

This Month in MSC

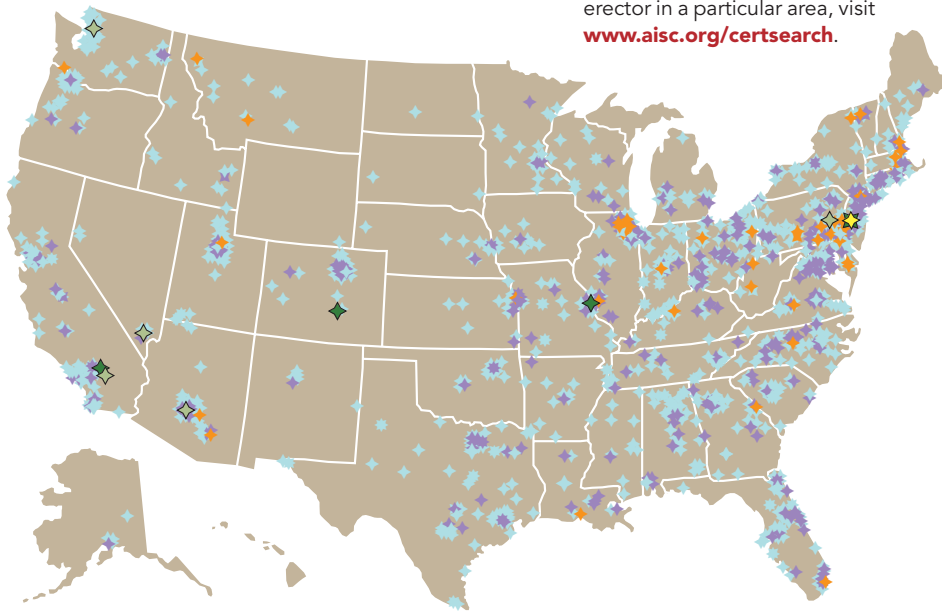
- You're not alone if you've ever turned to the AISC Steel Solutions Center with a question. AISC's director of technical marketing Tabitha Stine looks back at how the SSC has evolved into a powerful industry resource beginning on page 26.
- Have you considered the legal ramifications related to "green" projects? Minimize your risk by reviewing the 11-point checklist on page 56.
- Actively avoiding close calls is a lot better than just escaping them, writes safety expert Larry Wilson. His four-step plan provides a simple and effective way to proactively prevent accidents. The article starts on page 60.
- **COMING NEXT MONTH:** The April issue of *MSC* will feature reviews of selected upcoming presentations from the 2011 NASCC: The Steel Conference, plus an advance look at new products being introduced at the exhibition.

CORRECTION

Victor Shneur's name was spelled incorrectly in the February 2011 *MSC* article "The Best Tips of the 21st Century." *MSC* regrets the error.

Newly Certified Facilities: January 1–31, 2011

To find a certified fabricator or erector in a particular area, visit www.aisc.org/certsearch.



Existing Certified Fabricator Facilities

Existing Certified Erector Facilities

Existing Certified Bridge Component Facilities

Newly Certified Fabricator Facilities

Newly Certified Erector Facilities

Newly Certified Bridge Component Facilities

Newly Certified Fabricator Facilities

Imperial Ornamental Metal Co., Inc., Fenton, Mo.
Industrial Constructors/Managers, Inc., Pueblo, Colo.
KCB Towers, Inc., Highland, Calif.
Tri-Steel Fabricators, Inc., Trenton, N.J.

Newly Certified Erector Facilities

Anderson Charnesky Structural Steel, Inc., Beaumont, Calif.
Castle Steel Inc., Phoenix, Ariz.
The Erection Company, Inc., Arlington, Wash.
Tri City Erectors, Inc., New Tripoli, Pa.
Union Erectors, LLC, Las Vegas, Nev.

Newly Certified Bridge Component Facilities

Tri-Steel Fabricators, Inc., Trenton, N.J.

