Tomorrow’s Tech on Display at TAUC’s First Annual Industrial Grade Innovation Conference and Expo – See Page 20
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by JAKE LOCKLEAR
TAUC PRESIDENT
PRESIDENT AND CEO,
APM + APCOM

“The best time to plant a tree was 20 years ago. The second best time is now.”
– Chinese Proverb

OW! That’s what I have to say after two great conferences – our Leadership Conference in Key Largo, Florida in May and our Industrial Grade Innovation Conference (IGI) in Dearborn, Michigan in June.

First, some big thank you(s) are in order. Our two TAUC Legacy Partners, DEWALT & ProCore, who sponsored many of the events at both conferences, put on a great show, engaging our attendees with new and exciting products and services. They again proved the value of our Legacy Partner program and why we are proud to be partnered with them.

Also, to our TAUC staff: What an amazing job! Two significant conferences, back-to-back, executed with excellence, even with major hurdles outside of your control (rain!), making no excuses and finding a way to deliver. You again proved we have the best staff.

Second, we had some ambitious goals for both conferences. Let’s do a quick review and see how we did.

Leadership Conference:

1. Further develop your leadership skills to win in the dynamic business environment of today.

2. Network with key players in the industry and strengthen relationships with our customer and labor partners in the spirit of our tripartite philosophy.

3. Celebrate the union construction industry, particularly recognizing the leaders on our job sites that keep our crafts safe, produce quality work, and deliver excellence for our customers.

Industrial Grade Innovation:

1. Experience innovation first hand; touch, feel and interact with the new technology on the trade show floor.

2. Become confident in your ability to understand and adopt the amazing tools of tomorrow.

3. Commit to making innovation and technology a central part of your organization’s culture, in the same way we have made safety an inseparable part of who we are.

Mission(s) accomplished!

Specific to IGI, allow me to share some reflections. I learned more about how we can use data – big data, smart data – to improve craft performance, particularly in the area of safety. We just scratched the surface, but really, that’s the whole point of IGI – to expose you (and me) to new ideas, and motivate us to go back home and learn more about how to put those ideas into action.

I also learned the importance of integrating whatever you do in terms of innovation with your organization’s entire system, and your entire team. It’s not enough to discover a great new technology and keep it to yourself, or “siloed” in a particular department or location. We must consider how technology impacts every area of our businesses and industry.

And finally, I learned an important lesson about the dangers of trying to do too much and the importance of setting priorities. One of the panelists in the afternoon session used the term “information overload” to describe the trade show floor. He didn’t mean it in a negative way – it’s just that there was so much amazing innovation on
display that it could overwhelm you and just kind of blur together. And there is so much “cool stuff” out there it’s easy to get distracted and lose focus. If you don’t have focus, it doesn’t matter how great the technology is – you’re not going to make the progress you want to make. So I am going to do a better job of separating the “cool stuff” from the tools that can help me get the job done. I’m going to try not to get distracted.

Finally, I’m not going to do this on my own. We had tremendous attendance at IGI, and we need more people next year. To borrow from the challenge that Iron Workers General President Eric Dean gave us, all union participants this year should bring three additional contractors next year, and all contractor participants this year should bring three additional customers next year. We must share innovation with others in our industry, as a high tide lifts all boats.

Many of us brought teams to IGI, exposing fellow leaders in our businesses to the same experiences and learning opportunities. Whatever we learn here, we must take back home and share it with our entire organization, from our leadership and management to our crafts in the field. And then, most importantly, we need to listen. We cannot forget that technology, no matter how great, is nothing without a team of motivated people.

Which brings us back to the Leadership Conference. As I write this article, I am reading Take Command by Jake Wood, the founder of Team Rubicon, who was our keynote speaker. In Chapter 2, he discusses how to build a “High Impact Team.” One of the phrases he uses, which I have discussed with multiple folks who heard him speak and/or read his book, is “Passion Trumps Talent, Culture is King.” Are we developing teams of leaders that have a passion for what we do, including leading our industry into the future? Are we developing cultures that incorporate innovation into all areas and all levels of our businesses?

Hopefully we have started on a journey of developing leaders that are passionate and innovative. It’s going to take time and persistence. We won’t solve all our problems overnight. But the important thing is, we’ve made a start together, both in Key Largo and in Dearborn.

We have planted a tree.
WE SHOULD ALL be aware by now that the demographic forecasts for the American labor pool are sobering. By 2022, 35% of all workers will be over 50 years old, versus just 25% of the workforce in 2002. And by 2030, 20% of all Americans will be 65 or older, the age typically associated with retirement. We also know that workers of all stripes and in virtually every occupation are already in short supply – nurses, teachers, truck drivers, financial workers and, yes, even skilled construction workers at all levels of expertise.

There has never been a better time to quote Charles Dickens’ famous phrase “It was the best of times, it was the worst of times,” because that’s exactly where the union construction and maintenance industry finds itself. Industrial construction is one of the fastest-growing sectors of the U.S. economy and our country is in the midst of an unprecedented energy renaissance that is driving up demand for our services (best of times), but productivity is down and we simply don’t have enough workers to meet this once-in-a-generation opportunity (worst of times).

One solution suggested by some experts is to focus on convincing older workers to delay retirement, but this is a temporary fix at best, and doesn’t do anything to replenish and grow the highly trained and skilled workforce the future demands. Plus, it’s not a practical approach for the construction industry in particular. The long-term physical wear-and-tear many craftworkers have experienced simply may not allow them to extend their “tour of duty” in the field even if they want to -- and the mentorship opportunities these skilled veterans could provide to new recruits would certainly be welcomed. I know personally that through the three-plus decades I have been involved in this business, some of the best mentors and educators I ever came across were people on the cusp of retirement from the union, contractor and, yes, even the owner-client ranks. Their advice, leadership and general approach to collaboration, all directed at solving challenges for the betterment of our industry, were things I was never going to read in a college textbook.

So we’re boxed in at both ends of the spectrum: we can’t find enough young workers, and we can’t hang on to the older ones who have crucial skills and experience. What’s the solution? At the risk of sounding like the host of a late-night infomercial, I believe there is a single answer to both problems. As the old saying goes, this solution is simple, but not easy. It’s not a “magic bullet,” because those don’t exist. But there is a path forward for our industry that can allow us to attract the best and the brightest young folks while, at the same time, allow key team members to extend and enhance their careers in ways no one thought possible just a few years ago. That path leads in one direction: towards embracing innovation and new technology.

This past June in Dearborn, Michigan, TAUC embarked on a new and, frankly, somewhat risky venture. We called it the Industrial Grade Innovation Conference and Expo, or IGI (see coverage beginning on Page 20). IGI gives technology firms and innovation entrepreneurs an unprecedented opportunity to introduce their products and services to senior leaders in our industry. As most of you know, TAUC is dedicated to the

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tripartite spirit by bringing together the three entities involved in the successful completion of construction projects – contractors, our labor partners and owner-clients. This event was no different, with all three “legs” of this “tripartite stool” actively testing out next-level tools and high-tech equipment that was the stuff of science fiction movies just a few years ago: augmented reality headsets, robotics and advanced automation, wearable tech, drones and so on. They came, they saw, and most importantly, they experienced what the future will look like. This was critical, because without the buy-in from the entire tripartite community, none of this new technology will make an impact on our industry.

But getting back to the simple-but-not-easy solution that was on full display at IGI: if our industry can learn how to leverage this new technology and innovation not just at the white-collar level (management and engineers), but also at the boots-on-the-ground level where craftworkers spend their days, we can potentially open a whole new world of productivity. It will be a game changer – we can literally transform how we do our jobs.

By embracing innovation and showing a willingness to evolve with the times, we’ll do a better job of recruiting the next generation of tech-savvy younger workers who not only want but demand the latest cutting-edge tools to do their jobs. We can help Generations Y and Z get excited about the opportunities that await them by offering training they can’t get anywhere else.

At the same time, our embrace of innovation would also solve the problem at the other end of the timeline: older workers cycling into retirement, perhaps earlier than we (or they) want them to. At IGI, I saw men and women suit up in lightweight “bionic” exoskeletons that allow them to lift incredibly heavy objects with much less stress on their bodies. What a gift for older workers! They can increase their productivity and dramatically reduce negative physical impacts, allowing them to work smarter and longer if they so choose (and perhaps even transition into management positions with union contractor companies).

