You Are Invited...

TO THE

NISD 2013
ANNUAL MEETING
IN
NEW ORLEANS, LOUISIANA

MARCH 21-23, 2013

The next NISD Annual meeting will not only educate and inspire members, it will be in one of the most unique cities in the USA. Travel to our next meeting and schedule a few days extra for a well deserved spring vacation.
Focusing on Membership & Training

Our membership voted to allow Members At Large the option of forming At Large Chapters and having director representation on the NISD Board of Directors. The Constitution & By-Laws are amended accordingly. Enclosed with this issue of the Connection is a copy for all regular members. It is also posted on our web site (www.nisd.org) under membership.

President Bowers’ message in this Connection calls for NISD to develop a new detailer training program. He would like it to be a series of webinars utilizing some of the hi-tech tools available to us today.

You may recall that some years ago NISD worked jointly with AISC to produce a set of detailer training CDs. The program covered everything from a basic introduction of steel detailing through each of the major components of a steel structure and finally to the topic of good detailing practices. I still have a set of these CDs in my office and even though they are now pretty much out of date, it wasn’t all that long ago when they were a valuable tool. It is amazing to see just how much the technology and the detailing software has advanced over the last 10 or so years.

In a recent issue of the Connection I mentioned the excellent training program that 4D Global Group conducts for their trainees in the Philippines. What is most impressive to me is the research papers that the trainees are required to write. They must do the research and write a comprehensive report about their assigned subject. These reports can then become educational materials to be shared among all of their other detailers.

When you read in this issue about the survey that Kevin Jacques conducted on the ages of people working in steel detailing today, it is evident that we need to really get to work and develop an affordable and up-to-date training program to bring new people into our industry. Kevin has already started exploring some possible programs to determine what might work best for us. The NISD board has given its support to move ahead on a new training program as soon as possible.

I want to thank 4D Global Group for the great article they submitted on the new control tower at the Oakland, California airport. I would appreciate hearing from anyone out there who has detailed a project that they would like to share with fellow detailers. These job site articles are inter-esting to our readers and they can also give you some free advertising for your company.

In this Connection, we have reprinted an article from the March 2012 issue of “The Fabricator’s Resource.” For interesting articles on steel fabrication, erection, estimating and detailing check them out at www.steeladvice.com.
AISC – Partnership in Industry

The time has come for the NISD as an institute to become more active in what our real mission is as an organization. Namely, the responsibility of the NISD is to train, educate, and provide continuing education for the detailing community.

As an organization we have made many well-intentioned attempts at education throughout our short history. We have been presented with some opportunities to allow those mission mandates for continuing education to be more easily achieved through cooperation with the AISC in the development of some webinars for that purpose.

Now before any of you folks dig in your heels and begin thinking that we are softening our position on the autonomy of this Institute, I want to put your fears at ease. We only have to look at the US Congress to realize that polarization of industry professionals will not get us anywhere close to our goals or achieving our mandated missions.

The great American inventor Alexander Graham Bell once said “Sometimes we stare so long at a door that is closing that we see too late the one that is open.”

Throughout the next few months to a year the Board will be presented with some opportunities to aid us as an institute, to move forward toward our mission of educating, training, and providing continuing education for the detailing community. We who are in positions of leadership would appreciate the input of members of this Institute with the desires or concerns that need to be considered. Remember cooperation is not a bad word and should be embraced as we continue to try to move this Institute forward in a very dynamic industry.

The ability to concentrate and to use your time well is everything if you want to succeed in business—or almost anywhere else for that matter. – Lee Iacocca

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>February 8, 2013</td>
<td>NISD Board Meeting – Teleconference</td>
<td></td>
</tr>
<tr>
<td>March 21-23, 2013</td>
<td>NISD Annual Meeting – New Orleans, LA</td>
<td></td>
</tr>
<tr>
<td>March 20-23, 2013</td>
<td>SEAA 41st Annual Convention – New Orleans, LA</td>
<td></td>
</tr>
<tr>
<td>March 24-26, 2013</td>
<td>The Steel Plus Network AGM – Chandler, AZ</td>
<td></td>
</tr>
<tr>
<td>April 17-19, 2013</td>
<td>NASCC: The Steel Conference – St. Louis, MO</td>
<td></td>
</tr>
<tr>
<td>September 18-21, 2013</td>
<td>CISC AGM – Whistler, BC, Canada</td>
<td></td>
</tr>
<tr>
<td>October 4, 2013</td>
<td>SteelDay 2013</td>
<td></td>
</tr>
</tbody>
</table>

These events are great ways to stay current on trends, and network with others. Join us for any of these events in 2013.
The Annual Meeting – Summer 2012
by John Linn

Our 44th Annual Meeting was held in Las Vegas at the New York New York Hotel. It began on Thursday evening, May 17th with an enjoyable welcome reception, which featured a variety of appetizers and refreshments.

On Friday, the meeting began at 8:00AM. President Mike Bowers welcomed all present to the meeting and gave his opening remarks. Vice President Joel Hicks then introduced our featured speaker Scott Hunter. He was followed by Jeff Stoneman of Simpson Strongtie, and then an audio power point presentation from Chris Moor of AISC was played.

In addition to the three speakers on Friday, we also had three speakers on Saturday. For a brief summary of the content of all of their talks please refer to an article titled Annual Meeting Speakers which can be found on later pages of this Connection.

After the speaking sessions were completed for the day, we began the NISD business session.

Annual Meeting Business Session
The Constitution & By Laws chair read aloud the two proposed constitutional amendments presently under consideration.

The first amendment would add language to more clearly define the membership category of Individual Associate Member. The amendment passed unanimously.

The second amendment was to allow Members at Large the option to form At-Large Chapters and to have a director to represent them on the NISD Board of Directors. The amendment failed. It needed a two-thirds (66 2/3%) voter approval and the vote came in at 62% approval. It was noted however that only three Member at Large firms were represented at the meeting and no Member at Large firms had voted by letter ballot.

The Saturday session began at 8:00AM with the first speaker being Tony Leto of The Wagner Companies. He was followed by Randall Dunn of Hilti who was next followed by Ian Coats of Tekla Structures.