People and Firms

- **Dennis C.K. Poon, P.E.**, has been named one of the 25 Top Newsmakers of 2010 by the editors of *Engineering News-Record* magazine. Poon is managing principal of **Thornton Tomasetti** and an AISC Professional Member. He is being recognized for his influence on China's building codes regarding supertall structures.



- **Mark Kisonak** has been promoted to head of engineering for Weld Tooling Corporation, manufacturers of Bug-O Systems automated welding equipment. The company also has named **Dave Bloom** its North American sales manager and **Mark Binder** its director of sales.

- The engineering and architectural firm **Mead & Hunt, Inc.**, has merged with **RPM Engineers**. With offices in 13 states from coast to coast, the organization will operate under the name of **Mead & Hunt**.

- **John W. Fisher, P.E., Ph.D.**, professor emeritus of civil engineering at Lehigh University and director of its ATLSS Engineering Research Center will present the 2011 Landis-Epic Lecture at the University of Pittsburgh on March 17. The title of his talk is "Fatigue and Fracture: A Challenge for Existing and Future Steel Bridges." There is no charge for admission and attendees will receive one PDH. For more information, call 412.624.6814.

- **Fumihiko Maki** has received the 2011 AIA Gold Medal from the American Institute of Architects. The award recognizes an individual's legacy contribution to the field of architecture and is considered the profession's highest individual honor. Maki is one of Japan's most eminent living architects and has studied, worked, and taught both in the U.S. and Japan. "His buildings convey a quiet and elegant moment of reflection," wrote his colleague Toshiko Mori, FAIA, in recommending Maki. The 4 World Trade Center building now under construction in New York is one of his recent U.S. designs.

STANDARDS

The 2010 AISC Specification is Now Available



The 2010 AISC *Specification for Structural Steel Buildings* is now available for free downloading at www.aisc.org/2010spec. The *Specification* is the standard for the design, fabrication and erection

of steel buildings in the U.S. and the 2010 version will be the basis for the 14th Edition AISC *Steel Construction Manual*, which will be available in the summer of 2011. The 2010 *Specification* includes user notes and a commentary to assist the reader in applying its provisions.

The 2010 *Specification* continues to address both the allowable stress design (ASD) and load and resistance factor design (LRFD) methods. A concerted effort was made to minimize the number of changes in the 2010 *Specification*; however, ongoing research, innovations, and evolutions in industry practices have led to some revisions. Although many of

the changes are clarifications and minor adjustments, there are important substantive changes that include the following:

- The scope statement has been revised to reflect seismic design requirements (Chapter A).
- Structural integrity requirements are addressed (Chapter B).
- Stability design procedures are simplified and better organized (Chapter C, Appendices 7 and 8).
- Expanded and new provisions are included for composite member design (Chapter I).
- The available shear strength values for bolts have been increased (Chapter J).
- Slip-critical design provisions have been simplified and revised (Chapter J).
- HSS connection design equations have been reorganized in a tabular format for ease of use (Chapter K).
- A new chapter has been added on quality control and quality assurance (Chapter N).

- Inelastic analysis and design provisions have been expanded and improved (Appendix 1).

Recent issues of *Modern Steel Construction* have highlighted a few of these topics. Please see the following: March 2010 for background on the new Chapter N on quality control and quality assurance; August 2010 for a discussion of changes in Chapter I regarding composite member design; and September 2010 for a summary of revisions to connection design in Chapter J.

For a complete summary of the new *Specification*, as well as an overview of the 14th Edition *Steel Construction Manual*, attend session N29 at NASCC: The Steel Conference in Pittsburgh, May 11–14, 2011. The 2010 *Specification* and the new *Manual* also will be the subjects of a session at the SEI Structures Congress in Las Vegas, April 14–16, 2011.

—Cynthia J. Duncan,
director of engineering, AISC

COMPETITIONS

Student Steel Bridge Competition Season Opens in Texas

Nine teams from Texas and four from Mexico met at Texas Tech University on January 15 to compete in the first regional Student Steel Bridge Competition of 2011. This year's design requirements for a cantilever span and smaller individual member dimensions and deflection limits than recent years have required students to rethink their design philosophies. At Texas Tech this resulted in a challenging competition with a visually interesting and diverse array of bridges.