While walking the exhibit floor at IGI, there was clearly electricity in the air. Many contractors and union reps told me they were “blown away” by what they were seeing. They also said they wished they were 30 years younger so they could take advantage of the new technology. “Imagine what I could have done if I had had these tools when I was just starting out” was a common refrain. “Yeah,” I thought to myself, “and imagine what that would have meant for our entire industry!”

Well, we can’t time-travel back to the start of our careers, but that doesn’t mean it’s too late to embrace change. In fact, now is the perfect time. TAUC took the risk of creating IGI because we wanted to give our members and tripartite colleagues the opportunity to transform their own careers, not to mention increase the competitiveness of their companies and organizations. In other words, we wanted to show the union construction and maintenance industry the path forward. Now it’s up to you to take the first step onto that path.

Steve Lindauer is the CEO of The Association of Union Constructors and also serves as Impartial Secretary and CEO of the National Maintenance Agreements Policy Committee, Inc. (NM-APC).

TAUC Introduces New Board Members

KEY LARGO, FL - TAUC Governing Members on May 16 elected three new members to the Board of Directors at the 2018 TAUC Leadership Conference in Key Largo, Florida.

Joining TAUC’s Board of Directors are:

- Tom Ensminger, Day & Zimmermann NPS
- Jeff Brinker, Dearborn Mid-West Company
- John Stevens, Thermal Solutions

In addition, Rusty Brown of Kiewit Power Constructors was appointed to the chairmanship of the TAUC Environmental Health & Safety Committee.

TAUC also honored outgoing board members Bob George (Abate Irwin), Bill Treharne (Midwest Steel), Jim Daley (JJ White) and Joseph Lasky (Scheck) with special plaques commemorating their tenures.

TAUC congratulates our new board members, and thanks them for accepting the opportunity to serve our association for the advancement of our industry.
Honoring the Field

By MARK BRESLIN

HIS ARTICLE, though it appears in a magazine published by a contractor association, is dedicated to the men and women who work in the field. Yes, contractors in our industry take 100% of the risk, but they can do nothing alone. It takes the combined effort and integrity of the tens of thousands of dedicated union craft workers who together build our communities, our states and our nation. They deserve respect and should be honored for their efforts every day.

It angers me that sometimes those who work in our industry do not get the recognition for the expertise they bring to their jobs — not to mention their work ethic and the sacrifices they make pulling two- or even three-hour commutes each way to support their families. It rubs me the wrong way that teachers, parents and school counselors would deter someone from joining our business because it might not fit their ideal of what “success” is in America today. Success is not a cubicle and a keyboard for everyone. Our craftsmen and women create things of lasting value with their heads, hearts and hands — and often make a very good living doing so. Some people simply can't appreciate that fact and offer clueless judgments instead.

My dad was a union Carpenter and went on to become a union contractor. My grandfather and great-grandfather were blue-collar Italians who went on to become builders in San Francisco. They all worked their asses off. Their work ethic was legendary. It was their example — not my college GPA — that made me who I have become. The roots of America and the families of most every reader of this magazine were forged by working people. And construction, most interestingly, has been the economic ladder used for more than a hundred years by those who wanted a better life. First the Irish, Italians, Chinese, Eastern Europeans and African Americans climbed that ladder. Now, Mexican and Central American craftworkers are doing the same. Some were discriminated against or looked down upon at first, but they kept going, fueled by their total commitment to their own potential, their families and their future. They chipped away enough to create a handhold on the American Dream. They deserve the honor and respect for their hard-won success against so many odds.

Continued on Page 11
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In today’s society, young people often admire those who have made fortunes by creating ideas. Yes, we are in the “idea economy” today, and to a lot of young people it looks easy and accessible. But the world doesn’t operate solely on a fast-money digital platform. Working people still form the backbone of what makes America great. I have tried hard in my parenting to pass that message on to my children. The lady at McDonald’s in her paper hat; the maid at our hotel; the truck driver in that rig; the janitor at your school; the waitress at Chili’s – they are not there to serve you. They are there because that is the best job they can get to take care of their families. And they may have another job on top of it. And you, I tell my children, will pay attention; you will stop and appreciate them. And you will not take for granted any advantage life provides for you. Working people work hard, and they will be respected for it.

TAUC has a similar philosophy. It supports and serves union contractors who are committed to providing their workers what they need and deserve. Those who work for TAUC companies receive some of the highest pay and best benefits in the nation, and they know that is something to live up to. There are cheaper ways to do contracting – but it is often on the backs of those who do the work. Our members don’t subscribe to that philosophy. TAUC contractors (many of whom also carry frayed union cards in their wallets) understand their people and have a kinship with them that transcends the paycheck. They understand the importance of working people, and no matter their own success, they know that without those willing and loyal craft workers, there can be no industry.

Honor the field – it’s the right thing to do.

Mark Breslin is a strategist and author of several books, including most recently, The Five Minute Foreman: Mastering the People Side of Construction. Visit his website at www.breslin.biz or contact him at (925) 705-7662.
The National Maintenance Agreements Policy Committee, Inc. (NMAPC) is proud to showcase the top signatory contractors and owners that utilized the NMA in 2017.

Below and on the facing page are the top 50 signatory contractors that performed the most construction and maintenance work hours under the NMA last year (TAUC Governing members are denoted by an asterisk next to their name). Work hours figures are based on data received through June 15, 2018.

Together, these 50 contractors performed over 31.6 million work hours under the NMA program in 2017. If your company is signatory to the NMA and is not on this list, but you did a significant number of work hours under the program, it may be due to the fact that you are not adequately reporting your work hours on NMAPC.org. For assistance in reporting work hours, please feel free to contact Ben Cahoon at (703) 841-9707 ext. 118.

On Pages 14 and 15 you will find a listing of the top owners that utilized the NMA, as well as breakdowns of NMA work hours by craft, industry and state.

### Top 50 NMA Signatory Contractors

#### RANKED BY 2017 WORK HOURS

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Top 10 NMA Owner-Clients
RANKED BY 2017 WORK HOURS

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2017 NMA Work Hours
BY CRAFT

![Bar chart showing work hours by craft](chart.png)
2017 NMA Work Hours

BY INDUSTRY

Top 10 NMA States
RANKED BY 2017 WORK HOURS
What is Changing Now?

By JACOB SNYDER

IF YOU READ my column regularly, you are probably tired of hearing about change. And you have probably seen this line (or something like it) in other articles and reports: “The world we live in is changing at a faster pace than ever before.” But the reason you keep seeing it, and I keep writing about it, is because it’s true – and extremely important.

Barry Ritholtz, writing for Bloomberg and quoting several sources, pointed out the following: it took the landline telephone 75 years to hit 50 million users. It took airplanes 68 years, the automobile 62 years, light bulbs 46 years, and television 22 years to hit the same user milestone…but it only took YouTube four years, Facebook three years, and Twitter two years. The time it takes to hit the marketplace with new ideas, processes, and products and gain traction is far faster than it has ever been.

So, what impact does the pace of change have on our future in the union construction industry? Many quality contractors are changing the way they do business away from the jobsite, embracing new technology to transform traditional tasks like bidding, project planning, forecasting, and project tracking. However, we talk far less about transforming work processes and tools that make craft workers more efficient. This is a cause for concern!

I believe the future success of the union construction industry will hinge primarily on our ability to leverage our training infrastructure and become market disruptors by training our craftworkers to adopt innovative new technology and processes. Success will require existing journeyman craftworkers to continuously reinvent themselves by obtaining new skills and knowledge so that they – and the contractors they work for – perform better and stay ahead of the curve. The concern, though, is that the average journeyman in the workforce today won’t buy in to such a proposition – and without that buy-in, we won’t be successful.

Why is it so difficult to motivate journeyman craftworkers to improve, change and learn new skills?

Think about what motivates people. In order for someone to want to change or improve, that individual must have a need to meet. Below are a few areas that create needs, but there are many others.

First, there’s the need to generate income and provide resources and opportunities to those we care about. At the end of the day, most people would acknowledge that they go to work to earn income to provide for themselves or their family. Therefore, in most cases the ability to earn more will drive behavior, even if it leads to dissatisfaction.

