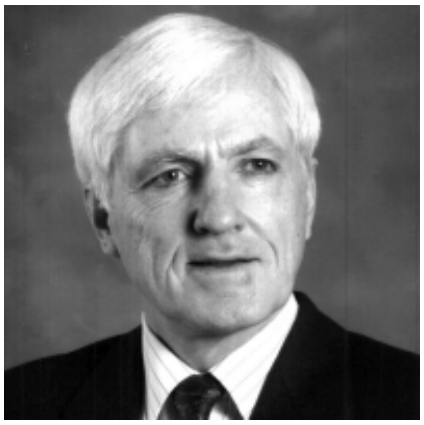
IN MEMORIAM

Geoff Kulak, Connections Expert, Dies at 80

Geoffrey L. Kulak, PE, PhD, a professor emeritus at the University of Alberta and one of the world's leading experts on the behavior of welded and bolted connections, passed away in March. Kulak also was a recognized authority on fatigue of fabricated steel members and member stability.

"Geoff was always willing to help the design and construction community and often gave lectures for AISC and others," said Larry Kruth, AISC's vice president of engineering and research. "And, of course, he was a prolific author of papers that helped to advance the state of the art of steel design and construction." In 2016, he received an AISC Lifetime Achievement Award in recognition of his incredible lifetime of work, and in 2000 he received an AISC Special Achievement Award for his contributions to the Second Edition of the *Guide to Design Criteria for Bolted and Riveted Joints*.

Kulak was a professor of civil engineering for nearly 30 years at the University of Alberta. He has also been a longtime leader in the steel industry through active involvement in the Research Council on Structural Connections (RCSC) and AISC activities. For more than two decades, he served as an officer of RCSC in several different positions, and he has written and presented numerous RCSC and AISC seminars on bolting that have been received as both practical and understandable. He has also published extensively on the subject and is the author of AISC Design Guide 17: *High Strength Bolts—A Primer for Structural Engineers*.



BRIDGES

NSBA Issues 2018 WSBS Call for Abstracts

The National Steel Bridge Alliance (NSBA), a division of AISC, invites those involved in all aspects of steel bridge research, design and construction to submit an abstract for consideration at the 2018 World Steel Bridge Symposium (WSBS), which takes place April 11-13, 2018 in Baltimore in tandem with NASCC: The Steel Conference.

All abstracts should be limited to 500 words or less. Each abstract will be peer-reviewed and acceptance for WSBS will be based on content, available space and overall program balance.

To submit an abstract, please complete the online abstract submission form by June 2, 2017 at 5:00 PM U.S. Eastern Time (visit **www.asic.org/nsba** for a link to the form). Submitters will be contacted in late June. Please send a separate copy of any abstracts containing charts, images or text formatting essential for the review process via email to **abstracts@steelbridges.org** in a PDF file; you must still complete the online submission form.

UNIVERSITY PROGRAMS

Student Steel Bridge Season Kicks Off

The 2017 ASCE/AISC National Student Steel Bridge Competition (NSSBC) is underway. The season kicked off in March with the first regional competition at the University of Texas at El Paso. Seventeen more regional competitions will follow this spring, culminating with the national competition over Memorial Day weekend, May 26–27 at Oregon State University in Corvallis, Ore.

Now in its 26th year, the program brings together more than 200 engineering student teams from across North America to showcase their skills and teamwork and prepares them for real-world bridge design. Bridge rankings are based on the categories of construction speed, stiffness, lightness, economy, display and efficiency. For more about the competition, visit **www.aisc.org/nssbc** or **www.nssbc.info**.

People and Firms

- **McLaren Engineering Group** is expanding to a new office in downtown Orlando to better serve its Florida clients. The full-service engineering firm has doubled the size of its previous Orlando location. The company also recently celebrated its 40th anniversary at its corporate headquarters in West Nyack, N.Y.

- **Dewberry**, a privately held professional services firm, announced that **Augusto Molina, PE**, has joined the company's New York office as the bridge structures department manager and will manage bridge structures services in the New York metropolitan area. In addition, **Leon Ostrovsky, PE**, has been named a senior project manager with the company's civil transportation group.

- **Raymond Monson, PE**, has joined **Pennoni** as a senior engineer in the Nationwide Structural Steel and Metals Inspection and Testing Group and will be based in the company's Clearwater, Fla., office. A registered professional engineer and certified welding engineer, Monson has more than 35 years of engineering, fabrication and construction experience.

- **Tuna Yelkikanat, PE**, a senior associate with **The Harman Group**, has been promoted to director of the firm's New York office and is responsible for the management of ongoing New York and New Jersey projects as well as the development of new clients in the area.