After lunch break we held a somewhat shorter than usual Board of Directors meeting. The most significant action taken at the meeting was concerning the amendment to allow for the formation of At-Large Chapters. The board felt that since the vote had failed to pass by such a small margin and since only three “Member at Large” firms had cast their vote, we should hold a second election via letter ballot. The cut-off date to receive ballots was set at July 31, 2012. Seventy-five votes were cast. Seventy votes in favor, five votes against. The amendment passes!

Kevin Jacques is Man of the Year 2012
by Mike Bowers

As this Institute moves closer to its mission of providing education and training for the detailing community, we needed some new young blood to pursue those goals. When I presented these challenges to the Board, I didn’t have to wait long as Kevin approached me after the Board meeting asking me to allow him to accept this challenge. He has worked extremely hard in trying to head this Institute in the direction of our mission. Kevin not only serves this Institute as a Board member, but he is also the President of the New England Steel Detailing Association.

Serving on both Boards as well as running his own small detailing business, I don’t know how he finds the time to get out and ride that Harley Davidson, but he does. Supported by his family, he has become one of the predominate “young guns” with fresh new ideas on the NISD Board. I would like to thank Kevin for all of his efforts serving the detailing community and congratulate him on being the Man of The Year for 2012.
The Fabricator’s Detailer

As steel detailers, we know that the detail drawings are created based upon the project requirements. Specific customer requirements are included with your drawing format. We work hard to service our customers to the best of our ability, both with drawing quality and timely delivery.

When we estimate our labor hours to create the drawings, both project and customer requirements are considered. We do not add labor hours for the research that projects will require in order to locate missing or incomplete information. If we did, we would never create a successful bid. We know that every job will have questions, and we accept each new challenge based on this premise.

Questions and Answers

Is your customer proactive with resolving ambiguous information in the contract documents? Do you find yourself doing most or all of the work to get answers? Do you try to get paid for these extra hours or do you consider this activity all part of your friendly service? Are you constantly thinking of getting into another line of work?

The answers to these questions are different for each of us. We all have a different set of customers, each with various job conditions and requirements. Mostly, we can agree that how we service our customers directly affects our own efficiency. Racking up unpaid labor hours to perform to the standard we have created is a given.

It is all a Learning Experience

When we do the resolution footwork on the steel fabricator’s behalf we actually deny them the ability to learn firsthand what is required to get the job done. If they do not have the opportunity to learn to resolve an issue they will never learn how.

Here is where helping our customer actually serves to keep ourselves doing work for which we do not get paid.

We are obligated when dealing with ambiguous information to identify the problem, ask the questions and supply a sketch as needed. Beyond that, it is up to the customer to field the question and work the resolution. It is not up to us as steel detailers to guide the hand of the steel fabricator by working to get the information ourselves.

Is it Customer Service or an Extension to the Fabricator’s Project Management?

Some of us nurse our customers through each job. This makes sense in our own world because we are trying to get a job completed, so we can bill and get paid. Once we have set that standard, our
customers will come to expect this behavior for every project you do for them. While this is common practice for some, others see this as crossing a line. The customer has a responsibility to manage their own work; it is not up to the detailer to become a project manager for them.

Many fabricators have scaled back their staff, or have added new members that are not fully trained in their position. We quickly realize in dealing with these newer staff members that we are forced to become their trainer in order to keep our projects moving forward. We accept this role in silence because to do so is easier than the alternative. then we cross our fingers and hope it all works out.

RFI Generated Delays

If waiting for information creates a project delay with detailing the steel, send the customer a written notice to that effect. Let them know that the project can be rescheduled when the answer comes back. Provide pricing for the additional costs that will be incurred to work around the RFI affected area. Ask for direction on how you are to proceed.

You did not bid the work with multiple starts and stops. It is not fair to be expected to skip around RFI affected areas, continue your work, then go back to revise drawings for free. Your customer can accept the added cost for you to continue, or they can accept the consequences of scheduling impacts due to the delay. Whatever the decision from your customer, be sure to document everything in writing.

The Choice is Simple

Removing yourself as your customer's project manager will be tough for some because they believe they do it for the sake of keeping business coming their way. In this world where cash is king, your friendly and 'above the call of duty' service is often forgotten when they are presented with an aggressive low bid from the competition.

This article originally appeared in The Fabricator's Resource, March 2012. It is reprinted here with permission of Kerri Olsen, owner of The Fabricator's Resource and also the website, SteelAdvice.com.

Visit SteelAdvice.com for a wealth of information that could be useful for anyone in the steel industry. You will also find past issues of The Fabricator's Resource posted to this site.

Thank you Kerri for your support of the steel industry!
Classification:
- ☐ Senior Detailer – Class I: Minimum 10 years experience including checking
- ☐ Detailer – Class II: Minimum 5 years experience

Category:
- ☐ Structural/Miscellaneous
- ☐ Bridge

Submit:
- Experience history, and
- Either a letter of recommendation from a steel fabricator, a Certified Class I detailer, or a NISD National Director.

When your application is processed, you will receive a Sample Test

Cost:
- NISD Members – Total fee per category: **$300** [in US dollars]
  - Non-refundable processing fee due with application: **$100**
  - Remainder of fee due 10 days prior to exam date: **$200**

- Non-Members and Overseas Members
  - Total fee per category: **$500 + proctor fee** [in US dollars]
  - Non-refundable processing fee due with application: **$200**
  - Remainder of fee due 10 days prior to exam date: **$300**

Personal Information:
- First Name: ___________________________ Last Name: ___________________________
- NISD Member: yes ☐ no ☐ Last 4 digits of SS# or SIN#: __________________________
- Home Address: ____________________________________________
- City: ___________________________ State/Province: ___________________________
- Zip/Postal Code: ___________________________ Country: ___________________________
- Telephone #: ___________________________ E-mail: ___________________________

Current Employer [if applicable] ___________________________________________

Business Address: ____________________________________________
- City: ___________________________ State/Province: ___________________________
- Zip/Postal Code: ___________________________ Country: ___________________________
- Telephone #: ___________________________ E-mail: ___________________________

Indicate which address [no P.O. Box] is best to receive IDC materials:
- ☐ Home     ☐ Employer

Method of Payment: Check ☐ Visa ☐ Mastercard ☐

Make check payable & send to: NISD, Inc., 1810 Catalina Court
Livermore, CA 94550-6416

Credit Card Information: Credit Card #: ___________________________ Expiration Date: __________
Name as it appears on card: ____________________________________________
Signature: ____________________________________________