Second, a need may be driven by the desire to feel important or connected. Being recognized for achievement is reinforced in our society and part of the American culture. Further, the ego drives humans to want to be recognized and praised. But beyond seeking simple praise is the desire or need to feel wanted or appreciated by others. Acceptance and belonging are a need for people of all ages and walks of life.

Third, many people need security and stability. There is comfort for lots of people in knowing their routine and where they are going each day. That provides a sense of safety and peace of mind. The construction industry can often oppose this need by the very nature of a project-based system, so meeting this particular need can be a tough hurdle.

Lastly, someone may want to be part of something bigger than themselves. Many people are motivated by the
need to have purpose. Feeling as though you are part of something bigger than yourself and that you are contributing to the good of others, is a motivator and, for some, a need. At TAUC’s leadership conference, Jake Wood, founder of Team Rubicon, talked about this very thing, and how he has used purpose to motivate and drive his organization.

**Based on this understanding, we must ask ourselves: What would motivate a journeyman craft worker today to change?**

In the 2018 TAUC Union Craft Labor Supply Survey (see story, Page 26), 67% of respondents reported some type of labor shortage in 2017, and 78% of respondents projected more growth in the construction industry in the near term. This data suggests that most craft employees in most areas are fully employed. Therefore, an employee would need to take time off of work and make less money to obtain new skills and training. Further, since most journeyman craft workers make the same wage, there is little motivation in full employment to seek new skills or improvement.

The need for security and stability could drive some people to change. For instance, if someone believes a new skill is needed to keep their job, they may be willing to work toward changing. But again, in a full employment situation, job security is already very high. Also, many in the construction industry are used to insecurity in jobs as most positions are project-based.

What about the need for recognition and connection? The problem is, most craft workers will spend their working career in the same position. It is the select few that truly desire advancement or promotion into other roles. Because of this, recognition as a motivating factor is substantially diminished.

That brings us to the need for purpose. I would argue that unions have done a good job of identifying this need but a poor job of meeting it – and contractors have largely forgotten it altogether. Construction unions need to find the messaging that gives today’s craftworker a sense of belonging to a group with purpose that is making a positive impact in the marketplace. Harsh working conditions and the need for better safety rules are no longer craftworkers’ biggest concerns, as they were fifty or a hundred years ago. As for contractors, we need to let our workers know why what they do is important. It’s not about a schedule or a building; it’s about the end user and what completing a successful project means for our country and their neighbors.

Knowing all of this, what can we do to motivate craft workers to embrace change and seek improvement?

1. **Incentivize the desired behavior.** This involves new classifications; it could be different levels of pay for training, or banning workers who lack needed skills from referral lists.

2. **Find ways to recognize accomplishments and make people feel connected.** We must show people the great career path they could have in our industry if they continue to learn new skills. We can also recognize their achievements in union and contractor magazines and publications.

3. **Come together and give purpose to craft workers.** Unions need to grow and improve their identity for the next generation. This includes understanding what is important to young people. Unions have always been about brotherhood and making the lives of workers better. But the worker’s experience and values have changed -- and so must the unions. But make no mistake: selling a sense of purpose is our industry’s job. We need to find ways to make craft workers understand the importance and noble nature of the work they do. We make sure our country improves and grows; we ensure that sustainable power is available to millions of people; we build water infrastructure that provides a better quality of life for millions more; we improve the daily lives of people by making it possible to build new and innovative automobiles…and the list goes on. Our craft workers serve a great and honorable purpose, but do they know? It’s our job to make them aware.

The above three points are really intended to start a conversation between contractors and unions. I know there are many other possibilities to help motivate people to embrace change. Accomplishing this task could forever alter the landscape of the union construction business in a positive way.

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**Jacob Snyder is the TAUC Industrial Relations Committee Chairman and Director of Safety and Labor Relations for Enerfab Power & Industrial, Inc.**
The National Maintenance Agreements Policy Committee, Inc. (NMAPC) has been serving the union construction and maintenance industry for more than 40 years. We negotiate and administer the National Maintenance Agreements (NMA), a series of collective bargaining agreements utilized by more than 2,000 industrial construction and maintenance contractors employing members of fourteen international building trades unions.

Now, the NMAPC has created a comprehensive web-based resource center to help contractors, clients and crafts more effectively utilize the NMAPC Program.

The NMA I.Q. eLearning Resource Center is the web-based resource for “all things NMA.” It is designed for newcomers and industry veterans alike, and equally useful to all members of the tripartite community – contractors, building trades unions and owner-clients. It offers easy-to-follow online tutorials and short videos on virtually every aspect of the NMA, from a “How does it work?” general overview to detailed instructions and explanations on more technical aspects of the Agreements.

Try it today – it’s free!
www.NMAIQ.org
Dialogue, Teamwork and Innovation: A Winning Formula

By RUSTY BROWN, CSP

At the TAUC Leadership Conference in Key Largo, Florida in May, I had the honor of being named Chair of the Environmental Health and Safety (EHS) Committee. Coincidentally, at around the same time I celebrated the completion of an important safety project I had been working on for several years with my colleagues at Kiewit Power Constructors and the folks at DeWALT. On the surface, these two events don’t appear to be connected. But on closer inspection, they show how TAUC can foster real and lasting change within our industry – the type of change I want to encourage and implement as the new EHS Committee Chair.

The journey began a few years ago when I met the DeWALT team at a TAUC event. We had a great discussion about safety — in particular, the danger posed by dropped objects. Soon afterwards, we set up another meeting to continue our conversation. It quickly became clear to all of us that there was an opportunity to partner with DeWALT and provide a new tethered solution for their cordless tools.

A little background: as part of their LANYARD READY™ integrated solutions, DeWALT already offered options to tether select corded tools to rigid structures on job sites when working at height. With a maximum lanyard length of two meters, these options helped to secure the tool in case it was accidentally dropped. But no similar tethering solution was available for cordless tools – from DeWALT or anyone else. Also, craft workers across multiple trades often had to use special tape to secure the batteries on their cordless tools to ensure they didn’t fall out at height. Clearly, here was an opportunity to innovate and help make our job sites even safer.

From the very beginning, DeWALT was eager to learn more about Kiewit’s (and the entire industry’s) specific needs in this area. Select members of our EH&S team were invited to DeWALT’s Global Innovation Center to further explore the dropped-objects problem and outline potential solutions. DeWALT brought in its Product Development and Commercial Leadership teams and together we rolled up our sleeves and got to work.

A few months later, Kiewit returned to the Global Innovation Center to see the first prototype DeWALT had developed based on our initial feedback and some preliminary field work. We were extremely impressed, and discussed some further refinements necessary to produce a market-ready solution. DeWALT’s engineers and designers put together another prototype and introduced the revamped cordless tethering system to a few Kiewit job sites in North America for field testing. There, Kiewit craft workers put the tools through a rigorous “real world” set of trials, and the response from them was overwhelmingly positive. Special tape was no longer necessary! Now craft workers had a cordless power tool with secure anchorage points that also prevented the battery and tool from separating during a dropped tool incident.

The new tethered solution is now available for select DeWALT 20V MAX tools. Also, contractors in the field with existing DeWALT 20V MAX tools can have the nationwide DeWALT service network retrofit many cordless tools to be LANYARD READY™.

My point in telling you this story – aside from letting you know about an important new safety development – is simple: it all started with a single conversation at a TAUC event. From that dialogue we built a team, and from that teamwork came the idea for an innovation that will literally save lives. When you get the right people in the right place at the right time, you can change the industry, and TAUC is committed to doing just that. So when I took over as Chair of the TAUC EHS Committee within days of DeWALT announcing its new cordless tethering solution, the coincidence hit me right between the eyes.

The experience with DeWALT has also had a big influence on how I hope to steer the EHS Committee in the coming years. I want to use the cordless tethering project as a model and inspiration for other EH&S members – and, when appropriate, the Committee itself – to pursue even more bold and game-changing safety improvements in the industry. I look forward to hearing everyone’s ideas. Again, by encouraging dialogue and building teams, we can create solutions to ensure everyone goes home safe and healthy at the end of a long work day.

