



President's Letter

Ladies and Gentlemen..... it's been fun, rewarding, and exhausting at times. It has been an honor to serve on the Structural Engineers of New Hampshire (SENH) Board of Directors for the last four years and as President for the last two. In that time, I have seen our members honorably represent our profession and our organization on a local, state, regional and national level. I appreciate the efforts of my fellow board members and of Deb Coon. Thank you to all who have planned, attended, and spoken at the meetings, traveled to conferences, and served on committees and coalitions. Thanks to those that established the scholarship, advanced the public relations effort, strengthened our relationship with UNH, tackled legislative issues. Keep up the good work.

Thanks, also, to all who contributed the written word to the newsletter. I had intended to ask the various SENH committees and liaisons to prepare a brief written annual summary to be presented in this newsletter, but either I decided to go easy on them or I forgot to ask. In either case they owe me lunch!

I had also planned to profile the retiring board members, but Jim Karmozyn, P.E. asked to go quietly after serving on the board

for six years. Without fanfare, the board would like to express appreciation for his service to this organization. I have already written too much about myself.

Rather than looking back on the accomplishments of the past year, of which much has been written and of which I am very proud, let's look forward. Before doing that, I must reflect briefly on some very recent events.

- The meeting/seminar combo planned by the Professional Development Committee (PDC) that was held in March exceeded our expectations. Congrats on a job well done.
- Earlier in April, many SENH members (among others) served as willing and able volunteer judges for the Student Steel Bridge Competition and the Student Conference Paper and Presentation Competition, two of whom wrote reports for this newsletter. I must also say how impressed I was with the students and faculty of UNH, who did a fantastic job hosting the regional event.
- On a much sadder note, Dr. Louis Klotz passed away on April 3rd at his home in New Castle after a yearlong battle with pancreatic cancer. He taught in the UNH

Civil Engineering Department for 21 years until 1986. Skipping ahead a few decades, he directed and taught a series of workshops designed to educate engineers on emergency response services; including evaluations of building damaged from natural events such as severe wind storms, flooding, earthquakes, as well as man-made disasters. Please keep his family and friends in your thoughts during this difficult time.

Looking ahead over the next several months:

- The PR Committee has advanced the cause of a website update which is just the beginning of an expanded PR effort. Draft versions of the contract are circulating as this is being written.
- In August SENH will be sending our NCSEA Representative and board members to a New England Region Meeting of NCSEA Member Organizations and the NCSEA Board of Directors. There is even a Boston Harbor cruise planned, so you can see representing SENH is not all work and no play.

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Special Points of Interest/ Reminders:

- *SENH Annual Meeting and May Membership Meeting—May 29, 2008. See inside for details.*
- **DEADLINE REMINDER: GET YOUR SECB APPLICATION IN BY MAY 31 TO QUALIFY FOR GRANDFATHERING PROVISIONS.**

President's Letter *Continued*

- In August SENH will be sending our NCSEA Representative and board members to a New England Region Meeting of NCSEA Member Organizations and the NCSEA Board of Directors.
 - Soon the books donated by Dr. Klotz to the SENH/NHTI library collection – 36 boxes in all—will be collected and officially cataloged. His loved ones note that teaching and sharing knowledge were high priorities for Dr. Klotz and that he was very pleased to have found somewhere that will put his personal engineering library to good use.
 - Amendments to the Bylaws will be put before the membership at the
- upcoming 2008 Annual Meeting and two new members to the Board of Directors will be elected. As anyone who has ever served on a committee for any organization knows; new people brings new energy and new ideas.
- At an upcoming board meeting, previous board members may be tapped for their experience and wisdom in a brainstorming session. The creation of an enduring Nominating Committee and the recently submitted bylaw changes are just a few example the call to arms made to the former board members last August.
 - Looking really far ahead! The SENH Board of Directors is soliciting nominees for the 2009 Engi-
- neer and Young Engineer of the Year Awards. If you wish to nominate an SENH member for either of these prestigious awards, please write to the Board. As always, nominees must not be informed of their nomination.
- It is our past, present, and future that has me convinced that SENH will continue to thrive with your all-important support. The new board will further advance the causes and interests of the structural engineering community in NH. They will set new goals. Please answer in the affirmative when they ask for your help in meeting those objectives.

