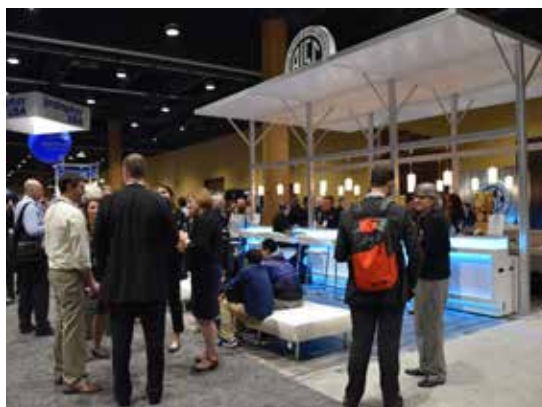


NASCC posts near-record attendance in Orlando.

Steel in the SUNSHINE State

BY GEOFF WEISENBERGER



ARE YOU INVISIBLE?

Maybe you are, maybe you aren't—but if you are, that doesn't mean you're unimportant. In fact, you may be one of the most important people in your organization.

The concept of “invisibles” in the workplace—those that do crucial work but don't necessarily seek attention—was the focus of author David Zweig's keynote at this year's NASCC: The Steel Conference, which took place in April in Orlando.

Zweig, who once held a job as a magazine fact-checker, commented that invisibles typically aren't noticed until they make a mistake.

“No one ever told me, ‘Man, that article was fact-checked beautifully,’” he laughed.

Despite this, he stressed that invisibles typically take pride in their work, noting that structural engineers are often the invisibles of the building or bridge design team. For example, when interviewing Dennis Poon, vice chairman of Thornton Tomasetti and engineer of record for the 2,073-ft-tall Shanghai Tower, for his book *Invisibles: Celebrating the Unsung Heroes of the Workplace*, he asked Poon how he handled all of the responsibility. Poon's answer: “It's an honor to do so.” Zweig's message is that Poon, like many other “invisibles,” performs diligent, crucial and downright difficult work not for the money or prestige, but rather for the satisfaction of the work itself and performing to the best of their abilities. (And for more on the Shanghai Tower, see

Poon's article “Shanghai Sky” in the April 2013 issue, available at www.modernsteel.com.)

Engineers and others certainly weren't invisible at the conference, where 4,532 professionals from all across the industry congregated to view and discuss the latest technologies and ideas in steel construction. (This year's attendance was second only to last year's 4,582 in Nashville.)

“I found the program to be very well-balanced and was able to take home some technical and practical design information, which I look forward to sharing with my colleagues,” said Natalie Tse, a project engineer with KPW Structural Engineers, Inc. “I also attended a roundtable discussion in which guest speakers shared some interesting insights and opinions, and there were plenty of great opportunities to learn and to network with other people in our industry.”

The show also incorporated its bridge counterpart, the World Steel Bridge Symposium, which featured more than 20 sessions geared toward designers, fabricators and builders of steel bridges, as well as a screening of the film *Bridging Urban America: The Story of Master Engineer Ralph Modjeski* that drew around 400 viewers (visit www.bridginguamericafilm.com for more on the film).

Touching on a similar theme to Zweig's was Duane Miller, who presented a student session geared toward preparing the next generation of engineers and other professionals for the real world—part of NASCC's student track. A well-known welding guru, Miller's presentation focused not on that topic

At the Top of their Game

Fourteen leaders from across the structural steel design, construction and academic communities received distinguished awards from AISC at April's NASCC: The Steel Conference in Orlando. Duane Miller received the Robert P. Stupp Award for Leadership Excellence, one of AISC's highest honors, and John Nolan received the Chairman's Award for outstanding service as a member of the AISC Board of Directors. Gregory Deierlein, Geoffrey Kulak and James Stori were honored with Lifetime Achievement Awards, and Special Achievement Awards were presented to Glenn Bishop, Brad Davis, Larry Fahnestock, Vernon Mesler and Mark Saunders. In addition, AISC honored the inaugural recipients of its new Early Career Faculty Award (pictured at right): Caroline Bennett, Matthew Eatherton, Jason McCormick and Christopher Raebel. The winners were all recognized during the conference awards presentation and opening keynote.

For more about each winner, see the related March 28 news item at www.aisc.org.



but rather on the broader concept of making one's mark in the working world. He stressed that while technical know-how is what gets an employee in the door, after that, value is determined and cultivated in a much different way. It's about personality and business acumen—the type of wisdom that is valuable in any industry. A few points he touched upon were: telling a customer when they're wrong (but you'd better be right!); recognizing that selling is getting people to take actions they wouldn't have had you not showed up; the importance of first impressions; coming up with a \$1 million idea not overnight but rather over the course of your career; not solving one problem by creating another; learning something from everyone you meet; taking care of other people's problems first; and not discounting instinct.