For more information: Visit our website at www.nisd.org or contact Karolyn Linn at nisd@sbcglobal.net
Or Mike Bowers, Individual Detailer Certification Committee Chair at mike@mdbowers.com

Re-certification is required every 3 years
NEW MEMBERS

INDIVIDUALS

JESSICA BASCO
8027 U.S. 70 Bus. Hwy. W
Clayton, NC 27520
phone: (919) 553-3034
jessica@thehalesgroup.net

NICK BEEBE
7213 Circle Dr.
Rohnert Park, CA 94928
phone: (707) 849-9922
nbeebe34@gmail.com

GREG BRAWLEY
16th Floor Strata 2000, F. Ortigas Jr. Ave.
Pasig City, NCR 1605
Philippines
phone: +63 917-806-6926
gregb@steel-detailing.com

MICHAEL CHRISTENSON
9800 SE McBrod Ave., Bldg. #17
Milwaukee, OR 97222
phone: (503) 971-2000
michael@a2fab.com

ILKO DIMITROV
64 Richard Rd.
BRAINTREE, MA 02184
phone: (781) 848-3426
idimitrov@tuckermansteel.com

THOMAS P. THOMAS
249-08 82nd Ave.
Bellerose, NY 11426
phone: (347) 548-5612
tpanamoottil@jyahoo.co.in

ANTHONY TUMOLO
11125 Fanny Brown Rd
Raleigh, NC 27603
phone: (919) 609-1620
steeldetailingsolutions@yahoo.com

NEW ENGLAND CHAPTER

ATLANTIC STEEL DETAILING SERVICES, INC.
30 Main St.
Salem, NH 03079
phone: (603) 898-6108
dave@asds1.net
www.asds1.net
Dave Angelini

NEW ENGLAND CHAPTER

4D GLOBAL GROUP
86 Prospect Hill
Trenton, Ontario K8V 2V3
Canada
phone: (613) 969-2410
christinem@steel-detailing.com
www.4d-group.com
Christine McCulloch

ONTARIO CHAPTER

MEMBERS AT LARGE

AFFILIATED STEEL DETAILERS, INC.
9500 So. 500 W #101
Sandy, UT 84070
phone: (801) 562-5944
fax: (801) 562-5945
www.asdetailing.net
Dave Maynes

FISCHER DESIGN GROUP, LLC
3580 W. Electra Ln., Suite #4
Glendale, AZ 85310
phone: (623) 738-2180
mike@fischersteeldetailing.com
www.fischersteeldetailing.com
Mike Fischer

GULF COAST ENGINEERING
P.O. Box 6623
Lakeland, FL 33807
phone: (863) 577-0206
fax: (863) 644-7687
jhall@gulfcoasteng.com
www.gulfcoasteng.com
Jason Hall

INTEEL CORP.
156 Peachtree E. Shopping Ctr., # 187
Peachtree City, GA 30269
phone: (404) 567-5982
will@inteelcorp.com
www.inteelcorp.com
Will Parker

STEEL DIMENSIONS, INC.
42 Aragon Ave.
Scarborough, Ontario M1T 1X7
Canada
phone: (416) 888-2830
fax: (416) 551-4004
saagie.navaratnam@steeldimensions.info
www.steeldimensions.info
Saagie Navaratnam

THE AUDETTE GROUP, LLC
4 Fox Place
Providence, RI 02903
phone: (401) 228-3894
fax: (401) 228-3885
jamessullivan@theaudettegroup.com
www.theaudettegroup.com
James Sullivan

LA STEEL DESIGN GROUP
3800 La Crescenta Ave., Suite 209
La Crescenta, CA 91214
phone: (818) 249-9909
fax: (818) 541-6649
arous@lasteeldesign.com
www.lasteeldesign.com
Arousyak Melkonian

LES DESSINS TRUSQUIN
4965 Ambroise-LaFortune, Suite 100
Boisbriand, QC J7H 0A4
Canada
phone: (450) 420-1000
fax: (450) 450-9798
email@trusquin.com
www.trusquin.com
Michel Villemure
Since my last report the California Chapter is feeling the recession more than before. We have lost two of our members due to the slow down of work and poor collections. Both have told me that they will be back as soon as things turn around.

The California Chapter and the detailing community have lost a long time friend of the CSDA and NISD with the passing of Russ Mobley. Russ and I were officers of our chapter for a few years. I have good memories of those times we worked together. John Linn will have an article about Russ in this issue.

My next chapter report for the Connection will be a more upbeat and happier one.

Have a good autumn!

---

Despite the hard hit of the recession in our area, the Pacific Chapter has been able to maintain its membership at six firms. In addition, we have two individual associate members that regularly attend our chapter meetings, which help to make our group a little more substantial.

The economy in Northern California is slowly but steadily improving. We have had a huge increase in the number of jobs out to bid and the bid prices have become much more realistic. Another big difference now is that when a job bids, it goes ahead and gets built, whereas a few years ago the jobs would bid and then just die and drop out of sight.

We were happy to have had Terry Vachon of Vachon Drafting from Reno, Nevada attend our last chapter meeting. Terry was a previous chapter member who had dropped out about 8 or 10 years ago. It was great to see him again and I hope we will be seeing more of him in the future.

All of our members have reasonably good workloads. Some have had gaps between jobs but the gaps have gotten shorter than before so no one is really complaining too much about it.

---

The New England Chapter consists of seven NISD members. They range in experience from 15 years to 30+ years of experience. However, one of the more interesting aspects of the chapter is that each NISD member also belongs to another organization that goes by the name of The New England Steel Detailing Association (NESDA), of which I am the immediate past president.

The group consists of detailers, fabricators, engineers and other trade suppliers. They have a total of about 40 members in all. The group meets four times a year, and holds an annual golf network outing. However, at the meetings, it is customary to have industry representatives present their products, service and knowledge. Some of the topics have been connection design, fastener technology and stair design, to name a few.

The meetings usually last about 2 ½ hours and commences with dinner and time to network and commiserate. This is a great organization with which to belong and a great model for the NISD chapters to follow. Conversations with other detailers and a group of comrades upon which one can bounce ideas or problems, is an invaluable asset from which I’m sure all can benefit.
Quebec Chapter

by Robert Beauchamp, Director

Members (and non members) of the Quebec Chapter are enjoying brisk business, thanks to the Quebec PLAN NORD, which brings in lots of mining projects, and to the fact that the Quebec Fabrication force has turned to Western Canada (mining - oil and gas) since the US market is still down, as well as the fact that the Canadian currency is now stronger than its US counterpart.