The 2008 Annual Meeting and May Membership Meeting

BYLAWS: Amendments to the Bylaws were developed by an ad-hoc committee of past SENH Presidents with input from the Board. These were recently submitted to the membership along with a detailed explanation of why the changes were being proposed. In accordance with the current bylaws, the changes and amendments will be put before those at the upcoming 2008 Annual Meeting for a vote. This meeting will be held at the Derryfield Country Club in Manchester, NH.

ELECTIONS: Also, at our 2008 Annual Meeting there will an election of two new members to the Board of Directors. The SENH Board of Directors presents Tony Coviello, P.E. of Summit Engineering and Kyle Roy, P.E. SECB of TF Moran as the nominees to fill the two open seats on the Board.

SPEAKER: The PDC has planned for David Biggs, P.E. of Ryan-Biggs Associates, a structural engineering firm in the New York, to speak at our meeting on May 29th. He specializes in the design, evaluation, and restoration of masonry structures, forensic engineering, and the development of new masonry products. Mr. Biggs is a Distinguished Member of the American Society of Civil Engineers (ASCE), chairs the Prestressed Subcommittee for the MSJC masonry standard (ACI 530), was a member of the Building Performance Study team that investigated the World Trade Center disaster, and is currently developing structural software for loadbearing masonry.

TECHNICAL PRESENTATION: The topic is on the planning, design and construction of structural masonry along with the interaction of precast elements to form a cost-effective building system. With the increasing cost of structural steel, engineers have been asked to reevaluate their thinking on the selection of structural systems for many projects. This presentation explores the system of concrete masonry (CMU) walls and precast concrete plank. CMU and plank will be addressed separately and as a system along with details from several projects. Some new efforts to prefabricate masonry buildings will also be shown. Included in the presentation will be references that can be used to aid both architects and engineers to design and detail CMU and plank buildings. Computer software that facilitates the design of masonry elements and full buildings is described.

New Associate Members & Members

SENH is proud to welcome the following new Associate Members & Members:

Associate Members:

- ◇ Nathan Boudreau, SEA Consultants
- ◇ Robin LeBlanc, John Turner Consulting, Inc.
- ◇ Lawrence Obrien, Gelinis Structural Engineering, LLC

Members:

- ◇ Jaime Harned, P.E., CLD Consulting Engineers, Inc.

PDC Committee News

Sean James, P.E. SECB, is now the chairperson of the Professional Development Committee.

Thank you to job well done by retiring PDC Chair, Tony Coviello, P.E. Unless you read from the back to the front (which I confess in how I read most magazines) you will know that Tony is not quite retiring...just moving on up to the Board of Directors..... pending your vote.

2008—2009 SENH Meeting Topics

The SENH Professional Development Committee (PDC) is beginning to discuss meeting topics for the 2008-2009 meetings and would like to solicit the membership for ideas on what topics you would like to have presented. If you have ideas for meeting topics or know an interesting speaker, please send them to Sean James at sjames@hta-nh.com for consideration.

NCSEA Structural Engineering Award Program

NCSEA announces the Call for Entries for the 2008 NCSEA Excellence in Structural Engineering Awards Program. The purpose of the program is to recognize creative achievement and innovation in structural engineering.

Awards will be presented in five project categories:

- New buildings under \$30 Million
- New buildings \$30 Million to \$100 Million
- New buildings over \$100 Million
- New bridge and transportation structures
- Other structural design projects

Up to three entries in each category will be chosen to receive the NCSEA Excellence in Structural Engineering Award. From those three winners, one will be chosen as an “Outstanding Project”. Non-winning projects from last year’s program may be re-submitted as long as they are still eligible based on completion date.

All **entries must be received at the NCSEA office by 4:00 p.m. CDT on Friday, July 25, 2008.** For complete details visit www.NCSEA.com.



Judging the Regional Steel Bridge Competition, Submitted by Kathy Dougherty, P.E., SECB

Surprisingly, the competition is much more interesting and complicated than the name would imply.

When asked to judge the student steel bridge competition at UNH, I must admit, I did not have a clear understanding of the competition. For those of you that are unfamiliar with the competition, I'll try to briefly summarize the events of the day. The official rules of the competition are a thirty-eight (38) page document including text and diagrams and the rules are very stringent and very well enforced. I was a part of the weight and measure judging team so, my perspective of the events of the day deals almost exclusively with this portion of the competition.

