2006 NASCC—Register Today!

Registration is now open for the 2006 North American Steel Construction Conference! The 2006 Steel Conference will take place February 8-11 in San Antonio, TX. See the 2006 Advance Program in this month’s issue of MSC or visit www.aisc.org/nascc for a complete schedule of conference events and instructions for registration.

NASCC is a premier education event aimed at providing structural engineers, steel fabricators, erectors, and detailers with practical information and the latest design and construction techniques. In addition, NASCC offers an extensive trade show, featuring products and services ranging from fabrication machinery, galvanizing, and connection products to detailing and engineering software. NASCC also incorporates the Structural Stability Research Council’s Annual Stability Conference.

Educational opportunities at the 2006 NASCC will include sessions addressing the latest technical issues in structural engineering, as well as current topics in fabrication, detailing, and erection. The 2006 short courses will give attendees the opportunity to earn CEUs or PDHs while updating their knowledge of interoperability, beam buckling and bracing, termination, and the new AISC specification and manual.

Among the conference’s plenary sessions will be a keynote speech by Gene Kranz, leader of the “Tiger Team” of NASA flight directors who brought the Apollo 13 spaceship safely back to Earth on April 17, 1970. Kranz’s lecture, “Failure is Not an Option” reflects on his years of experience in the space program. Other keynote speakers include James M. Fisher, who will impart some of the valuable lessons he has learned in 40 years of practice as a structural engineer in his lecture, “Design!” This year’s T.R. Higgins Award Lecture will be delivered by 2006 Higgins Award recipient Ronald Hamburger, P.E., S.E. Hamburger will present his paper, “Design of Steel Structures for Blast-Related Progressive Collapse Resistance.”

The conference’s 65,000+ sq. ft. exhibit hall will feature more than 400 booths with more than 130 exhibitors showcasing the latest products for the steel construction industry, including a detailing pavilion and heavy machinery area. The exhibit hall will also feature the popular “Heavy Machinery Classroom” again, where heavy machinery exhibitors will give presentations on product developments. (If you are interested in exhibiting at the 2006 Steel Conference and would like to receive an exhibitor prospectus, contact Renae Gurthet, RG Enterprises, at rgurthet@rgenterprises.us.com or by phone at 231.995.0637.)

The Knibbe Ranch, a working ranch in Texas Hill Country, will be the setting for the 2006 conference dinner. Conference attendees can take wagon rides, test their cowhand skills on a mechanical bull, or sit and take in the Texas sky while enjoying a true Texas-style BBQ. The 2006 conference will also give attendees the opportunity to tour the brand new facility of an AISC member steel service center, Triple-S Steel/Intsel in San Antonio.

Mailed registration forms for the 2006 Steel Conference will be accepted until January 23, 2006, while online registration will be open until February 3, 2006 at www.aisc.org/nascc. After these dates, registration must be completed on site at an increased rate. Don’t miss this opportunity for a great value for this incredible event—register today!

AISC Board of Directors News

The 2005 AISC Annual Meeting was held September 17, 2005 in Dana Point, CA. The annual meeting is a chance for the nation’s leading fabricators to meet and exchange ideas, and provides a forum for the election of AISC’s officers.

With this year’s meeting, Stephen E. Porter began his two-year term as AISC Chairman. Porter is President of Indiana Steel Fabricating, Inc. in Indianapolis, IN, and has served on the AISC Board of Directors since 2000. He is an active member of several AISC committees, including the Executive Committee, Strategic Planning Committee, and Audit Committee, and is the Oversight Director of the Professional Member Committee.

Rex I. Lewis was named AISC Vice Chairman. He is Vice President of Puma Steel in Cheyenne, WY. He serves on AISC’s Executive Committee, Strategic Planning Committee, and is Chairman of the Information Technology Committee. Lewis previously served on the AISC Board of Directors from 2000 to 2003. He rejoined the board in 2004.

John Yohe, President of Megquier & Jones, Inc. in South Portland, ME, was appointed AISC Treasurer. Yohe serves as Chairman for AISC’s Audit and NASCC Committees. He is also a member of the Chairman’s Advisory Committee.

Ronald Sherrill, Chairman and CEO of SteelFab, Inc., in Charlotte, NC, was elected to the Board of Directors, while Thomas Cera, International Steel Group; Sidney W. Blaauw, formerly with Prospect Steel Company; and Patrick P. Loftus, a past president of High Steel Structures, Inc., resigned from the Board of Directors Committee.

SSPC Offers Standards Online

The Society for Protective Coatings (SSPC) announced the launch of a new benefit for its members: the “Members Only Download Area.” This benefit provides unlimited access to the entire collection of SSPC standards. SSPC members can access the download area using their SSPC member user name and password to log in. Members can then search and download standards at no additional cost and no increase in membership dues.

For more information about the new download area, SSPC membership, and SSPC member benefits, visit www.sspc.org.
AISC Launches Safety Web Site

AISC’s Safety Committee, comprised of industry professionals with specific experience in the application of current safety standards and accepted safety practices to the fabricated structural steel industry, has launched a safety resources web site at www.aisc.org/safety.