Most detailing companies are back up to their full staff and are looking to grow in the near future. Unfortunately, the recession lasted too long and some of the experienced staff went (no choice) to work for engineering firms, who incidentally are getting their nose into detailing or BIM with little training costs.

That recession also has taken its toll on chapter members but for the moment we are holding on at 8 members. As a director I have made it a point in feeding the members with information from the meetings and from the conventions I attend.

I am just back from the Tekla 2012 user meeting in Orlando, Florida and I am happy to report that I saw a lot of young people there, some of them heirs of our long time members who are passing on their enterprises to family or employees that are in tune with modern times and technologies. I was pleasantly enthused to meet some of our chapters’ people like Ed Byrd from the Southern Chapter (eternally looking into the future), Matt from the Arizona Chapter, Rob Schoen from Axis Detailing, Christine McCullough, Russ Schiebler and John Taylor from NESDA, and a few more.

The keynote speaker, Ray Napolitan, President of Nucor Yamato/Verco Group, was excellent and the sessions interesting and informative, with job integration through BIM being the focal point of the show.

At this time the general feeling is positive for the short term but a bit uncertain about the longer-term state of the world economy.

In closing, we wish a great autumn to all.

Publications from NISD...

These reference guides are now available. Order them online at www.nisd.org
5. There are several fundamental design considerations that set up the complexity of this project that presented challenges for both the design and execution aspects of the construction process:

1. The structure, by definition, is both tall and slender, standing 240 feet high over a circular column grid of only 29'-2" diameter, yet weighed in at approximately 920 tons. This is especially noteworthy given FAA's stringent ATCT cab operational lateral drift requirements for a high-level activity tower operating in a relatively "high-wind" environment (Figure 1).

2. The structure is located in a region of very high seismic risk (Oakland CA).

3. The Tower structure's performance criterion specified that the structure meet selected "blast-resistant" criteria through the 3rd Level.

4. The interface of the geometry of the tower column grid (six-sided irregular polygon) and the blast-resistant symmetrical 12-sided exterior wall presented some member and connection geometry challenges.

5. SidePlate FRAME proprietary special moment frame (SMF) connections were required to be adapted for use in the skewed geometry conditions created by the irregular polygon column grid.

6. The Columns are Rectangular Built-Up sections 15" x 28" with 4" thick flange plates and 2½" web plates. These sections, with skewed-extended SidePlate Connections applied to shop built "trees", weighed approximately 12 tons each and required complete-joint-penetration welds at each column splice – (Figures 2 & 3).

7. The approximation of the exterior wall geometry is achieved by “Bent” girders between the six main columns with SidePlate connections at each end of the girders (Figures 4 & 3).

8. This “Bent” moment frame girder configuration presented erection and safety challenges due to the imbalanced loads during lifting and setting of these members (Figure 4).

9. The work points for the geometry of the moment frame girders do not align with the geometry of the 12-sided exterior blast panels. This was necessary to allow the Bent moment frame girder centerline and the width of the girder flange cover-plates to align with the centerline of the BU Column flange plates. (See Figure 5 below).

10. The above deviation from “symmetrical” geometry was “driven” by the need to maintain symmetry in the girder alignment with the column flange. Had W.P. 2 been at the centerline of the column the configuration of the bent SidePlate FRAME connections would have been eccentric to the column flange plate resulting in connection geometry that is unworkable.

11. Bringing the "mud stops" into proper alignment, observing the weld "protected" zones (areas in which welding was NOT permitted for SMF connections), and coordinating support framing for metal deck around SidePlate Connections added to the complexity of the work.

12. Tower framing geometry became more complex at the transition area to the Cab Level framing which brought the structural steel grid in alignment with the exterior wall geometry. At this point HSS curtain framing in a sloping wall configuration transitioned into symmetrical 12-sided polygons. (That’s a “dodecagon” for those who care!).

THE PROJECT

If, there is any credibility to the notion that a room full of primates pounding on computers would, given enough time, generate the great works of Shakespeare, then the ability to generate excellence under the demand of time constraints must be the mark of true professionals! Such is the challenge of construction “professionals” when it comes time to execute the design for a project. As the construction industry moves deeper into collaborative project delivery processes, the conventional line between design and execution becomes increasingly blurred in order to meet the performance expectations of the owner.

Continued on page 14
This became starkly evident in the case of Oakland International ATCT. Dennis Young of Leo A. Daly, the EOR pointed to some design challenges that were brought to his table: “1) Fitting a six column frame arrangement into a 12-sided tower shaft 2) Combining the SidePlate frame with the skewed moment connections into the confines of the blast-resistant exterior wall and the interior volume of the stairs and elevator shaft. 3) Providing adequate space behind the blast-resistant wall to allow for the required wall movement during a blast event. 4) The girder centerlines needed to intersect the column flanges at the center of the flange rather than at the center of the column.” Upon citing these challenges, Mr. Young commented that if it were up to him, he “…would have brought the major entities involved in the building frame and envelope together sooner in the design phase,” while also realistically citing that: “Unfortunately, that is not how the design process works and many contractors involved in the various aspects are not able to be involved fully during the early stages of a project.”

According to Jared Adams, Project Manager for SidePlate, “…Using SidePlate FRAME connection technology to meet the very strict drift criteria and keeping the core open…” required “…coming up with an entirely new concept and adapting SidePlate FRAME technology to meet those needs.” In addition to the connection geometry, the coordination of the weld “protected zones” at the SidePlate connections presented yet another challenge. Keeping secondary connections, slab edge and stud welding outside of the weld protected zones of the SMF connections added “spice” to the execution of this densely framed structure.

The Isometric view of Sequence 1 shows the framing congestion in the “core” of the structure which contains two stairs, a 180 foot elevator shaft, various catwalks and accommodation of mechanical equipment. The field welded column splices for these shafts required CJP welds at six (6) levels for the 12 ton fabricated column “trees”. The extensive quantities of field welding required for the installation of the “Bent” Girders only added to the massive number of field welding hours.

As Jake Doherty, Project Manager for steel subcontractor and erector Schuff Steel Company observed: “This was a very difficult project. Given the complexity of the design and schedule I think the team did a great job of working together to prioritize the items so as to maintain the scheduled milestone dates.” His view is supported by the fact that Schuff completed steel erection 1 week ahead of schedule.