The day of the competition, the students are to construct an approximately 20' long x approximately 3'-9" wide bridge over an existing river using all steel elements. The bridge is then statically loaded to determine if it will hold the requisite load. It sounds simple enough but, the equation for determining the winner is quite complex. A gross simplification is the team with the fastest construction time, using a minimum amount to resources (i.e. construction workers, temporary piers, etc.) yet able to hold the requisite load is the winner.

At various times of the day I was surprised, impressed and eventually exhausted. I was surprised by numerous things including the variation of bridges and the differing amount of time and effort put into the bridges by each team as well as my misinterpretation of the official rules.

The first surprise was the obvious difference in the amount of time the teams spent planning and constructing their bridges and the amount of money invested in the bridge material. The bridges ranged in sophistication from the very simple beam bridge to quite complex truss bridges. I use the terms "beam" and "truss" bridge types in the loosest interpretation. Several of the bridges were very well-proportioned, well-constructed, adequately-braced truss bridges. Other bridges were well-proportioned, well-constructed simple beam structures. The remainder of the bridges were somewhere in between.

Several days prior to the competition, I had the opportunity to skim through the official rules. As a bridge designer, I had a picture in my head of the "perfect" bridge to win this competition. When I arrived at the competition, not one of the twelve bridges even remotely resembled my "perfect" bridge or, for that matter, each other. My final surprise was that I realized that I am truly a bridge designer in that I had taken into account the load that the bridge had to carry but, I hadn't taken into account that the load was static or the construction time. In other words, my "perfect" bridge would not have won the competition.

Along with several surprises, there were many impressive things about the competition including how smoothly the day went as well as the leadership qualities exhibited by the participants. The amount of time and effort necessary to successfully host this event was obviously astounding and it is my understanding that the planning and coordinating of the events was done primarily by the students. Needless to say, I was immeasurably impressed.

The other thing that impressed me was the professionalism of the students. Although well planned and orchestrated, the events of the day were, by definition, very stressful. The team captains appeared to be well informed and well organized and the remaining team members appeared to understand their responsibilities.

THANK YOU TO ALL THE SENH MEMBERS WHO VOLUNTEERED TO BE STEEL BRIDGE COMPETITION JUDGES ON SATURDAY.

Kathy Dougherty, P.E., of Weyerhaeuser; Keith Donnington, P.E., of Parsons, Brinckerhoff, Quade & Douglas, Inc.; Tony Coviello, P.E., of Summit Engineering, Inc.; Steve Langevin, P.E.; of Maguire Group, Inc.; Jason Ross of H.E. Bergeron Engineering; and Christopher Fournier, E.I.T., of H.E. Bergeron Engineering.

UNHASCE Paper Competition, Submitted By Matthew J. Low, P.E., SECB

On Friday, April 4th, three SENH members (Joe Allwarden, Matt Low, and Linda McNair-Perry) had the opportunity to participate as the judges for the UNH/ASCE New England Steel Bridge Paper / Presentation Competition. This was a great opportunity for SENH to be involved with the University and the students. Twelve schools participated in the paper / presentation contest which required that an undergraduate from the school's civil engineering group write a maximum of a 2000 word paper on the topic of "Ethical Issues with Infrastructure Privatization." The papers were reviewed and scored by the judges the week leading up to the presentations. Presentations of up to 5 minutes were made by the authors followed by a brief questioning session by the judges. The irony of the situation was that the winner of the contest was the Université Laval from Quebec using English as a second language. All in all, the experience for the judges was rewarding and fun.



SENH MAY MEETING ANNOUNCEMENT

NEXT MEETING: May 29, 2008

PRESENTATION: “**Load-Bearing Masonry—A Proven Structural System**”, by David Biggs, PE

With the increasing cost of structural steel, engineers have been asked to reevaluate their thinking on the selection of structural systems for many projects. This presentation explores the system of concrete masonry (CMU) walls and precast concrete plank. It addresses issues related to the planning, design and construction of structural masonry along with the interaction of precast elements to form a cost-effective building system.

PLACE: **The Derryfield Restaurant,**
625 Mammoth Road, Manchester, NH.
Phone 623-2880
www.thederryfield.com

DIRECTIONS: I-93 to exit 8, toward Wellington Rd. Turn right onto Bridge St. After ¼ mile, turn left onto Mammoth Road. The restaurant is a ¼ mile on your left.

AGENDA: 5:30 pm-6:30 pm Social Hour
6:30 pm-7:15 pm Dinner
7:15 pm-7:30 pm Business Meeting
7:30 pm-9:00 pm Presentation

DINNER: Buffet choice of Chicken, Haddock, or Tortellini.