The site is a collection of safety resources the committee has assembled for use by AISC member fabricators. It includes publications, reviews of safety products, links to other safety sites, past MSC articles on safety, and ideas that fabrication shop personnel have used to improve safety in their own shops.

A document titled “Sample Safety Program Elements for Structural Steel Fabricators,” available under the site’s publications section, is a collection of elements that shop safety managers can refer to for ideas when drafting or revising safety programs. The program elements are assembled from OSHA standards and excerpts from steel fabrication shop safety programs, and have been edited to reflect general use and practice. The publication is provided in both PDF and Word document formats. The Word document is provided to permit users to copy and revise the elements for their own use.

The elements provided include information about general safety requirements, record keeping, general safety rules, training, personal protective equipment (PPE), safety practices for selected processes, facility evaluation, forming a safety committee, accident investigation, occupational injury management, safety recognition programs, and statutory required program elements. The document is written in an example format, as opposed to simply providing instructions on how to write a program. The examples are not complete enough or specifically tailored for use without revision, but they are relatively extensive and offer specific guidance.

The committee is looking forward to contributions from users to help keep the elements useful and current. To contribute your ideas, please contact Tom Schlafly, AISC Safety Committee Secretary, at schlafly@aisc.org.

New AISC Seminar Debuts at NASCC

AISC Continuing Education will debut its newest full-day seminar in conjunction with the 2006 North American Steel Construction Conference. “Design Steel Your Way with the 2005 AISC Specification” will be offered for the first time as a short course on February 11, 2006 in San Antonio, TX during the Steel Conference. Throughout 2006, the seminar will be presented in approximately 60 cities across the United States.

Whether you design in ASD or LRFD, this seminar will accelerate your ability to design steel buildings according to the 2005 AISC Specification for Structural Steel Buildings and the 13th Edition Steel Construction Manual. You will gain valuable insight into:

✔ The Basic Design Values cards—two 5x8” cards that distill the most widely needed and often used specification provisions;
✔ The 13th Edition Steel Construction Manual, which presents design aids for ASD and LRFD by side by side for ease of use; and
✔ The Design Examples CD, which provides an illustration for each of the Specification provisions, as well as examples illustrating the use of all tables in the Manual.

Presentation topics will include proper material selection, design philosophies and analysis requirements, member and structure stability provisions, member design, and connection design.

This is the AISC seminar you’ve been waiting for! Look for the full schedule, available soon, at www.aisc.org/seminars.

2006 IDEAS² Awards

Entries are now being accepted for AISC’s newly-revised Innovative Design in Engineering and Architecture with Structural Steel Awards (IDEAS²). Entries will be accepted through December 15, 2005.

The IDEAS² program celebrates projects where structural steel has been used in an innovative manner and recognizes the entire building team: architectural firm, structural engineering firm of record, general contractor, detailer, fabricator, erector as well as the project owner. Any member of the project team may submit a project for consideration. Joint submittals from project teams are encouraged.

The judges will consider the project’s use of structural steel from both an architectural and structural engineering perspective. Submission packets can be requested by visiting www.aisc.org/ideas2form until November 15, 2005. Please e-mail Becky LeDonne at ledonne@aisc.org or call 312.670.5433 with additional questions.

SDI and Roanoke Electric Steel Announce Merger

AISC member Steel Dynamics, Inc. (SDI) and Roanoke Electric Steel Corporation have announced the execution of a definitive agreement of merger pursuant to which SDI will acquire Roanoke.

The merger will increase SDI’s total steel making capability to approximately 5.2 million tons.

“Combination further diversifies SDI’s product offering, provides additional penetration of the joist, truss, and girder markets and provides SDI with its first foray into the processed raw materials arena,” said Keith Busse, SDI’s President and CEO. “The combination will enable us to broaden our geographic presence and strengthen our relationships with customers. We plan to invest $50-$80 million to improve and upgrade Roanoke’s facilities after the transaction closes.”

SDI operates three steelmaking mini-mills producing a wide range of steel products and also produces joist and decking products for the non-residential construction markets in two fabrication facilities. Roanoke Electric Steel Corporation has steel manufacturing facilities in Roanoke, VA and Huntington, WV.
SOFTWARE NEWS

NetGuru sells REI to Bentley Systems

NetGuru, Inc. entered into an asset purchase agreement in late August to sell its Research Engineers International (REI) business and STAAD product lines for $23.5 million to privately held Bentley Systems, Inc., a leading provider of software and solutions for the architecture, engineering, and construction market.

The sale is subject to various closing conditions, including approval by NetGuru stockholders and compliance with regulatory requirements. If approved, the sale is expected to close before the end of 2005.

Bentley would acquire the worldwide operations associated with REI, including the market-leading STAAD structural analysis and design product line, software and product development, customer support and relationships, and offices associated with the worldwide business. NetGuru would retain its collaborative software operations and products, including eReview and ForReview, and its information technology and engineering business process outsourcing services businesses.

Attend the 2005 World Steel Bridge Symposium

Pre-registration discounts for the 2005 World Steel Bridge Symposium (WSBS) are available now through November 25. This year’s symposium, themed “Time for Steel, Steel for Time,” will be held November 29 through December 2 at the Hyatt Grand Cypress hotel in Orlando, FL.