4D Global Group, Inc. provided steel detailing services to Schuff Steel Company on this project using Tekla software for 3-D modeling, shop drawings and production data. The Rectangular Built-Up Column section 15” x 28” with 4” thick flange plates and 2½” web plates required extensive lead time in production for acquiring the heavy plate material needing to meet LEEDS requirements and the extensive shop welding. “Blanks” of the column profile were detailed, submitted, approved and fabricated as a “pre-fabrication” operation. These blank shafts were thereafter handled in the shop as any main member would be, while meeting complete material traceability and inspection requirements.
The effectiveness of 3-D modeling in this project provided exceptional side-bar advantages. As cited by Schuff’s Mr. Doherty, “The model allowed for visual and conceptual understanding of the framing system. It helped establish tolerances with other trades, and provided us with multi-faceted erection and shop drawings.” Similar observations by other team members point to the broader objectives that are supported by the free exchange of 3-D model information. Not only the generating of shop detail drawings, but the benefits of being able to manage the technical data, such as weld protected zones, demand critical welding criteria, the intricate member geometry, erectability and construction sequencing. Dennis Young of Leo A. Daly perhaps summed it all up: “Fast-tracking of projects to speed the construction process is not always the best way to the successful completion of the project...Engineer’s understanding of a steel detailer’s drawings aids in the development of better design details.”

Perhaps, as the construction industry pushes forward into deeper Building Information Management (BIM) project delivery systems, the power and utility of 3-D software will be the tool that redefines traditional roles in construction projects. Dwelling somewhat on Mr. Young’s perspective he noted “…that, when the project stakeholders start out working together in a cooperative spirit rather than with an adversarial mentality, the project runs more smoothly. The various entities involved in this project cooperated to work out details in a timely manner and were able to communicate freely.”

Now there’s a concept that seems to hold a whole lot more promise than the room-full-of-primates theory!
Mr. Ilko Dimitrov is very pleased that he is now IDC certified as Bridge-Senior Detailer Class I.

He is a self motivated person and he learned about the IDC program by going on-line and searching for detailer certification programs. He thought that the study guide was well written and was most helpful to him in his preparation. In reading the study guide he learned a few new things about bridge detailing that he had not known before.

Mr. Dimitrov began working as a steel detailer in 1995 when he began his employment as a scantling engineer with the Varna Shipyard, located on the Black Sea in Bulgaria. This experience helped him to develop a good understanding about work points and geometry of curved shell and frames.

Also along the way he has been involved in a variety of ship work projects including heavy ship repairs, piping systems, mechanical equipment overhauling and learning to estimate man hours based on the complexity of a project. He also worked on one of the largest ship conversions ever done – Abouzar 1200; a tanker ship converted into a floating crane and pipe laying vessel.

Ilko tells a great story about when he began his career in 1995. Ilko was replacing a retiring 75 year old second generation shipbuilder who, on his last day at work, left his fellow workers with these words of wisdom. “I am 75 years old and I am still learning. Never think that you know everything.” These words have remained a motivation to Ilko throughout his career.

IN MEMORIAM & OUR CONDOLEANCES

Russell Mobley of Upland, California, went to rest on August 2, 2012, at the age of 75. He was born August 21, 1936 in Normanhurst, Ontario, Canada.

In 1957 Russ began working as a draftsman in structural steel detailing. He was involved in the National Institute of Steel Detailing, as well as the California Steel Detallers Association. Russ was well liked by others and highly regarded in the steel detailing business. He was a visionary in the industry, developing one of the first automated steel detailing systems and contributing to the technical evolution of the detailing profession.

Memorials in memory of Russ may be made to the American Cancer Society.
Congratulations! This regular feature recognizes detailers who have recently taken and passed the IDC test.

### Structural/Miscellaneous Senior Detailer – Class I

- Reynaldo Avanzado  
  *International Design Services, Inc.*  
  Quezon City, Philippines

- James Avila  
  *International Design Services, Inc.*  
  Quezon City, Philippines

- Eileen Co  
  *International Design Services, Inc.*  
  Quezon City, Philippines

- Glenn Corpuz  
  *City of San Fernando, Philippines*

- Ludilyn Dela Cruz  
  *Isometric Diagonal Scheme, Inc.*  
  Quezon City, Philippines

- Annette Diaz  
  *San Mateo, Philippines*

- Felicitas Doria  
  *International Design Services, Inc.*  
  Quezon City, Philippines

- Plutarco Gaddi  
  *International Design Services, Inc.*  
  Quezon City, Philippines

- Bryan Golles  
  *International Design Services, Inc.*  
  Quezon City, Philippines

- Jose Grafilo Jr.  
  *International Design Services, Inc.*  
  Quezon City, Philippines

- Felisar Laforga  
  *International Design Services, Inc.*  
  Quezon City, Philippines

- Evangeline Lingat  
  *Isometric Diagonal Scheme, Inc.*  
  Quezon City, Philippines

- Alejandro Quizon  
  *Isometric Diagonal Scheme, Inc.*  
  Quezon City, Philippines

- Daisy Veliganio  
  *Isometric Diagonal Scheme, Inc.*  
  Quezon City, Philippines

- Mario Veliganio  
  *Isometric Diagonal Scheme, Inc.*  
  Quezon City, Philippines

### Structural/Miscellaneous Detailer – Class II

- Gino Bonifacio  
  *Isometric Diagonal Scheme, Inc.*  
  Quezon City, Philippines

- Godofredo Dela Paz Jr.  
  *Isometric Diagonal Scheme, Inc.*  
  Quezon City, Philippines

- Nethaji Muttam  
  Mold-Tek Technologies LTD.  
  Hyderabad, India

- Gillier Muyano  
  *Isometric Diagonal Scheme, Inc.*  
  Quezon City, Philippines

- Leoncio Ramirez Jr.  
  *Isometric Diagonal Scheme, Inc.*  
  Quezon City, Philippines

- Sayad Ahmad Bhasha Shaik  
  Mold-Tek Technologies LTD.  
  Hyderabad, India

- Crisanta Siron  
  *Isometric Diagonal Scheme, Inc.*  
  Quezon City, Philippines

### Bridge Senior Detailer – Class I

- Ilko Dimitrov  
  Braintree, Massachusetts
National Institute of Steel Detailing
Membership Application
The annual membership cycle runs from June 1st through May 31st

**Regular Membership** is open to any company that conducts its office in the Americas for, and is regularly engaged in, the business of steel detailing. Such office shall have been conducted for a minimum period of one year. A member in this category may be chapter affiliated or a member-at-large, and has all privileges and benefits of membership including voting and holding office.