Rusty Brown is the Environmental Health and Safety Director for Kiewit Power Constructors Co. and Chair of the TAUC Environmental Health and Safety Committee.
VISITING THE FUTURE TODAY
Held June 19-21 at the Ford Conference and Event Center in Dearborn, Michigan, IGI 2018 brought together contractors, unions and owner-clients with more than 30 hand-selected, cutting-edge tech firms and innovation entrepreneurs. Held over three action-packed days, the event gave attendees the opportunity to try out new products and services, such as Microsoft’s HoloLens augmented reality device; DeWALT’s jobsite WiFi and Smart Tools; and Procore’s productivity suite of online cloud-based tools. Construction execs got “up close and personal” through hands-on demos and one-on-one chats with the inventors and engineers who will fundamentally change how we work.

SPYDER IN THE HOUSE
Michigan’s own Operating Engineers Local 324 brought in the heavy equipment for IGI 2018, dominating the center of the trade show floor with the dazzling autonomous Spydercrane. As one of the first things attendees saw when they entered the conference space, it became a powerful visual symbol for what IGI is all about: the fusion of traditional construction with next-generation innovation. This dynamic mini-crawler is a textbook example of how technology is transforming the jobsite. Its extremely compact footprint and overall dimensions allow it to get into the tightest spaces, and once there, its four adjustable outriggers give it a solid foundation from which to work. The Spydercrane is also equipped with a wireless radio remote control system, allowing the operator unprecedented freedom of movement.

INDUSTRIAL ATHLETES
Keynote presenters Stacy Scopano, Vice President of Innovation for Skanska USA, and Matt Abeles, Co-Founder of BuiltWorlds, kicked off IGI 2018 with an overview of the breadth of new innovation and technology coming to the construction and maintenance industries. Scopano talked about the “Industrial Athlete” and how craft personnel will be able to use “bionic”-like technology to enhance their strength capabilities in the field.

A NEW VISION
D’Arcy Salzmann, Senior Director of Strategy for Microsoft Hololens – the first self-contained holographic computer that looks like a pair of extremely cool safety glasses – kept the audience riveted as he took them on a guided tour of the industrial jobsite of the future. By utilizing hard data and his own hilarious anecdotes, Salzmann showed how “mixed reality” – a combination of the concrete “real world” and an enhanced digital environment – will transform the experiences of contractors, craftworkers and owner-clients. In addition to Salzmann’s keynote presentation, Microsoft Hololens set up a huge mixed-reality workspace on the trade show floor where attendees got to try out the Hololens for themselves (see Page 22).
TRAINING MEETS VIDEO GAMES
Operating Engineers Local 324 also brought along a Deere Excavator Simulator that attendees could try out. It’s a great example of the new types of training available to apprentices. Mounted on the front of the excavator is a large TV screen. You simply sit down and start “operating” the machine as if you were actually out in the field. The simulator gives you a variety of tasks to complete within a certain time limit. The best part is, if you move the wrong lever or even crash, no one gets hurt!

THE NEXT BIG THING
One of the highlights of IGI was the Industrial Grade Accelerator -- like ABC’s Shark Tank but with a construction technology twist. Four construction tech startups were each given six minutes to pitch their products to a panel of four judges, all venture capitalists. The winner was StructionSite (www.structionsite.com), which specializes in “reality capture hardware” for construction sites. By linking 360-degree photos of the jobsite to your actual plans, StructionSite allows you to “walk the jobsite” (virtually speaking) from anywhere, using a phone, browser or even VR headset. StructionSite’s Chief Product Officer Philip Lorenzo is shown here with his winner’s check for $5,000, courtesy of our Diamond Sponsor Barton Malow.

BREAKING IT ALL DOWN
Sixteen breakout sessions covered a variety of topics from software and data analytics to how different International Unions are incorporating cutting-edge tech into their respective training curriculums. This training not only enhances the capabilities of their apprentices, but also serves as a way to help recruit younger workers who might not think of construction as a career that would allow them to use high-tech tools and equipment.

SNEAK PEEKS
IGI 2018 concluded with an innovative two-track event called “Speed Networking.” This unique opportunity put contractors together with exhibitors and solution providers to discuss becoming pilot testers, or beta testers, for their new cutting-edge projects. Contractors met with a series of providers for about seven or eight minutes apiece – that’s where the “speed” comes in – and tested out the products, many still in the development stage and not yet commercially available. Contractors and providers who found they make a good “match” will go on and work together. The cool part is that as beta testers, contractors will actually get to influence the development of these new tools!

JUST THE BEGINNING
IGI 2018 brought together the entire tripartite community - owner/clients, contractors and the trades - and each distinct group took away something different to help their businesses and organizations grow. The event allowed contractors to showcase some of the cutting-edge technology they’re employing in the field to meet the needs of their customers, and gave the trades an opportunity to highlight how they’re pushing the envelope to stay at the top of their game. It also gave start-ups and established technology companies to create relationships and touch on some of the ways their products and services could have significant impacts on our industry. TAUC looks forward to this event growing in size and scope, and we hope to see you next year for IGI 2019!
Thanks to several exhibitors at IGI 2018, reality as we know it will never be the same! Augmented, virtual and “mixed” reality technology was on full display at the Ford Conference and Event Center, courtesy of companies like Microsoft Hololens, Mosaic Learning and the Kelly Companies. Attendees were able to step onto virtual jobsites and operate heavy machinery without leaving the comfort of the trade show floor. These products will change the way the next generation of craftworkers are trained – not to mention how contractors and owner-clients plan and inspect their projects.
Technology is Revolutionizing Design & Construction

By MATTHEW METCALFE, PRINCIPAL, BOOZ ALLEN HAMILTON

The following article is based on a panel discussion at the TAUC Industrial Grade Innovation Conference and Expo (IGI) with thought leaders and innovators: Josh Bone, Construction Technology Specialist at Stanley Black & Decker, Inc; Scott Peters, President and Co-Founder of Construction Robotics; Jeff DiLullo, General Manager at Advanced Solutions Group United Rentals, Inc; and Eric Lynch, Technical Deputy, US Army Corps of Engineers, Utility Monitoring and Control System Mandatory Center of Expertise. Moderated by Matt Metcalfe, Booz Allen Hamilton (see bio at end of article).

The last 40 years have been defined by the information technology revolution, which has transformed whole sectors of our economy (e.g., finance, healthcare, media) and generated tremendous benefit. However, despite many advancements, the design/construction sector has been slower to adopt technology than others. But this is beginning to change. The information technology revolution is accelerating into the design/construction sector across the project lifecycle. Wearable devices, construction operating systems, drones, augmented reality and 3D building information modeling (BIM) are just some of the technologies with the potential to change the way we design and construct infrastructure. Given the impact of technology in other sectors, radical shifts can be expected in the way we plan, design, construct and operate infrastructure. We will be able to design and build things in ways and in places that were not possible in the past and deliver step changes in productivity, safety and quality.

The Future is Exciting

Over the next year, more than 80% of design and construction firms plan to spend significantly more on technology than they did last year. More than 30% of firms are already using advanced emerging technologies, such as drones, augmented reality and construction operating systems. Many larger design and construction firms have dedicated responsibilities for innovation and technology infusion. Technology is providing crane operators visibility where before they were in the “blind,” moving large objects without actually being able to see what they were doing. This is obviously a huge leap forward in safety and productivity. New innovation has also led to advances in automated bricklaying, enabling firms to build faster at higher quality, and is allowing firms to share information more quickly, enabling real time decision-making. Jeff DiLullo, Manager of the Advanced Solutions Group at United Rentals, described how modular prefabricated designs will enable
advanced manufacturing practices developed in the automotive and other industries to be applied to construction. This will enable fast custom-designed buildings where prefabricated designs are delivered to the job site when they are needed, in the same way that aircraft or cars are built today.

All of these technologies digitize and automate the design/construction process and generate large quantities of high-quality data that provide a second-order level of benefit to improve decision making and productivity. Using advanced analytics and data science, firms can quickly identify inefficiencies in their design/construction processes. These may be due to geographical variation, different subcontractors, transportation networks or their own business processes. Experiences from other sectors have shown that data insights can generate tremendous benefits in fine-tuning cost, schedule, and quality. Real-time jobsite data allows more effective planning and execution through the efficient movement of people and materials. In the future, data will enable repetitive tasks to be automated and machine learning or artificial intelligence may order products “just-in-time” based on actual construction activity.