"It is refreshing to observe the effort, ingenuity and character displayed by all of the students who participate in the Student Steel Bridge competition," said AISC's director of education Nancy Gavlin.

The best way to appreciate the exciting atmosphere is to attend a competition, and with 17 more regional events to come and the National Competition in May, there are many opportunities.

Upcoming 2011 Student Steel Bridge Competitions:

March 19

University of North Dakota

March 26

California State University, Los Angeles
Mississippi State University
Tennessee Tech University

April 2

United States Air Force Academy
University of Wisconsin, Milwaukee
University of Michigan
University of Alaska, Anchorage

April 16

North Carolina State University
Fairleigh Dickinson University
Drexel University
California State University, Sacramento
University of Akron
West Virginia University

April 30

Kansas State University
University Laval
L'Ecole de Technologies Superieure

May 20-21 National Finals

Texas A&M University

For detailed information about the Student Steel Bridge Competition see www.aisc.org/steelbridge. Or to find out more about the regional competitions listed above, which are held in conjunction with ASCE's annual student conferences, go to <http://bit.ly/dM2nXm>.

To read about the 2010 competition, go to www.modernsteel.com/archives and select "Real-Life Lessons" in the July 2010 issue. To view a gallery of photos from the 2010 national finals at Purdue University, go www.modernsteel.com/photos.



- The University of Texas–Austin's entry in the AISC/ASCE Student Steel Bridge Competition uses full-spectrum color coding to simplify construction. Here team members prepare to compete in the first regional competition of the 2011 season.

Updated Steel Deck Information is Available

I came across a letter from Alex Bonnar of McNamara/Salvia, Inc., in the January 2011 edition of *Modern Steel Construction* (page 20) requesting sources for United Steel Deck datasheets. I am writing to inform the readers that United Steel Deck is still in existence proudly producing the same quality products as before, now as a division of Canam Steel Corporation. United Steel Deck, a division of Nicholas J. Bouras for almost 40 years, was purchased by Commercial

Metals Company (CMC Joist & Deck) in 2007 and was recently acquired by Canam in August 2010. Despite the changes in ownership, United Steel Deck maintains its vast experience in the industry as it is still operated by many of the personnel from Nicholas J. Bouras.

Much of the information from the past United Steel Deck datasheets has been updated and incorporated into our Canam—United Steel Deck Design Manual and Catalog of Steel Deck

Products available at www.canam.ws. However, any past datasheets or additional information can be obtained by contacting me by phone or email at 908-561-3484 or michael.martignetti@canam.ws. Thank you in advance for addressing this matter and we appreciate all of the contributions that *Modern Steel Construction* makes to the industry.

—Michael Martignetti
Product Engineer, Canam USA,
a division of Canam Group Inc.

EDUCATION

AISC Spring Seminars Announced

Whether you're designing industrial buildings or office buildings, AISC's Louis F. Geschwindner Seminar Series is a great opportunity for structural engineers and other designers to increase their knowledge and earn continuing education credits. With seven exciting live seminar topics and two Steel Camp events being offered in 25 cities from now through July, there's bound to be one that's right for you. Complete information is available at www.aisc.org/seminars.

- Step-By-Step Design for Commercial and Industrial Buildings
- Step-By-Step Design of a Low-Rise Office Building with Seismic Considerations
- Seismic Braced Frames—Design Concepts and Connections
- Practical Connection Design for Economical Steel Structures
- HSS Connections / Dos & Don'ts of Steel Construction

- Design Steel Your Way II: Efficient Analysis for Steel Design using the 2005 AISC *Specification*
 - Listen to the Steel: Duane Miller on Welding
 - Steel Camp (covers 4 topics in 2 days)
- Visit www.aisc.org/seminarmap to search AISC's spring seminars by state. For more information on registration and pricing, visit www.aisc.org/seminars.