SAFETY

AISC Announces 2016 Safety Award Winners

More than 80 structural steel facilities are being honored with AISC Safety Awards for their excellent records of safety performance in 2016. Awards are given in the categories of "Fabricator" and "Erector" and include the Safety Award of Honor—AISC's top safety award, presented for a perfect safety record of no disabling injuries—as well as the Safety Certificate of Merit and Safety Certificate of Commendation.

"AISC's annual Safety Awards program recognizes excellent records of safety performance, and we commend these facilities for their effective accident prevention programs," said Tom Schlafly, AISC's director of safety. "Periodic recognition of safety in the workplace has been demonstrated to provide worker incentive and a reminder of the importance of safe practices. This is our 53rd year of recognizing the importance of safety and the fact that a good record of safety is an indicator of dedicated management and skilled workers."

All AISC full fabricator members and erector associate members are eligible and asked to participate, and data for the program is solicited annually. In order to facilitate data collection and to make statistics meaningful in terms familiar to safety professionals, the program uses data that companies also report to OSHA. The program recognizes performance measured in terms of Days Away, Restricted or Transferred Rate (DART). The DART is a measure of the number of recordable lost work cases per 200,000 man hours worked. Only the number of cases (not days) that are required to be reported on the OSHA 300A form and that cause a lost work day as defined by OSHA are reported to AISC along with the hours worked in the year. AISC Safety Awards are given for perfect records (Honor, DART=0), excellent records (Merit, 0<DART≤1) and commendable records (Commendation, 1<DART≤2).

For more information about the program as well as safety resources available to the fabricated and erected structural steel industry, please visit **www.aisc.org/safety**. Here are the winners:

Fabricator Category Honor Awards
- 2-K Steel Products, Inc.
- Able Steel Fabricators, Inc.
- Anderson Steel Supply, Inc.
- Aristeo
- B & B Welding Company, Inc.
- Cianbro Corporation, Baltimore, MD
- Cianbro Corporation, Georgetown, MA
- Cianbro Fabrication & Coating Corporation
- Cooper Steel
- Cubic Designs, Inc.
- Custom Metals, a Division of Lexicon, Inc.
- Dave Steel Company, Inc.
- DeAngelis Iron Work, Inc.
- Delta Steel, Inc.
- Douglas Steel Fabricating Corp.
- Eddy's Welding, Inc.
- Erection & Welding Contractors, LLC
- EW Corporation
- Fiedeldey Steel Fabricators, Inc.
- G2 Metal Fab, Inc.
- Gibson Industrial, Inc.
- GT Grandstands, Inc.
- Hallmark Iron Works, Inc.
- Highway Systems Incorporated
- Hillsdale Fabricators, J.S. Alberici Construction
- Indiana Bridge, Inc.
- J.R. Hoe and Sons
- Jon Edwards Steel
- K & T Steel Corporation
- Larwel Industries
- McCombs Steel Company, Inc.
- NOVA Group, Inc.
- Padgett, Inc.
- Phoenix Fabrication & Supply, Inc.
- PKM Steel Service, Inc.
- Redd Iron, Inc.
- Reliance Steel, Inc.
- Rochester Rigging & Erectors, Inc.
- Scott Steel Services, Inc.
- Shepard Steel Company, Inc.
- Shickel Corporation
- Steel Fabricators of Monroe, LLC
- Structural Systems, Inc.
- Stud Welding, Inc.
- Summit Metal Fabricators
- Superior Rigging & Erecting Company, Inc.
- The Arthur Louis Steel Company
- The Haskell Company
- Tipton Structural Fabrication
- Trinity Fabricators, Inc.

Erector Category Honor Awards
- B & B Welding Company, Inc.
- Barker Steel Construction, Inc.
- Cooper Steel
- Delta Steel, Inc.
- Erection & Welding Contractors, LLC
- EW Corporation
- Hallmark Iron Works, Inc.
- Jon Edwards Steel
- JPW Structural Contracting, Inc.
- National Steel City, LLC
- North Alabama Fabricating Co., Inc.
- Padgett, Inc.
- Peterson Beckner Industries, Inc.
- Reliance Steel, Inc.
- Stinger Bridge & Iron
- Summit Metal Fabricators
- Tubal-Cain Industries, Inc.
- Western Steel Erectors, Inc.

Fabricator Category Merit Awards
- Chief Industries, Inc., d.b.a., Arrowhead Steel Fabricators
- Environmental Air Systems, LLC
- Tubal-Cain Industries, Inc.

Erector Category Merit Awards
- Aristeo
- Midwest Steel, Inc.
- Olson Steel
- Superior Rigging & Erecting Company, Inc.

Fabricator Category Commendation
- Ben Hur Steel Worx, LLC
- Ford Steel, LLC
- JPW Structural Contracting, Inc.
- Olson Steel
- Prospect Steel, a Division of Lexicon, Inc.
- Stinger Bridge & Iron

Erector Category Commendation
- Ben Hur Steel Worx, LLC
- CSE, Inc.
- Hillsdale Fabricators, J.S. Alberici Construction

letters

On the Contrary

While I agree with much of the February article "Specific Instructions to the Contrary" (available at **www.modernsteel.com**), I would like to point out two problems related to my interpretation of this article's position relative to item 3.1 of the AISC *Code of Standard Practice* (ANSI/AISC 303).