COST: Member: \$45.00 Non-Member: \$50.00 Full Time Student: \$10.00

RSVP: by Friday, May 23, 2008—There will a \$5.00 “late fee” for anyone wishing to RSVP past the May 23rd date. Make sure you register on time!

Please send check payable to “Structural Engineers of New Hampshire” with list of attendees to:

SENH
P.O. Box 226
Manchester, NH 03105-0226
Contact: Deb Coon, Administrative Assistant
dcoon@hoyletanner.com

NOTE: 2.0 PDHs have been assigned for attendance to this program. Attendees are responsible for ensuring their check-in on the attendance list upon arrival at the meeting.

SENH March 18, 2008 Meeting Minutes

Business Portion of the Meeting

I. BUSINESS PORTION OF MEETING:

The meeting was called to order by Linda McNair Perry, P.E, at 7:00 pm, after the social time and dinner.

1. Treasurers Report: Jim Karmozyn, PE reported that the ending checkbook balance for March 18, 2008 was \$22,888.72. For 2008, the budget planned expense is \$24,210. The actual expenditures to date are 4,377.58.
2. Board Members: Linda McNair Perry announced that two new volunteers for the board members were Kyle Roy and Tony Coviello. She reminded the membership that any regular member wishing to serve needs to be nominated by three other members
3. By Laws: The SENH By Laws and been revised and are under review by the board. The changes will be presented by the next newsletter.
4. Professional Development Committee: Tony Coviello, the chairman, announced that the PDC is working on a new topic for May's meeting. One possibility will be on the subject of masonry. Another possible program could be a round table discussion on business practices. The meeting is planned for Meridith, NH. He reminded the membership that March 19, was an all day conference on the 2006 IBC.
5. Tony introduced the speaker.
6. The next SENH business meeting is scheduled March 18, 2008 at the Yard Restaurant in Manchester. Ed Huston will provide a short talk on progressive collapse. On the following day, two four-hour seminars are scheduled. The morning session will cover a rapid solution on wind design developed in Washington State. The afternoon session will address the changes in the 2006 IBC code from the previous editions.

Disproportionate Collapse: *by Ed Huston, P.E*

Disproportionate Collapse or Structural Integrity and the IBC, by Ed Huston, PE, is the current President of the NCSEA. Ed, with 35 years of experience, is also President of his own consulting firm, Smith & Huston, Inc. He serves on the Code Advisory Committee for NCSEA.

What is a disproportionate collapse? The question is asked when it comes to examining building failures. The presentation began with various examples of building failures starting with the collapse of Ronan Point Apartments in London, 22 story prefabricated panel system, which was completed in March 1968, and a few months later had the wall panels blown out due to a fire. The most authoritative papers on progressive collapse were published within a few years of this event. ANSI A58.1 (publication became ASCE 7 in 1982) addressed the issue in 1972. In 1976, The Precast Concrete Institute, PCI, provided recommendation on using ties in precast concrete bearing walls.

Other events influenced US code development as well. The bombing of the Oklahoma City Federal Building April of 1995 destroyed the transfer girder supporting three intermediate columns located at the third floor on the north side of the building. There is a debate on whether the initial damage was local or global in nature. Many believe the building may have survived the explosion had the building been designed to the current seismic requirements which would have eliminated the transfer girder, added continuity and ductility. This event precipitated the adoption of a security criteria by the General Services Administration (GSA), which included some design requirements to prevent or reduce the likelihood of progressive collapse in November of 2000). The event also influenced the decision of DoD to incorporate progressive collapse prevention into their antiterrorism criteria. A group of terrorists bombed the barracks facility, Khobar Towers in 1996. The casualties were 19 fatalities, 500 wounded. Even though the structure

did not collapse, Khobar Towers and the preceding terrorist attacks directly lead to the development of Department of Defense (DoD) minimum standards for buildings. The standards addressed progressive collapse prevention for the first time for the DoD.

The World Trade Center, September 11, 2001, attacks brought public exposure to the potential for inherent weakness in structures when exposed to unexpected or extreme loading. Ten major buildings at this site experienced partial or total collapse. Once again the engineering community focused on the issue of progressive collapse. In a sense, the events in September showed progressive collapse being adverted in many cases. The towers themselves were able to withstand the initial impact of the airplanes, only to succumb at a later time to the fire and structure interaction. Several buildings surrounding the towers received extraordinary damage from debris impact,

Continued from Page 6

but did not experience progressive collapse. One example is the Banker's Trust Building, which was across the street from the WTC tower. It sustained significant damage, but the structure was able to redistribute the loads and avoid collapse. Nonetheless, the events at the WTC will always be linked to the issue of progressive collapse.