**Make Sure You Are Ready**

The AEC sector is poised for success, continued growth is projected, a body of knowledge exists from sectors that have undergone similar technology revolutions, and some of the traditional barriers to technology adoption such as cost and availability have been reduced and/or eliminated. However, **Josh Bone, Construction Technology Specialist at Stanley Black & Decker**

Continued on Page 29
Thank You to Our IGI 2018 Sponsors

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Thank You to Our IGI 2018 Exhibitors

- Applied Software
- Assignar
- Barton Malow
- Construct Your Future
- Devon Industrial
- DEWALT
- DEWALT Safety & Specialty Tools
- Eksobionics
- Filamento Lighting
- First Energy
- Grit Virtual
- Illumagear
- Ironworkers/IMPACT
- Kelly Companies
- Leica
- Lincoln Electric
- Manufacton
- Mobile Medical
- MOSAIC Learning
- Nelson Companies & Stanley Security
- Operating Engineers Local 324
- Procore
- Skidmore Wilhelm
- SMART
- SpyderCranes
- Stanley Proto
- StructionSite
- Triax
- Trimble
- Velocity Robotics
- Walbridge Aldinger Company
- Werner Ladder
- Women Who Weld
New TAUC Survey: Growth on Horizon, But Labor Shortage Fears Loom

THE GOOD NEWS: the future looks bright in terms of overall growth for the union construction and maintenance industry.

The bad news: as in previous years, many insiders remain deeply concerned about a growing labor shortage, despite strong efforts by building trades unions, contractors and owner-clients to recruit a new generation of craft workers.

That’s one of the key takeaways from the fourth annual Union Craft Labor Supply Study, recently released by The Association of Union Constructors (TAUC) in conjunction with the Construction Labor Research Council (CLRC).

The study – available for download at www.tauc.org/laborsupply – is designed to give construction professionals an in-depth understanding of the current state of union labor supply in the construction and maintenance industry throughout the United States. TAUC and CLRC utilized a rigorous scientific methodology to analyze nearly 750 responses to a multi-question survey sent earlier this year to a cross-section of contractors, union representatives and owner-clients. The large sample size and carefully worded questions combine to make this one of the most useful labor supply reports available, and the only union-specific study focusing on construction and maintenance.

This year’s report builds on previous studies and feedback from respondents to provide even more detail, data cuts and historical trend analysis. TAUC and its partners in labor believe that a data-driven approach is the only way to achieve our shared goals of planning for the future and increasing union market share. New to the study this year is an examination of two key issues: the pervasiveness of absenteeism in our industry and the perceived relationship between union craft labor supply and safety.

Outlook Remains Optimistic for Growth

Over three-fourths (78%) of the study participants project growth for 2018 in the construction and maintenance industry (see Exhibit 2.1). Union/labor representatives were the most optimistic about growth, and...

Exhibit 2.1

GROWTH/CONTRACTION PROJECTIONS FOR THE CONSTRUCTION AND MAINTENANCE INDUSTRY: 2016-2018

<table>
<thead>
<tr>
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<th>2016</th>
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<tr>
<td>Very Strong Growth</td>
<td>58% in 2016</td>
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<tr>
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the manufacturing industry has the strongest growth prospects.

With the exception of 2016, over 70% of the respondents since 2015 have projected some degree of growth for the ensuing year. More specifically, in both 2017 and 2018, 78% reported that they anticipate growth in their organization. In 2016, the outlier year, just 58% projected some sort of growth. Moreover, the optimism has been growing. At the most pronounced end of the rating scale, the right side in Exhibit 2.1, the percent of the sample projecting “very strong growth” has increased steadily since 2015, when it was 9% (see earlier report), to 24% in 2018. Conversely, very few believe there will be contraction in the construction and maintenance industry.

**Shortage of Union Craft Workers Grows**

But the flip side of the coin is troubling. At the same time as respondents see business opportunities increasing, more of them reported that union craft worker shortages in their organization in 2017 were greater than in previous years. Exhibit 3.1 shows that more and more people who are familiar with the union construction and maintenance industry are reporting a union craft labor shortage, and the degree of that shortage is growing. To illustrate, in 2015, 52% reported a shortage in their organization; two years later this had grown to 67%. As a result and necessarily so, the percent of respondents recording a surplus or the right number of workers in their organization decreased from 48% in 2015 to 33% in 2017.

While two thirds of the participants in this study reported a worker shortage in 2017, it is also important to note that the vast majority of these said they had a “small shortage” in their organization. Seventeen percent said they had a “large shortage.”

**Exhibit 3.1**

UNION CRAFT LABOR SHORTAGE: 2015-2017
Exhibit 4.2 shows the average shortage or surplus rating for each craft. The average shortage in 2016 was 1.8%; it grew to 2.5% for 2017. Most crafts fell in the 2 – 5% range. The biggest changes from 2016 to 2017 were for Bricklayers & Allied Workers, Electricians, Plumbers/ Pipefitters/Steamfitters and Teamsters. For all four of these, the average shortage increased substantially.

Absenteism

Thirty-five percent of respondents said they had a measurable union craft absenteeism rate in their organization. They were then asked to identify what the absenteeism rate was in their organization. The most common rate was 6-10%, followed by 1-5%. All told, 76% of the respondents reported a 10% absenteeism rate or less. At the other end of the scale, 10% of the sample said they had at least a 16% absenteeism rate.

Association representatives and contractors had the largest percent of their respective groups saying there was a measurable absenteeism rate in their organization. The utility industry had the highest prevalence of measurable absenteeism (49%) and the civil industry the lowest (20%); in fact, the civil industry is in the best shape when it comes to absenteeism, with both the lowest prevalence and the lowest average rate. The absenteeism rates clustered near the overall average for all other industries. In terms of geography, the Northwest region had the lowest absenteeism rate, while the New England and Southeast regions the highest.

Labor Shortage/Safety Link?

Participants in the study were asked the question, “What do you think is the relationship between union craft labor supply and safety incidents?” Two-thirds (67%) said they believe a labor shortage is linked with more safety incidents. Results were quite consistent for four roles: contractor, owner/client, union/labor representative and other. About two-thirds of the respondents in each of these roles think that a union craft labor shortage is associated with more safety incidents.

A little over one-fourth (27%) stated that there was no relationship between labor shortages and safety and a few (6%) suggested that a labor shortage actually associates with fewer safety incidents.

For more details, download the complete report today at: www.tauc.org/laborsupply.
Continued from Page 24

cautions that while the future is bright, technology implementation is not as easy as just getting a product off the shelf. Organizations must have a strategy that drives a culture shift at the highest levels of the organization and builds capacity through investing in employee training, external partnerships, and targeted investment. Bone cites a need for a change in mentality throughout the industry to become more supportive of failure, and points out that great companies allow for failure, learning, and adjustment. Without the ability to fail, innovation can be stifled.

Employee training and engagement must also be a priority for those looking to lead in the technology revolution. Scott Peters, President and Co-Founder of Construction Robotics offers that the next-generation workforce will be very different than the current model. New recruits to the workforce are looking to be challenged and put in a position of strength and excitement. Young recruits have also grown up with technology and bring an expectation that it will be a component of their job. Smarter equipment has the potential to make workers better, extend careers, and attract new people into the industry, including those with backgrounds in data science and business analytics. Companies should also facilitate collaboration between young innovators and long-time industry experts. The mutual understanding, relationships, and avenues for open discourse between these two segments of the workforce can support the culture transformation needed to bring AEC sector businesses to the forefront of the technology revolution.

Technology adoption can start with small investments, such as initiating a very simple technology committee to leverage available tax credits for research and development (R&D). Bone explains that these committees can work together to identify and systematically solve a simple organizational challenge, such as digitizing a paper process. However, he cautions that committees must bring together diverse perspectives including those willing to play a devil’s advocate role and warns leaders not to be tempted by what is “cool” and instead to hold themselves accountable and prioritize decisions with a strong return on investment (ROI). The table on Page 24 summarizes some of the key activities for beginning the technology adoption journey.

But all of this new technology can introduce new risks with which design and construction firms are likely to be less familiar. Eric Lynch, Technical Deputy at the US Army Corps of Engineers, explains that data systems are often interconnected across buildings, projects, contractors and subcontractors and bring risk of data system breaches and attacks with the intent to cause significant harm or disruption. There are multiple points of entry for a bad actor, and if they were to obtain designs for a facility they could learn critical information such as egress and exit points, security parameters, controls, equipment brands and models, and possibly even passwords. They could impact BIM data without the awareness of the contractor, or could hack into the machinery doing the work and cause a production issue or delay. For the government, a data breach to critical infrastructure such as a missile defense facility could be catastrophic. Therefore, design and construction firms are going to need to improve their understanding of cybersecurity risks to harden their own operations and protect their customers.