First, the following quotes from the article imply that the authors are suggesting that the *International Building Code* (*IBC*) could govern commercial agreements, such as the completeness of the drawings at certain stages of procurement: "…the requirements in Section 3.1 of the *Code* are specific, clear, complete and suitable as written—so much so that they are specifically referenced in the *IBC*" and "…don't violate the building code or break the law."

The purpose of the *IBC* is clearly stated its Chapter 1 as: "[A] 101.3 Intent. The purpose of this code is to establish the minimum requirements to provide a reasonable level of safety, public health and general welfare through structural strength…" Chapter 1 goes on to state: "[A] 102.4.2 Provisions in Referenced Codes and Standards. Where the extent of the reference to a referenced code or standard includes subject matter that is within the scope of this code…"

Per these statements, the *IBC* is clearly intended to result in "a reasonable level of safety," not to dictate any of the contractual or commercial requirements.

Secondly, alternate delivery methods such as design-build, guaranteed maximum price (GMP), fast-track (or phased delivery), design assist and numerous other alternate delivery methods all attempt to benefit the owner by delivering projects faster than the more traditional design-bid-build method.

With any of these alternate delivery methods, steel contractors are selected based upon schematic level (or earlier) drawings that bear very little resemblance to the complete drawings defined by AISC *Code* Section 3.1. These preliminary drawings are supplemented by narratives, tonnage charts, allowances and example details, plus extensive "pre-bid" instructions and discussions. Working with steel contractors experienced in alternate delivery methods that use these early drawings, and engaging all parties in the extensive discussions, can successfully engage them long before the drawings are allowed to reach the level of completeness contemplated by Section 3.1. The final "released for detailing" or "released for construction" drawings for these fast-tracked projects should be the only drawings (or models) that are considered by 3.1.

An overly strict interpretation of this particular portion of this otherwise well-written article could potentially be misused to restrict commercial arrangements in fast-track projects. If you believe that I have interpreted this portion of your article differently than intended, I would be happy to discuss.

—W. Steven Hofmeister, SE, PE
Managing Principal, Thornton Tomasetti

Response from AISC president Charles J. Carter, SE, PE, PhD:

Thank you for sharing your concerns and compliments, Steve. With regret and respect, I disagree.

I believe that the *IBC* does intend to specify the information requirements noted in the article. Chapter 1 in the 2015 *IBC* in general, and requirements in Sections 107.2.1 and Section 1603.1 in particular, seem to me to be directly relevant. This is not new with *IBC* incorporation of the 2016 AISC reference standards in the 2018 revision, and is not even new in the *IBC*. The predecessor model codes also had similar requirements.

Section 3.1 in the AISC *Code* provides the information necessary for the work to be performed by the steel fabricator, and that does not change with project delivery method (Section 3.6 also is relevant to your specific point). The language in Section 3.1 in the *Code* is intentionally written to allow for the schematic and conceptual approaches that are used early in alternate methods of project delivery. The *Code* also recognizes that such approaches often have revisions as the completed project changes from the schematic information, and provides for equitable adjustments to the contract to account for such changes.

We will certainly talk further, and I look forward to it.

Hindsight is 20/20

The "Live to Innovate" business article in the February issue, which cherry-picked anecdotal stories, is simply misleading. One has to look at all the options, and consider the outcomes, which include:

1. Firms that innovated but got something wrong. Innovation can involve a lot of risk. For example, the molybdenum battery industry had issues with fires and, despite overcoming this problem, never recovered.
2. Firms that innovated, but just a tad too slowly. Alexander Graham Bell was not the only one pursuing the telephone; many others were but got little or no return for their efforts.
3. Firms that innovated and the market just wasn't ready for the innovation. An example of this is the Edsel car, which, at its time, was very innovative, with a more aerodynamic design, but rejected by consumers.
4. Firms that innovated but not in the game-changing areas. Many firms have innovated, but been leapfrogged by a novel concept. Blockbuster Video got caught by Netflix, but could you really have expected Blockbuster's management to anticipate this development and take the lead in it?
5. The firms that have continued focusing on their core strengths and are still doing well. Woolworths' decline may have resulted more from their forgetting this than from a lack of innovation. They diversified into speciality stores including Footlocker and, some believe, did not focus enough attention on their core business at the time.
6. Firms that have a good idea, but fail to promote it in the right way. There are likely many thousands of these, most unknown but to the people involved.

Innovation can reap big returns or can spell disaster. Knowing which will happen and looking forward is the tough part; it is easier to look back and pick the winners.

—Ralph Watts, P.Eng.