Also on September 11, an aircraft was crashed into the Pentagon. As was the case in the WTC, the structural system, as a whole, showed great ability to redistribute loads with only a small area collapsing. Post event findings indicated that the collapse was limited by some of the following factors. The building contained redundant and alternative load paths of the beam and girder framing system. The spans between columns were short. There was substantial continuity of beam and girder bottom reinforcement in the supports. The building was originally designed for a 150 PSF warehouse live load, which exceeded the current service load. The spirally reinforced columns had significant residual load capacity. Finally the exterior walls had the ability to act as transfer girders. The redundant and alternate load path saved the building. Unfortunately today's designs are usually closer to maximum capacity of the structural elements.

All these events are leading to changes in structural design practices. Many suggest that the past structures were able to resist abnormal loads due to redundancy, inherent strength, and continuity; however, recent developments in optimization, innovative framing systems, and refinement of analysis techniques have resulted in structures with a considerably smaller margin of safety. Others would suggest that framing systems designed for ease of construction possess less inherent continuity leading to less resistance to abnormal loads (i.e. less load redistribution) And of course others argue that there is not an issue with disproportionate or progressive collapse in most modern buildings.

Currently efforts are being made by several groups to address the issue of

building collapse in the building codes. Unfortunately the recommendations put forth have been mediocre at best. Some of the code submittal examples are as follows:

CCP S7-03/04 – Purpose (Submitted prior to 3/24/03) 1604.5 General Structural Integrity.

Buildings and other structures shall be designed such that local damage, defined as loss of one vertical load-bearing member of the structural system, shall not cause damage to an extent disproportionate to the original local damage. This shall be achieved through an arrangement of the structural elements such that the stability of the entire structural system is maintained by the transferring loads (sic) from any locally damaged region to adjacent regions capable of resisting those loads without collapse. This shall be accomplished by providing sufficient continuity, redundancy, or energy-dissipating capacity (ductility), or a combination thereof, in the members of the structure.

It should be noted that designing the structure maintain to stability when one key element is removed would not have prevented the collapse for many of the listed failures. More than one element was damaged prior to their collapse.

CCP S5-06/07 – Purpose 1604.11 Disproportionate collapse.

Design for structural integrity to protect against disproportionate collapse shall be in accordance with section 1605

1605.1 General. The building structure or portion thereof shall be constructed to the building will not suffer collapse as the result of an accident or incident to an extent disproportionate to the cause.

Who is the judge of what is disproportionate to the causing incident? The public felt that the failure of the twin towers was disproportionate to the causing incident.

1605.1 General. Buildings shall be designed for sufficient robustness to sustain a limited extent of damage or failure, depending on the class of the building, without collapse. Design of new buildings in accordance with Section 1605.5 shall be deemed to comply with Section 1605.4

If you comply with the prescriptive provisions you are deemed to comply- if

you use the performance-based approach of 1605.4 you are on your own.

Definitions:

Disproportionate Collapse – Local failure of a member of the structural frame that leads to the collapse of the adjoining structural members, which then lead to additional collapse.

If collapse progresses past the members directly supported by the member or connection that first fails, it is deemed disproportionate – regardless of where it arrests

Load-Bearing Construction shall include masonry cross-wall construction and walls of light weight steel section studs.

But apparently not load bearing concrete walls or Light wood frame walls.

Key Element - A structural element capable of sustaining an accidental design loading of 700 psf applied independently in the horizontal and vertical directions to the member and any attached components.

Apparently whether the element is actually required to support anything or not

The list of problems pertaining to proposed code changes were quite extensive. The examples were too long to be given in these minutes. There were numerous problems in the description of analytical procedures occurring for all building materials including steel, masonry, etc.

Summary:

The proposals were overbroad in the scope of structures addressed. They were poorly written with many technical inconsistencies and inaccuracies (to the extent that it can not be implemented). They confuse performance-based and prescriptive approaches – negating possibility of true Performance-based approaches. The proposals place excessive liability on the design professional. Prescriptively addressing progressive collapse design may stifle more creative approaches. Having poor provisions in place reduces the credibility of the code and also discourages the development of improved provisions. Many of the recent recommendation being made for the building code would not have prevented the failures that had occurred since 1968.