Conclusion

Infrastructure is a $14T market and underpins the broader global economy. The integration of technology has the potential to supercharge this market, driving innovation and growth. While it will require a culture shift within some organizations, it will provide an opportunity for differentiated, more complex design and construction services that use technology to deliver complex structures, faster, more efficiently, and of better quality. U.S. companies that can draw from a technology-savvy workforce and develop a culture of innovation are well positioned to excel in this new future.

About Booz Allen

Booz Allen Hamilton is a global firm of 24,225 diverse, passionate, and exceptional people driven to excel, do right, and realize positive change in everything we do. We bring bold thinking in our work in consulting, analytics, digital solutions, engineering, and cyber, and with industries ranging from defense to health to energy to international development. Our guiding purpose is to empower people to change the world. Our founder, Edwin Booz said it best: “Start with character… and fear not the future.” We bring a ferocious integrity to not only train our clients to tackle the problems they face today, but to help them change the status quo for tomorrow. Each day, we imagine, invent, and deliver new ways to better serve our employees, our clients, and the world.

About the Author

Matt Metcalfe is a Principal in Booz Allen Hamilton’s transportation infrastructure practice, focusing on the impact of technology, data science, and innovation to the future of mobility and the built environment. Matt helps organizations evaluate new technologies potential to support their business / mission, and their organizational capacity to adopt new technologies. He works with organizations to develop technology adoption strategies and foster a culture of innovation. Throughout his career, Matt has helped organizations stay at the leading edge of technology adoption and innovation—be more efficient, deliver faster, more safely and securely—and change the game.
Kyle Cochran Named 2018 TAUC Craftperson of the Year

by DAVID ACORD

KEY LARGO, FL – Kyle Cochran has been named the 2018 TAUC James J. Willis Craftperson of the Year. The award, which recognizes outstanding labor-management cooperation and quality craftsmanship in the union construction and maintenance industries, was presented at a special ceremony on May 17 at TAUC’s annual Leadership Conference at the Ocean Reef Club in Key Largo, Florida.

Kyle is a member of IBEW Local 26, which represents the Washington DC Metropolitan area. He was nominated by Kiewit Power Constructors for his outstanding work as General Foreman on the expansion of Dominion Energy’s Cove Point Liquid Natural Gas Terminal in Lusby, Maryland.

Kyle made a point of meeting every new hire on the job, and took time to understand their individual strengths and explain his approach to safety on site. He also mentored several journeymen along the way.

“I started off right out of high school in the Marine Corps, so it’s similar to a kind of brotherhood in the union,” Kyle said. “There’s a loyalty to each other and a loyalty to the craftsmanship.”

“This is basically the biggest job Local 26 has ever done, and being able to watch over and make sure everyone is safe is, to me, an awesome task,” said Jim Marx, Business Agent for IBEW Local 26.

“The crews have a good relationship with Kyle, due to the fact that he’s got a calm demeanor about him – he’s patient, he listens attentively, and he doesn’t hesitate to give the proper feedback, whether it be positive or sometimes a little harsh or critical,” added Kurt Carlson, Electrical Superintendent for the Cove Point Project.

His work ethic is contagious, his safety culture is contagious, and it helps put the right mentality in the whole crew that is working with him,” noted Bob McKinley, Dominion Energy Representative and Vice President of Cove Point Construction.

“He’s never going to ask anybody to do something that he won’t do himself, and he cares about people,” Marx added. “He cares about his brothers and sisters in the IBEW.”
In addition to the Craftperson of the Year statue, Kyle was also awarded a selection of tools from TAUC Legacy Partner DEWALT.

Watch TAUC’s video tribute to Kyle at www.tauc.org/willis.

About the Award

The James J. Willis Craftperson of the Year Award honors outstanding labor-management cooperation and quality craftsmanship in the union construction and maintenance industries. It is given to building trades members who have a gift for recognizing the vision of a project and can bring that vision to fruition in a professional manner. Apprentices, journeymen, foremen and general foremen from all crafts are eligible for nomination.

The recognition program was originally created in 1989 as the Craftsman of the Year Award. TAUC changed the name in 2008 to memorialize James J. Willis, Sr. He was a dear friend and supporter of TAUC and an authentic leader within the union construction industry for more than five decades. Jim started out as an apprentice ironworker in 1945 at the age of just 16 and eventually rose to the rank of First General Vice President within the international union. He also served as President and Labor Co-Chairman of the National Maintenance Agreements Policy Committee, Inc. (NMAPC) from 1988-2000.

Jim was hugely influential within the union construction industry, and his steadfast commitment to fairness and cooperation was legendary. It is fitting that the award bearing his name honors a union worker who demonstrates unparalleled leadership and professionalism, because Jim exhibited the same qualities throughout his life.

The James J. Willis Craftperson of the Year Award recognizes five categories of achievement:

- Safety and Health
- Schedule and Budget Productivity
- Cost Savings
- Innovation
- Outstanding Craftsmanship

Projects must be completed in the calendar year of the award. Nominations are forwarded to our judge’s panel to be evaluated and ranked in each category. This year, the members of the James J. Willis Award Task Force were: Scott Fisher, AGC of Michigan; Jacob Snyder, Enerfab Power and Industrial; and Kathleen Dobson, Alberici Constructors.

We salute their hard work and dedication to safety, and wish to thank the nominating contractors, their labor partners and the owner-clients for assisting in the nomination process.

Craftperson of the Year Nominees

CHOOSING THE CRAFTPERSON OF THE YEAR is a tough job, because we receive so many incredible nominations from our contractors. TAUC would like to honor this year’s runners-up for the prestigious award.

Glen Foley
Glen is a General Foreman with United Association Local 74 in Delaware. He was nominated by Scheck Mechanical for his outstanding leadership and performance on Croda International’s Mantis Project at the Atlas Point Facility in New Castle, DE. “Glen was able to plan ahead and maximize the performance of his crews to maintain schedule and budget parameters,” Scheck said. “With over fifteen miles of piping to install and an aggressive schedule, two-week look-ahead plans were reviewed on a daily basis and adjusted for any challenges…Glen’s proactive approach with scheduling his crews proved to save time and money.”

Zach Sherrill
Zach is a General Foreman with Ironworkers Local 103 in Evansville, Indiana. He was nominated by Midwest Steel for his work on the Daily’s Place amphitheater in Jacksonville, Florida, part of the NFL Jaguars’ stadium complex. “Zachary’s impeccable standards and knowledge was not only an asset for our company, but a requirement to accomplish this daunting task within the project’s demanding schedule,” Midwest Steel said. “Zachary’s knowledge was essential in developing the unique erection procedures...The project was extremely complex in nature and had inspectors on the site daily... everything was done right the first time which is a true testament to Zachary’s attention to detail.”
Reynolds Award Winners Honored at Leadership Conference

TAUC on May 16 announced the winners of the annual Thomas J. Reynolds Safety Awards for Excellence in Construction Safety and Health during a special ceremony at the 2018 TAUC Leadership Conference at the Ocean Reef Club in Key Largo, Florida.

The awards were created in 1983 by TAUC’s predecessor organization, the National Erectors Association (NEA), to recognize and commend the exceptional efforts made by members to prevent the occurrence of serious injury - or worse - on the jobsite.

Winners are recognized for achieving a zero DART (Days Away, Restricted or Transferred) rate in one of four categories. Participants who achieved a DART rate of 25% or more below the national average in 2016 received a Certificate of Achievement to acknowledge their accomplishments.

This year, 107 contractors received Thomas J. Reynolds Safety Awards. These winners amassed more than 103 million work hours with 155 DART Cases in 2017. The average DART Rate of these TAUC members was an astounding 0.300 for 2017, well under the BLS National Average of 1.9.

A complete list of winners and certificate recipients can be found on the following page. TAUC would like to thank the generous sponsors of this year’s awards luncheon:

- DeWalt
- Procore
- Atlas Industrial Contractors
- CR Meyer and Sons
- NAES Power Contractors
- Shelby Mechanical
- Matrix NAC; and
- NMAPC

Who Was Thomas J. Reynolds?