At the same time, Miller provided a valuable reminder to students—and perhaps all of us—that the portion of our industry that doesn't work in offices is equally important, and he did get in a plug for welding. “If you don't think welding is fun, then you don't know welding,” he quipped, and encouraged interested students to visit his company's (Lincoln Electric) booth in the exhibition hall to test out some of what they'd learned at his presentation—and potentially launch a career.

Speaking of the exhibition hall, there was plenty of welding equipment—and plenty of other equipment, as well as heavy machinery, software, services and shop and field solutions—on display. Cloud-based information sharing was one

of the recurring themes from the software vendors, as were the use of mobile apps and increased offerings for seismic applications. (For more on these trends and others observed at NASCC's exhibit hall, be sure to check out next month's “Hot Products” section.)

“Once again, NASCC was a great opportunity for us to connect with our customers and the industry to evaluate how we can better provide solutions for them,” said Michael Gustafson, Autodesk's structural engineering industry strategy manager. “It was exciting to hear so many attendees talk about implementing new technologies, and we're looking forward to helping the industry ride the wave of a recovering construction economy.”

For those not able to attend NASCC—or if you were there but couldn't be two places at once—AISC posts recordings of all of the sessions at www.aisc.org/2016nasconline about two months after the conference.

And roughly nine months after *that*—specifically, March 22-25, 2017—NASCC heads back to San Antonio, host city for the show in 2005. Between now and then, whether you're an invisible or someone who is front and center, make the best of your role in the steel construction industry. As Zweig pointed out, for invisibles (and others), it's typically the work itself that is the reward. And in the case of the steel industry, when we do our best work, we have the opportunity to reward not only ourselves but also building owners and occupants with truly amazing and efficient buildings that are anything but invisible. ■



Up on the Iron

When we think of steel erection, we often think of the big cranes that hoist beams and columns into the air but not always that people that are operating them—or in many cases literally climbing the structure.

And when we go on building site tours, while the work is ongoing, the framing and flooring is already in place—otherwise, tours might be kind of difficult. We see all kinds of workers on the site, doing what they do. But ironworkers and erectors are the ones that come in first and give everyone else something solid to work on.

“We’re the Marines of the construction industry,” said Henry Kendrick, business manager for the Iron Workers Local Union 808 in Orlando. “We take the beach, we set the flag and then the other trades come.”

The union played host to 40 or so attendees of NASCC: The Steel Conference (mostly engineers) and gave them a glimpse into what goes into becoming an ironworker. Organized by IMPACT (Ironworker Management Progressive Action Cooperative Trust), the tour provided an overview of the ironworker profession, discussed the rigorous training procedures that ironworkers must go through, let attendees walk through the training facility and even gave them the chance to test their own skills.

The Local 808 facility is one of 154 such training facilities throughout the U.S. and Canada and puts roughly 120 trainees through its apprenticeship program every year. Training is designed for working adults and encompasses four years of night classes (three hours twice a week). Among other things, it includes a minimum of 700 hours of on-the-job training for the rigging program, more than 200 hours of welding training, 80 classroom hours and a class that specializes in reading blueprints.

“We stress that ‘you are not the engineer,’” says R. Reis James, industry analyst for the Southeastern States District Council, which represents 10 ironworker locals throughout Alabama, Georgia and Florida. “It’s about teaching our students to correctly interpret the drawings and execute the plans—though we do encourage them to speak up when they notice possible mistakes.”

James points out that the average age for a construction worker in the U.S. is 47 and that the average age for management staff is even older, so there is a never-ending push to bring younger workers into the profession. Local 808 partners with schools in Orange County (Fla.) and works to source prospective students from local technical schools. It also works through the Helmets to Hardhats program to transition veterans into ironworkers. Roughly 70% of those that begin the apprenticeship program complete the training, and most figure out whether it’s the right path for them within the first year.

“We have approximately 130,000 ironworker members, including 20,000 apprentices and more than 2,000 female members,” says IMPACT’s director of industry liaisons and RAB V regional director, Kenny Waugh. “Not everyone is cut out for college, and potential students can come to us straight out of high school and receive a free education while working toward a great and fulfilling career. I know this firsthand as a third-generation ironworker, with my sons being fourth-generation.”

Following the presentation, attendees took a tour of the training facility, and a few tried their hand at welding and even column climbing, all while donning the appropriate footwear and safety equipment (safety, safety, safety is encouraged and enforced throughout and following training). Ricardo Cantu, Local 808’s organizer and QC manager, climbed the 40-ft column in a matter of seconds, which prompted several attendees to give it a shot and gain a firsthand experience of—and hopefully a newfound appreciation for—the rigorous work that goes into erecting the framing systems they design and detail.