The 15-member ICC committee, charged with making the code approval, did not like the recommendations either. The changes appear to be promising something that it cannot deliver. Using the proposed provision and having a building collapse would cause tremendous public furor. In response to these initiatives made to date, NCSEA offered to chair a new committee to consider structural integrity as opposed to disproportionate collapse. The first meeting was in Chicago on August 29, 2006, followed by 8 more meetings. The last meeting was July 17, 2007. The voting membership represented AF & PA, AISC, AISI, ASCE, ACI, MACS, TMS, NCSEA, PCA, AIA, PCI and SJI. The non-voting members represented, NIBS MMC, NIST, ICC.

The factors this group decided to focus on was:

1. What groups of buildings needed to have these provisions.
2. Would the provisions be force driven.
3. Would the provisions be detail driven.
4. Would the provisions be force and detail driven.
5. What groups of buildings needed to have additional provisions.
6. What would the additional provisions be.

Two code change proposals were developed. SECTION 421: BUILDINGS REQUIRING A RISK ASSESSMENT and SECTION 1614: STRUCTURAL INTEGRITY

BUILDINGS REQUIRING A RISK ASSESSMENT

The Criteria for Identification are as follows:

1. Buildings more than 420 feet in height with an occupant load

- greater than 5,000.
2. Buildings and other structures with an occupant load greater than 10,000.
3. Buildings and other structures deemed by a jurisdiction to be at higher than normal risk of being subjected to acts characterized as terrorist threats.

A Risk Assessment Report would be performed by an approved agency with expertise in risk characterization for accidental and intentional hazards including terrorism threat and vulnerability assessment. It would conform to generally accepted principles for risk analysis and follows industry guidelines for identifying and characterizing terrorism threats and evaluating vulnerability to extreme loads and events. Thorough documentation of the assessment, including assumptions, information sources, calculations and analyses, and referenced guidelines shall be submitted. Following acceptance of the risk assessment, the reports and other data submitted shall be returned to the building owner. Retention of these documents shall not be required.

Risk Assessment shall have a Peer Review. It shall be implemented when required by the building official. If there is mitigation, it shall be mitigated in a manner acceptable to the building official. Acceptable mitigation shall be permitted to include measures to reduce the risk, or the acceptance of the risk as reasonable or unavoidable.

STRUCTURAL INTEGRITY

Triggers:

1. Buildings and other structures in Occupancy Category II, III, or IV
2. More than three stories above grade plane
3. Frame structures shall comply with the requirements of Section 1614.3.
4. Bearing wall structures shall comply with the requirements of Section 1614.4.

There are specific exceptions, such as structures other than buildings with structural systems not like building structures including billboards, signs silos, tanks, stacks, mechanical and electrical equipment.

The recommendation continues with the placement and strength of vertical, horizontal, longitudinal, transverse and perimeter ties. Tie force design came after WWII from building that survived blitz. Ties are probably not going to work well for robust explosions. Some of the issues that represented a road block for the committee included minimum detailing of the ties. Masonry and other groups did want the ICC generating information outside the standards development process. Wood didn't think it could comply with perimeter tie requirements.

The proposals made by this committee were submitted to the ICC Structural Committee at Palm Springs in February. The proponent of S7-06/07 has also resubmitted it. All of the proposals were disapproved. Public comments are to be submitted later.

Ed Huston believes some of the historical events like Ronan Point Apartments could be prevented if the structural integrity proposal ever passes. Many would not have been prevented. It can be mandated if the structural engineers as a group stand behind it.

2.0 PDHs for the technical presentation were earned by attendees.

Respectfully submitted by Robert S. Busby, P.E., Secretary, SENH

Attendance List

Disproportionate Collapse (2.0 PDH's)