**Fee Schedule:**
- **$290** for companies with a gross annual income of less than $250,000 [June-September]
- Prorated dues when joining October-February **$200**
- March to May 31 of the following year (15 months) **$290**
- **$450** for companies with a gross annual income greater than $250,000 [June-September]
- Prorated dues when joining October-February **$305**
- March to May 31 of the following year (15 months) **$450**

**Associate Membership** is open to any company, national or regional trade or professional association interested in enhancing the detailing profession or the activities of the NISD, whose primary business is not in structural steel detailing. This category includes all privileges and benefits of membership except those of voting and holding office.

**Fee Schedule:**
- Annual membership fee is **$360** [June-September]
- Prorated dues when joining October-February **$245**
- March to May 31 of the following year (15 months) **$360**

**Individual Associate Membership** is open to a person employed as a steel detailer or other person interested in the future of the steel detailing industry but who does not fall in the category of Regular or Associate membership. This category includes limited privileges and benefits of membership, which precludes them from voting and holding office.

**Fee Schedule:**
- Annual membership fee is **$65**
- Annual dues of $65 are renewable on June 1st

**Overseas Membership** is open to any company that conducts a regular office for, and is regularly engaged in, the business of steel detailing outside the Americas. Such office shall have been conducted for a minimum period of one year. Members in this category may vote (no proxy votes), but they may not hold national office.

**Fee Schedule:**
- Annual membership fee is **$450** [June-September]
- Prorated dues when joining October-February **$305**
- March to May 31 of the following year (15 months) **$450**

**Member Emeritus Membership** is open to any individual who was a former regular member of the NISD and has retired from the competitive field, but wishes to remain active in the NISD. Members in this category may not hold office.

**Fee Schedule:**
- Annual membership fee is **$100**
- Annual dues of $100 are renewable on June 1st

The undersigned hereby applies for membership in the National Institute of Steel Detailing, Inc.

Name ___________________________________________________ Title ___________________________________________________
Company Name__________________________________________________________________________________
Address    ______________________________________________________________________________________
City ________________________________ State/Province ______________________Zip/Postal Code____________
Country _______________________________________
Telephone _______________________________________  Fax ___________________________________________
E-mail  ________________________________________ Web site _______________________________________

**Payment in US Dollars**

<table>
<thead>
<tr>
<th>Membership Fee:</th>
<th>US$________</th>
</tr>
</thead>
<tbody>
<tr>
<td>Postage/handling, add:</td>
<td>$________</td>
</tr>
<tr>
<td>$28 for Canada</td>
<td>$________</td>
</tr>
<tr>
<td>Central &amp; South America</td>
<td>$________</td>
</tr>
<tr>
<td>$38 for International</td>
<td>$________</td>
</tr>
<tr>
<td>TOTAL ENCLOSED</td>
<td>US$________</td>
</tr>
</tbody>
</table>

**Method of Payment**

- [ ] Check, payable to: NISD, Inc.
  1810 Catalina Court
  Livermore, CA 94550-6416
- [ ] MasterCard
- [ ] Visa

Number:________________________ Expiration Date:________
Signature:_____________________

To receive a free subscription to *Modern Steel Construction* magazine (U.S. only) go to: www.modernsteel.com/subscriptions
The Annual Meeting - Summer 2012 – continued from page 5

Membership chair Fred Tinker will contact all Members at Large and begin chapter formation.

On Saturday evening we enjoyed a wonderful banquet dinner held at one of the New York, New York hotel’s meeting rooms. It was a beautiful evening and to top it all off, President Mike Bowers announced that Kevin Jacques was named the NISD Man of the Year for 2012.

SOME BOARD MEETING HIGHLIGHTS

Industry Standard – Joel Hicks

As a member of the AISC TI Committee, Joel attended a joint meeting with the Code of Standard Practice Committee in Grapevine, Texas on 4/18/12. The COSP Committee is working with the TI Committee to establish what is “best practice” as it relates to ownership of the manufacturing model. The COSP has long been regarded as the governing consensus document, which establishes what is customary, standard practice. Right now, with the rapid growth of BIM and IPD (Integrated Project Delivery), there is no customary or standard practice, because it is being done several different ways. The steps that are being taken by the TI Committee and COSP Committee coming out of this meeting are as follows:

1) Complete the flow chart to identify steps in the flow of information on a project. The TI Committee has already been working on this for about a year. Luke Faulkner (AISC) is to complete it and present it in a webinar prior to June.

2) Compile several industry contracts to see what language is currently being used.

3) Review Appendix A of the COSP for necessary changes or updates. Interestingly it was mentioned by the AISC’s legal council that Appendix A is technically not a part of the actual code, but more a suggested position.

The question for us is: Do we need to wait and see what the AISC does, or what their position will be on model ownership? Or do we need to move forward with our own now?

Membership – Fred Tinker

Last month at the NASCC Conference in Dallas, Texas, Fred worked in the NISD booth and had a chance to talk to people from different parts of the steel industry. From the architect and engineers he heard a positive tone about being busy, from fabricators and erectors he heard that they were bidding more work. Also some were buying newer equipment and software so when the steel industry gets really busy they will be ready. Fred came away from the Dallas meeting with a better feeling for the future than he has felt in a while, and with work picking up so will the NISD membership!

The membership statistics report is showing positive numbers for the first time in almost two years. Under regular membership we have gone up 2% and under total membership we are up 3%. This could be a turning point in membership and the construction industry.

Individual Detailer Certification – Mike Bowers

As of April 26, 2012 there is a total of 330 IDC certifications held. Of those 330, 7 are Bridge-Class I, 6 are Bridge-Class II, 18 are Bridge/Structural Misc.-Class I, 2 are Bridge/Structural Misc.-Class II, 233 are Structural/Misc.-Class I and 64 are Structural/Misc.-Class II. We have on the books a total of 14 more exams to be taken in the near future as well as 37 that are due for renewal.