The Thomas J. Reynolds Safety Award was named in honor of a long-serving member of TAUC’s predecessor organization, the National Erectors Association (NEA). A U.S. Navy veteran, Thomas J. Reynolds spent more than forty years in the construction industry, starting out as a union ironworker, boilermaker and millwright. From 1955 to 1976 he held a variety of high-level safety positions at Bethlehem Steel, culminating in his appointment as Supervisor of Plant Protection and Safety at the company’s Burns Harbor, Indiana facility. He went on to serve as Corporate Manager of Safety for Morrison Construction Company for many years.

In 1980, Mr. Reynolds assisted in writing proposed construction safety standards for OSHA. In 1986, he was invited by Labor Secretary William Brock to join OSHA’s Advisory Committee on Construction Safety and Health, becoming the first NEA member to participate on this prestigious panel. The appointment was a fitting capstone to a career dedicated to advancing worker safety. Over the past three decades, the Thomas J. Reynolds Safety Awards program has become a widely recognized standard of excellence in the union construction industry. TAUC is proud to continue Mr. Reynolds’ legacy.
2018 Award Winners

**CATEGORY ONE**
Over 1 Million Hours Worked Without a DART Case
- AECOM Construction Services
- Brand Energy Services, LLC
- Kiewit Power Constructors Co.
- Mascaro Construction Company, LP
- RMF Nooter, Inc.
- Solid Platforms, Inc.

**CATEGORY TWO**
500,000 - 1 Million Hours Worked Without a DART Case
- APComPower, Inc.
- Corval Constructors, Inc.
- Day & Zimmermann NPS, Inc.
- Gallagher-Kaiser Corporation
- International Industrial Contracting Corporation
- McGraw/Kokosing, Inc.
- Minnotte Contracting
- MPW Environmental Services, Inc.
- Superior Electric Great Lakes Company
- Walbridge Aldinger Company
- White Electrical Construction Company

**CATEGORY THREE**
100,000 - 499,999 Hours Worked Without a DART Case
- Advanced Specialty Contractors, LLC
- Central Rent-A-Crane, Inc.
- Chellino Crane
- Dearborn Mid-West Company
- DLZ Industrial, LLC
- Enerfab Process Solutions and Fabricated Products
- F.E. Moran, Inc. Special Hazard Systems
- Hardman Construction Inc.
- Helmkamp Construction Company
- Imperial Crane Services, Inc.
- ISG dba Universal Blasto Compositech
- Lytle Electric Company
- M & O Insulation Company
- Madison Industrial Services Team, Ltd.
- MC Industrial
- Monarch Welding & Engineering, Inc.
- Moorhead Machinery & Boiler Company
- National Steel City, LLC
- Performance Mechanical, Inc.
- Rand Construction Company
- Simakas Company, Inc.
- Stevenson Crane Service, Inc.
- StructureSure Scaffold & Insulation, LLC
- Thatcher Foundations, Inc.
- The Pangere Corporation
- Universal Piping Industries, LLC
- Vertical Access Solutions, LLC

**CATEGORY FOUR**
Less than 99,999 Hours Worked Without a DART Case
- Chemsteel Construction Company
- Delta Nooter
- Hayden Wrecking Corporation
- IWR Building Systems, LLC
- Norris Brothers Company, Inc.
- Scheck Technical Services, Inc.
- Smart Energy Insulation - Michigan Mechanical
- Smart Energy Insulation - Toledo Mechanical
- StructureSure Environmental, LLC
- Barton Malow Company
- Beltline Electric Co., Inc.
- BMWC Constructors, Inc.
- Broadway Electric Service Corporation
- C.R. Meyer and Sons Company
- Commercial Contracting Corporation
- Construction & Turnaround Services, LLC
- Conti Corporation
- Cornerstone Services Group, LLC
- Fluor Constructors International, Inc.
- Foley Company
- GEM Inc.
- Genesys Industrial Corporation
- Grand River Construction, Inc.
- Graycor Industrial Constructors Inc.
- Gribbins Insulation Company
- Harder Mechanical Contractors, Inc.
- Henderson Services, LLC
- Ideal Contracting, LLC
- Industrial Contractors Skanska
- Industrial Contractors, Inc.
- J.J. White, Inc.
- McCull's Inc.
- MCT Services, LLC
- Mecon Industries, Inc.
- Midwest Steel, Inc.
- NAES Power Contractors
- Niles Industrial Coatings
- Nooter Construction Company
- Performance Contracting, Inc.
- Pioneer Pipe, Inc.
- Piqua Steel Company, Inc. dba PSC Crane & Rigging
- Ragan Mechanical, Inc.
- Rudolph Libbe Inc.
- Ryan & Associates, Inc.
- Sargent Electric Company
- Scheck Mechanical Corporation
- Shelby Mechanical, Inc.
- Sterling Boiler & Mechanical, LLC
- Stevens Engineers & Constructors, Inc.
- The Jamar Company
- The State Group Industrial (USA) Limited
- Thermal Solutions, Inc.
- Triangle Enterprises, Inc.
- White Construction, Inc.

**Certificate of Achievement**
- Abel Construction Company, Inc.
- Advanced Industrial Services, LLC
- Alberici Constructors
- AMS Mechanical Systems, Inc.
- Aristeo Construction
- Atlantic Contracting and Specialties, LLC
- Atlas Industrial Contractors, LLC
- Avalotis Corporation
- AZCO INC.
KEY LARGO, FL – The Association of Union Constructors (TAUC) on May 17 honored industry veteran Bill Treharne with its prestigious Spirit of Union Construction Award, reserved for individuals who have dedicated their entire careers to the advancement of the industry.

Bill is the Director of Engineering and Administration for Midwest Steel in Detroit. He is also the former chair of the A10.13 standard subcommittee for steel erection. Throughout his career, he has held the positions of structural engineer, chief engineer, erection manager, general manager of the fabrication division, general manager of the construction division, chief estimator and vice president of operations. He also has experience in structural steel erection, steel and aluminum mill building, design and build projects, structural alterations to industrial plants, bridge erection and repairs, and material handling system installation, including extensive experience in crane runway repairs and alterations.

That’s a very impressive list - evidence of a great career. But there’s a lot more to Bill than his resume, and that’s why he received the award. We encourage you to go to www.tauc.org/spirit and watch our exclusive tribute video to learn more about who Bill is as a friend, colleague and industry champion.

The TAUC Spirit of Union Construction Award was created in 2007 to recognize individuals who have made a significant impact on the union construction industry throughout their illustrious careers. It recognizes and celebrates a lifetime of achievements. But it’s about more than just their career and the titles they’ve held. It’s about the positive impact they’ve had on the people around them. The Spirit of Union Construction Award recognizes someone who has inspired others to do better, to achieve more than they thought possible; someone who has reached out and helped colleagues during times of trouble, and never asked for anything in return; someone whose passion for the industry was evident in everything they did.

TAUC congratulates Bill on receiving this honor.
Thank You to Our Conference Sponsors
What Will They Think of Next?

By STEVE JOHNSON

FEDERAL POLICIES impact almost every aspect of the work TAUC members do, which is why we established a Government Affairs division to protect and advance the interests of the union construction industry. Over the past couple of years, TAUC has been looking for opportunities to “up our game” in Washington to better represent the union construction industry and advance policies to benefit our members. I am proud to serve as TAUC’s Government Affairs Committee Chair, and I want to use this article to let the membership know about some of the steps the organization has taken to better advocate for the needs of our industry, as well as outline our association’s top legislative priorities.

Before turning to specific policy issues, let me highlight some of the internal steps TAUC has taken recently to increase our government affairs activities and elevate our ability to “get in the game” on Capitol Hill. The first step was reenergizing the Government Affairs Committee as a means of getting members involved in setting priorities and developing an advocacy agenda to advance the needs of the union construction industry.

The next step in this process was establishing a Political Action Committee—TAUCPAC—which was approved by the Board of Directors in December, 2017. Like it or not money is still king in politics. Not having a PAC limits an organization’s ability to leverage relations and support elected officials who actively promote legislation and policies that benefit the union construction industry.