Registration may be completed by phone at 734.572.4705 or online at www.aisc.org/nsbawsbs. Registration forms, available online, also may be faxed to 734.572.4715. (After November 25, registration must be presented in person at the Hyatt Grand Cypress and discounts will no longer apply.) The WSBS gathers steel bridge owners, designers, contractors, and others from around the world to discuss all aspects of steel bridge design and construction. WSBS attendees come to the symposium to learn about the latest innovations in steel bridges. The symposium’s exhibit hall features products and services to advance the state of the art of the steel bridge industry.

This year’s symposium program includes half-day workshops on accelerated bridge construction technology; the new AISC Sophisticated Paint Endorsement (SPE) standard; AISC fabricator certification criteria for bridges and buildings; and pre-fabricated bridge elements and systems.

Focus areas of the symposium’s many sessions will include, but will not be limited to: short span bridges; intermediate span bridges; case studies featuring the use of high-performance steel; restoration, rehabilitation, and reuse; fabrication, construction, and erection; innovative bridge designs; and inspection and maintenance.

The highlight of this year’s symposium banquet will be the presentation of the 2005 Prize Bridge Awards.

For general information, contact Kristin LaPlaca at 312.670.5421 or laplaca@aisc.org. For exhibit and sponsorship information, contact Jody Lovness at 402.758.9099 or lovness@nsbaweb.org.

Be sure to watch NSBA’s web site for more information, coming soon: www.nsbaweb.org.

Bentley Offers Free CAD Software in Nine Languages

Bentley Systems, Inc. announced that BE Careers Network, its academic resources division, has expanded its offer of free MicroStation PowerDraft CAD software to students and instructors to include versions in nine languages: simplified Chinese, traditional Chinese, Czech, English, French, German, Italian, Korean, and Spanish.

MicroStation PowerDraft is a professional-level application used for 2-D and 3-D drafting and detailing in architecture, engineering, and construction. It features an easy-to-use graphical user interface, intuitive viewing techniques, and a set of industry-recognized tools for production work.

The free offer includes the MicroStation PowerDraft application, an 18-week curriculum for teachers, and a student guide that can be reproduced at no cost. These materials are available to students and instructors in all nine languages at www.becareers.org. The Chinese versions are also available at www.bentley.com.cn.

New Link for RISAFloor and Revit Structure

RISA Technologies, working in conjunction with Autodesk, has developed a robust, two-way interface between Revit Structure and RISAFloor. This new link complements the already available link between RISA-3D and Revit Structure.

This link between the programs enables synchronization of all construction documents—plans, elevations, sections, and details—with the structural analysis models. The link was not previously possible within a single platform. For more information, please visit “What’s New” at www.risatech.com.

2005 AISC Specification Now Available in Print

Printed copies of the 2005 Specification for Structural Steel Buildings are now available to purchase through AISC’s online bookstore at www.aisc.org/bookstore.

This specification provides the generally applicable requirements for the design and construction of structural steel buildings and other structures. The ANSI-approved specification is the first edition to incorporate both allowable stress design (ASD) and load and resistance factor design (LRFD) methods. The design provisions for single angles and hollow structural sections (HSS) are also included. A dual-units format provides for both U.S. customary and S.I. units.

Electronic copies of the Specification, as well as the associated Commentary and Basic Design Values cards, are also available to download from the AISC web site at www.aisc.org/2005spec.
Sidesway Buckling Analysis

I think the article, “SpecWise: Stability and Analysis,” by R. Shankar Nair in the September 2005 issue of Modern Steel Construction was excellent. Dr. Nair has an unusual talent for explaining complex issues in simple terms for ordinary engineers like me.

In his discussion of the effective length method he states that K factors “...must be determined by a sidesway buckling analysis...” but makes no mention of the nomograph that many of us use on a regular basis. My question to Dr. Nair: Is the nomograph a “sidesway buckling analysis”?

—Robert O. Disque, P.E.

Nair’s response:
Yes. The traditional nomograph method, using the sidesway-uninhibited alignment chart, could be regarded as a “sidesway buckling analysis” for the purpose of determining the K factor. But this approach has severe limitations: the designer who uses it should be aware of the assumptions underlying the chart, listed in the commentary to the AISC specification. Most importantly, if the building has “leaning” columns (that is, nominally pin-connected columns that are not part of the lateral load-resisting frame), the alignment chart method must be adjusted to account for the effect of the load in the leaning columns on the overall lateral stability of the building. There is extensive literature on this subject but, unfortunately, no single “standard” way of making the adjustment.

—R. Shankar Nair, Ph.D., P.E., S.E.

RFI Recommendations

Bill Andrews is to be commended for the excellent article on RFIs. (“RFI Recommendations,” October 2005).

[It was] an excellent description on what RFIs are intended to be and not intended to be—a must-read for all. I’ve passed this article on to many of my colleagues.

Keep up the good work in separating fact from fiction.

—John G. Sobetski, P.E.
SmithGroup, Inc., Detroit