Web Site – John Linn

Everything is complete with the new web site and now we are tracking down the information needed to change our web hosting. Since the current hosting server does not support the programming language that we will be using, the hosting will need to be moved.

The discussion board we have added to the site will allow NISD to manage comments so that only members can comment on posts, but it will also not require members to have a specific account with wordpress to do so. This makes it less complicated for our members.

What will happen is that a member will post a comment and enter their email, name, and web site (if they have one). The admin on the discussion board will receive a notification that there is a comment pending on the site so they can login and review the comment.

If the comment has the member’s name and email address, then they can approve the comment.

If not, they can choose to mark the comment as spam, or if it seems like a legitimate comment or question, the admin can reach out to that individual and invite them to join NISD so that they can comment on the discussion board as well as receive the other benefits of becoming an NISD member.

This will enable NISD to only allow members’ comments to display on the discussion board, but it will also give NISD an avenue for generating potential new members who are interested.
# Publications Order Form

**Guidelines for Successful Presentation of Steel Design Documents**  
...the Steel Detailer’s Point of View  
**Certification Programs for Detailing Companies & Individual Detailers**  
**NISD Informational DVD:**  
Introduction to Steel Detailing  
Quality Procedures Program

<table>
<thead>
<tr>
<th>PRODUCT</th>
<th>QTY</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Guidelines for Successful Presentation of Steel Design Documents</td>
<td></td>
<td>No charge</td>
</tr>
<tr>
<td>Certification Programs for Detailing Companies &amp; Individual Detailers</td>
<td></td>
<td>No charge</td>
</tr>
<tr>
<td>NISD Informational DVD:</td>
<td></td>
<td>$10.00</td>
</tr>
<tr>
<td>Quality Procedures Program</td>
<td></td>
<td>$10.00</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>[Regular, Associate &amp; Overseas new members receive 1 copy free of the following manuals &amp; CD]</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>PRODUCT</strong></td>
</tr>
<tr>
<td>---------------------------------------------------------------</td>
</tr>
<tr>
<td>NISD Industry Standard Manual</td>
</tr>
<tr>
<td>Beam Cards [CD only]</td>
</tr>
<tr>
<td>Hot Dip Galvanizing “What We Need To Know”</td>
</tr>
<tr>
<td>Painting And Fireproofing “From a Detailer’s Perspective”</td>
</tr>
<tr>
<td>Shipping &amp; Handling Canada - Central or South America</td>
</tr>
<tr>
<td>Shipping &amp; Handling Overseas</td>
</tr>
</tbody>
</table>

(Sorry No Invoicing)

<table>
<thead>
<tr>
<th><strong>TOTAL</strong></th>
</tr>
</thead>
</table>

All above items going to addresses within the US include shipping & handling. Please allow 10 business days unless other arrangements are made at additional cost. **International shipping is extra.**

**Detailing Guide for Erector’s Safety & Efficiency** [Second Edition] Contact SEAA at 336-294-8880 or [www.seaa.net](http://www.seaa.net)


Name: _____________________________________________________________

Firm: _____________________________________________________________

Address: __________________________________________________________

City: ____________________________ State/Province: ________________ Zip/Postal Code: ________________

Phone: _______________________ Fax:______________________ E-mail:__________________________

**Method of Payment:**  
- [ ] Check  
- [ ] Visa  
- [ ] Mastercard

Make check payable & send to: NISD, Inc.  
1810 Catalina Court  
Livermore, Ca 94550-6416

**Credit Card Information:**  
Credit Card #: ___________________________ Expiration Date: ________

Name on card: ___________________________ Signature: ___________________________ Daytime phone: ________

For Information:  
Tel: (925) 294-9626  
Fax: (925) 294-9621  
E-mail: nisd@sbcglobal.net
A CALL TO ARMS – NISD’s 2012 Survey Results and Action Plan

by Kevin Jacques

The NISD Census of 2012 was a terrific success. The Board of Directors and the Education Committee owe a great amount of gratitude to all who invested their valuable time to participate. There is a tremendous amount of data to sift and compile. And the Board of Directors’ Education Committee looks forward to the task. They will report more results in future issues of the “Connection”.

As mentioned in the survey cover letter, the goal of the survey was to determine the age and experience level of the industry. While there is not a lot of data on detailers, a “Snap Shot” if you will of the NISD should prove sufficient to achieve the goals intended.

That goal of course is to set up a Steel & Miscellaneous Metals detailer training program at colleges and technical schools. It has been a concern of the board of directors that our industry is aging, with an insufficient number of new recruits to sustain the work load. Also, keep in mind the issues the industry had a little over five years ago finding trained detailers just for the respondent group. Since only 20% of the NISD responded, as an organization, we would need to add 5 times that number. If one takes into account a two year degree and a year or so to create such a program, we need to get moving.

So, where do we begin? First, let us look at some of the issues within the construction industry as a whole. The contract plans seem to be getting worse rather than better. Yes, it is convenient to blame the engineers and architects. But quite honestly, they don’t make the drawings, drafts people do. Some of the errors seen, clearly point to entry level mistakes that their checkers don’t catch. The point being made is that the construction industry does not have a detailing shortage; they have a drafts person shortage. To that end, the solution lies in getting people interested in drafting.

To date, statistics of how many drafts people are working and what percentage of the industry steel detailing represents, have yet to be found. It is statistically sound to assume that whatever that percentage is, it will remain relatively consistent with the new wave of drafts people entering the work force. So our mission is to get people interested in drafting. Yes, that is the Call to Arms.

The NISD urges each and every one of you to contact your local or regional high schools and speak with the drafting instructor. If they don’t have a program, see what it would take to get one started. Make plans to visit a class or two and bring your work with you. If you have a 3d modeling program, bring that. These techno-hungry kids will be wowed by the graphics and smart tools available. You as a person with intelligence and excitement about your chosen profession can impress upon these youths the same excitement and get them interested in following your career path. Yes, you can get people interested in becoming a detailer. And if steel detailing is the first type of drafting that they see, then maybe that is where they will finally land.

The NISD’s Education committee will be working hard to get colleges and technical schools interested in offering steel and miscellaneous metals detailing. The current thought is to have at least three schools in strategic geographic locations across the United States. At least one of the schools should offer On-Line degrees as well. This will give the option for students not wanting to travel, or foreign students the opportunity to learn this trade.