With these steps, we have aligned ourselves with the thinking of North America’s Building Trades Unions Secretary-Treasurer Brent Booker for the need of a national multi-trade union contractor association to partner with on legislative and regulatory priorities. We have now stepped up to the plate and done just that. We all know that when labor and management are united on issues that impact our industry, we can be a force to be reckoned with in Washington.

In addition to our own internal advocacy activities, TAUC is also an active participant in a number of legislative coalitions and organizations—like the Construction Employers of America (CEA)—which allow us to partner with allies to expand our association’s reach and leverage relationships on policies that benefit our association’s members. As a signatory contractor coalition, the CEA allows us to work to advance a pro-industry message to ensure that signatory contractors do not have an undue burden thrust upon them by the Federal Government.

TAUC has been aggressively pushing back on the idea of PBGC premium increases because of the competitive disadvantage it could have on signatory contractors.

Another key example of TAUC partnering to leverage our relationships is our involvement with the National Coordinating Committee for Multiemployer Plans (NCCMP). NCCMP is the leading organization advocating for and protecting multiemployer plans, plan sponsors, participants and beneficiaries and is a recognized authority on policy issues impacting multiemployer pensions plans. TAUC joined NCCMP as a Contributing Member back in 2017, and just a few months ago our Chief Executive Officer, Steve Lindauer, was selected to join the NCCMP Board of Directors.

Our organization’s leadership role in NCCMP gives us a unique ability to work towards advancing our association’s top legislative priority--passage of the “Giving Retirement Options to Workers (GROW) Act” (H.R. 4997). This bipartisan effort is designed to strengthen and modernize the multiemployer pensions system by allowing the use of composite plans (a combination of defined benefit and defined contribution plans) that would significantly reduce if not eliminate unfunded liability for those union contractors that participate in said plans.

As many of us know all too well from personal experience, elements of the multiemployer pension system are facing a crisis that threatens to harm plans, plan participants, and contributing employers. To deal with the impending insolvency of a small subsection of troubled multiemployer plans, as well as the solvency of the Pension Benefit Guarantee Corporation (PBGC), Congress formed the Joint Select Committee on Solvency of Multiemployer Pension Plans. The Committee is charged with the difficult task of developing bipartisan legislative recommendations by Nov. 30th of this year to address this crisis that is threatening the retirement security of plan participants and the financial viability of contributing employers. Partnering with NCCMP provides TAUC access to information and input into policy recommendations that will ensure that any legislative proposal does not undermine

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What You Should Know About the GDPR

By STEVE FELLMAN, TAUC GENERAL COUNSEL

RECENTLY, THE European Union enacted a new data privacy regulation that went into effect May 25, 2018. This regulation, commonly known as the General Data Protection Regulation or GDPR, requires that every company that has a presence in the EU or offers goods or services to persons residing in the EU must implement a comprehensive Data Privacy Protection Program to protect personal data provided by EU individuals to the company.

“Personal Data” is defined broadly. It includes such basic information as a person’s name and address. Essentially, if your company has an office or agent in the EU, has customers who are individuals in the EU or sends promotional information to individuals in the EU, you are covered by the GDPR. Companies and other organizations that violate the provisions of the GDPR are subject to substantial fines. In certain cases, companies’ Board members may be held personally liable.

You are probably all aware of the GDPR because you have been receiving privacy notices from a great variety of companies, some of which you have never dealt with and probably some you have never heard about. Why are they sending you this information? First, they believe that they have your personal data in their files. Second, they are sending privacy notices to all the individuals in their data files regardless of where they are located. Third, and of most interest to TAUC contractors, because they want to demonstrate to their customers that they are GDPR-compliant.

Let’s pick up on the third point. The GDPR not only requires that companies covered by the GDPR adopt a Data Privacy Protection Program – it also stipulates that companies covered by the GDPR not exchange personal information with other companies including service providers, subcontractors, or other vendors unless they too are also GDPR-compliant.

The major requirements of GDPR compliance include:

1. Providing detailed notices describing how your company collects and processes personal data.

2. Ensuring that you provide personal data only to companies that are GDPR-compliant.

3. Having written GDPR compliance agreements with all service providers that will process your personal data.

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union constructors and their ability to compete for work.

One idea being discussed by the Committee could have horrific impacts on the multiemployer pension system: the use of alternative discount rates for actuarial assumptions for multiemployer funding. Under this proposal, funds would see massive increases in liabilities, requiring significant increases in contributions due to mandated funding improvements and rehabilitation plans. Here’s how it would work: by using the 30-year Treasury rate of return or the interest assumptions used by the single-employer plans, the rate of return would drop from 7% to somewhere between 2.5% and just under 3%, thereby creating unachievable funding targets. NCCMP sent a letter to the Hill, referencing two studies conducted by Horizon Actuarial Services and Segal Consulting on why this is a bad idea. They pointed out that this suggestion would “make employers uncompetitive...likely to result in a number of contributing employers seeking relief under Chapter 11 or Chapter 7 of the Bankruptcy Code” and would “likely result in employers losing access to capital,” and also “put employers at a competitive disadvantage of retaining and recruiting active workers.”

TAUC has been aggressively pushing back on the idea of PBGC premium increases because of the competitive disadvantage it could have on signatory contractors, and this new idea being floated by some on the Joint Select Committee would do the same.

These are just some of the examples of the legislative activities our association is taking on behalf of the union construction industry, and the value we try to deliver through our advocacy and political efforts. TAUC has developed a comprehensive government affairs strategy that will allow us to join our contractor association and building trades union partners to block regulations and legislation efforts that undermine ability of the signatory contractors to compete, and advance policies that benefit the union construction industry.

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Steve Johnson is the TAUC Government Affairs Committee Chair and President of GEM Industrial Inc.

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4. Having a system to protect all EU residents’ privacy rights.

5. Having an internal company policy in place to address data protection issues.

In some industries, international companies that are required to comply with the GDPR regulations have found that it is impossible to limit GDPR compliance to facilities in the EU or information transfers involving only EU residents. These large companies have adopted a policy of international, company-wide GDPR compliance. Under such a policy, all of the company’s service providers, subcontractors and other vendors must provide written certification to the company that they are GDPR-compliant. Since one element of GDPR compliance is to only use GDPR-compliant service providers, subcontractors or other vendors, we also expect to see many U.S. companies require GDPR compliance in their contracts with other U.S. partners in order to maintain business relationships with large international partners, even in instances where the U.S. companies are not directly covered by the GDPR.

Let’s take it one step further. Assume your client, an automobile manufacturer, takes a position that it is not covered by the GDPR. However, the automobile manufacturer enters into a contract to sell a fleet of vehicles to a customer located in the EU. The EU customer must comply with the GDPR. As part of this compliance, it must show that all of its suppliers, including the automobile manufacturer, have certified that they are in compliance. In order to certify that it is in compliance, the automobile manufacturer must certify that all of its contractors and service providers are in compliance. You may be one of those contractors or service providers.

Recently, some of our clients have received contracts from their customers that have a clause requiring them to certify that they are GDPR-compliant. When they object, arguing that they do not receive any personal data from EU residents from the customer, they are told that it is the customer’s corporate policy that all of its service providers, subcontractors or other vendors must provide this certification without exception.

If you are a contractor doing business with an international company such as an auto manufacturer or energy company, you may receive a GDPR compliance request. You may be told that if you do not become GDPR-compliant, you will no longer qualify to do business with that customer. Are you prepared to show that you are in compliance?

GKG Law, P.C. has published a comprehensive GDPR client alert. For a free copy of the Client Alert, contact Steve Fellman (sfellman@gkglaw.com).

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Steve Fellman is a shareholder with GKG Law in Washington, D.C. He is also general counsel to The Association of Union Constructors.
The United Association of Plumbers, Pipefitters, Welders, and HVACR Service Techs invites contractors and owners to join us at the

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**Monday, November 12**
Early Registration at 3 p.m.

**Tuesday, November 13**
Golf at Bayou Oaks at City Park  
Welcome Reception at 6-7:30 p.m.

**Wednesday, November 14**
Tripartite Conference 8 a.m. to 5 p.m.  
Keynote Speaker - Baseball Hall of Fame Icon, Cal Ripken, Jr.

Speakers and panels include industry leaders and successful local union project coordinators who will focus on issues important to our industry.

For more information on the speakers, panels, and events of the conference, email Jamie Deasel at jamied@UANET.org.
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