Armed with the survey results and a need for over 100 new detailers in a 5-6 year period should help persuade the schools to listen to the proposal. Schools work to the supply and demand principles just as a business would. They want to fill classrooms and provide a competent work force to maintain their reputation and bottom line. With all of you getting the high school students excited about drafting, and the education committee demonstrating that there is indeed a large need for drafts people, the schools should respond in favor.
Annual Meeting Speakers – Recap

This year’s Annual featured six speakers covering a wide variety of subjects ranging from “How to Create a Successful Organization” to “Latest Development in Concrete Connectors” to what is being done to stop “Piracy of Detailing Software.”

Scott Hunter
Our first speaker, Scott Hunter led off with a spirited talk on new ways of thinking to achieve greater success in your business, and in the process have a happier workplace for both you and your employees. He gave us two key principles to use in achieving our goals and related many past experiences he has had with business clients who have followed many of these leadership principles with great success.

I believe that most all of us can improve our businesses by applying these principles. If you want to learn more about Scott Hunter’s program through his books and audio CDs, go to his website unshackledleadership.com.

Randy Dunn
As a Senior Field Engineer for Hilti, Randy was able to give us a run down on Hilti anchoring systems including some resources such as an anchor selection chart. Hilti provides technical design centers and regional engineers to assist in product information and selection. Hilti sells their products directly to customers, not just to contractors. Product information can be found at www.hilti.com and engineering help can be found at www.us.hilti.com/engineering.

Jeff Stoneman
Jeff Stoneman, a field engineer for Simpson Strong-Tie gave us an overview of their extensive line of products. Some of their newer product lines are the Strong Frame and Strong Wall, which are used mainly in residential and smaller commercial buildings. In addition to their large array of wood construction connectors they also have a complete line of strong tie anchors. Check them out at www.strongtie.com.

Tony Leto
Tony Leto, Executive Vice President Sales/Marketing of The Wagner Companies, a supplier and manufacturer of metal railing systems and components gave us a talk that centered on building code issues concerning railing.

Mr. Leto first presented information about the many different code bodies and standards, including international codes. Jurisdiction is dependent on what code has been adopted by the particular area, city or county in which the project is located. Railing codes vary from place to place so we should be aware of that and check up on any recent code changes in our areas of work.

Chris Moor - Video Presentation
Because Chris could not be there in person due to some scheduling conflicts, he sent us a video presentation. Chris has been working on the AISC Technology Integration Committee. One of the first steps necessary for the committee was to get a better understanding of what technologies are in use today and how many fabricators are using them. They conducted a survey of the industry and got a pretty good picture of where it’s at right now.

- 80% is using BIM capable tools.
- 80% is using CNC download equipment.
- Less than one third is sharing models.
- Less than one percent use models in the review/approval process.

AISC is working to keep pace with the rapidly changing technology environment. Most likely this is going to require updating the Code of Standard Practice. Stay tuned to AISC for all the latest news and updates.

Ian Coats
Ian Coats of Tekla told us about the Tekla BIM Sight for steel detailers. The BIM Sight program was developed due to industry demand for models (not drawings). It is to be used primarily by our clients. The software can be downloaded free and it is easy to use. You can find the software by entering DOWNLOAD TEKLA BIMSIGHT.

Mr. Coats also addressed the topic of software compliance. License compliance is defined as using software according to the terms & conditions of the software license agreement. Software piracy is defined as the theft of the intellectual rights of software companies. Companies using illegal licenses directly harm development revenue of the software company. Most importantly they compete unfairly with licensed users and are able to bid lower because they have less expense. Also, these companies are directly at risk of introducing spyware and viruses to their internal work. In purchasing software you must be certain that you are dealing with a registered distributor of that software company. Never buy software that has been cracked or hacked.

Less obvious contract breaches of compliance are:
- Sharing a purchased license with another company
- Selling a previous purchased license to another company – A license is purchased, not the software

Continued on next page
Annual Meeting Speakers - Recap - Continued from Previous Page

- Employing a sub-contract detailing office who are in possession of illegal licenses
- Using Educational or Development Licenses for Commercial purposes (rare)

Tekla has been working to combat illegal software pirating by:
- License checking for prospective subcontractors
- Confidential reporting of suspects
- Establishing a confidential reporting site

There has been a breakthrough in the battle against software piracy. See the news article below.

22 December 2011 – In what is seen as a major breakthrough in the battle against software piracy, the Indian criminal court has, for the first time, jailed an end user of cracked commercial software, without bail, pending investigation. If convicted, the defendant, Managing Director of VM Informatics (VMI) in New Delhi, faces up to three years in prison. The case marks a unique milestone in the fight against software counterfeiting and illegal use.

If you suspect someone you know of that may be using pirated software, you should report it to the software vendor. Sorry we don’t have addresses for all software vendors but we do know that Tekla has a confidential reporting site at www.tekla.com/international/about-us/anti-piracy.

Tekla suggests five things that we can do to help stop pirating:
- You know your local area. Are any detailers or fabricators offering Tekla modeling that you weren’t aware of before?
- Watch online: Some company websites offer Tekla based services but don’t own licenses.
- Watch discussion forums: Illegal users discussing functionality that is not available in their licensed version.
- Watch for foreign competition. Tekla works globally and fights piracy globally.
- Report every suspicion. It is easy for Tekla to run a quick check on our customer databases.

You can contact Ian Coats at:
Email: ian.coats@tekla.com
Office: 770 426 5105 x230
Cell: 770 906 0739
You Tube: TeklaStructures
Facebook: Tekla Structures North America
Twitter: ian.coats
#Tekla
#TeklaSteel
What's New For NISD Members?
Visit YOUR NEW NISD Website... Use the NEW Discussion Board...

The NISD Board of Directors was pleased with the feedback it has had from membership regarding new ways that NISD can help expand the scope of services for the benefit of members and the steel detailing industry!

Our new website is contemporary, easier to navigate, and better represents our members as a professional and knowledgeable organization. Check it out!

Visit NISD.org

We Are Your Voice...

Networking Knowledge!

Our Discussion Board is a new tool to allow sharing of knowledge and resources. Post your industry related questions or comments. Receive responses from other professionals. Utilize your NISD membership network today!

nisdorg.wordpress.com

Because NISD fosters a professional approach to business and advocating improved quality through member networking, education and certification, our members are highly regarded by fabricators, architects, engineers and contractors.