The Executive Court Banquet Facility at the Yard, Manchester, NH

March 18, 2008

Name	Organization	Name	Organization
Matthew Allen, P.E.	JSN Associates, Inc.	Ed Huston, P.E., S.E.	NCSEA President
Alex Azodi, P.E., SECB	Omega Structural Engineers	James Karmozyn, P.E.	H.E. Bergeron Engineering
Paul M. Becht, P.E.	The H. L. Turner Group, Inc.	Dennis R. LaBombard, P.E., SECB	LaBombard Engineering, LLC
H. Edmond Bergeron, P.E.	HE Bergeron Engineers	Aaron M. LaChance	Stantec Consulting
Mark D. Beroney	Hexaport International	Thomas E. Lamb	TFMoran, Inc.
Stephen Boyington, P.E.	Parsons , Brinckerhoff, Quade & Douglas, Inc.	Stephen R. Langevin, P.E.	Maguire Group, Inc.
Rebekah Briggs	Parsons , Brinckerhoff, Quade & Douglas, Inc.	John Lavigne	The H. L. Turner Group, Inc.
Jay H. Brown, P.E.	Structural Systems, Inc.	Edward J. LeNormand, PE	Chapin Associates, Inc.
Tim Bryant	Vanasse Hangen Brustlin, Inc.	Laurent Levesque, P.E.	J.G.E. Enterprises
John Burke	Stantec Consulting	Jason Lodge, P.E.	Hoyle, Tanner & Assoc., Inc.
Robert S. Busby, P.E.	Kalwall Corporation	Nathan Maher, P.E.	JSN Associates, Inc.
Robert R. Bussiere, P.E.	Bussiere Engineering	Richard Martin	WR Grace & Co.
Robert Champagne, P.E., SECB	Summit Engineering	John Maynard, PE.	Maguire Group, Inc.
Normand G. Cote, P.E., SECB	NGC Structural, LLC	Donald F. Mayo, P.E.	Donald F. Mayo, P.E.
Tony Coviello, P.E.	Summit Engineering, PLLC	Linda McNair Perry, P.E.	SFC Engineering Partnership, Inc.
Nick Cricenti, PE	SFC Engineering Partnership, Inc.	Richard J. Porter	Northeast Helical LLC
Sarah Desiderio, P.E.	JSN Associates, Inc.	Richard A. Rouleau, P.E.	Consultant
Kathy J. Dougherty, P.E.		Paul Sbacchi, P.E.	TFMoran, Inc.
George Fallet, M.S., P.E.	Consulting Engineer, Inc.	Miles P. Stetson	The H. L. Turner Group, Inc.
Joel Fisher, P.E.	Fisher Engineering, P.C.	Charles W. Tinkham, Jr.	Hexaport International
Dan L. Gelinias, P.E., SECB	Gelinias Structural Engineering, LLC	Jeffrey S. Trexler, P.E.	Trexler Engineering
Charles "Tut" Gillen, P.E.	H.E. Bergeron Engineering	Emile Troup	
Martin Gorham, P.E.	JSN Associates, Inc.	Andrew D. White, P.E.	CCS Constructors, LLC

Additional Meetings & Conferences

January—June 2008 UNH Engineering Management Workshops for more information and a list of workshop topics please visit <http://www.learn.unh.edu/pcw/pd/sched.php?id=95>

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May 22, 2008: Annual WPI Steel Design Conference, Worcester, MA. for more information please visit <http://www.ssfne.org/>.

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May 28, 2008: SEAVT is hosting a seminar on Green Structures, at the Old Dorm Lounge on Vermont Technical College's campus in Randolph, Vermont Visit http://senh.org/PDH_Seminars/PDH_Seminars.htm for more information and registration form.

Two-Part Webinar

Tactics for Performing QA Reviews

With fast-track construction, computerized design, complex building codes and younger engineers taking on more responsibility earlier in their careers, the need for structural engineering firms to have a comprehensive in-house Quality Assurance program has never been greater. This is Part 1 in a series of two seminars and reviews the components of a model Quality Assurance program.

Clifford Schwinger, P.E. is Vice President and Quality Assurance Manager at The Harman Group. He is on the AISC Manuals and Textbooks Committee, is a member of ACI Committee 315, Details of Concrete Reinforcement and is an adjunct instructor at Drexel University.



May 6, 2008

Components of a Model QA Program

This seminar discusses the strategies and tactics involved in performing Quality Assurance reviews on structural drawings. Attendees will learn how to review a set of structural drawings for errors and omissions. There will also be discussion on procedures and methodologies for performing QA reviews, tips on things to look for, and a discussion of common mistakes and how to spot them quickly. This seminar is of use to experienced engineers as well as young engineers just starting out in the profession.



May 13, 2008

June 10, 2008

Components of a Model QA Program



The International Building Code has incorporated the American Institute of Steel Construction (AISC) document "Seismic Provisions for Structural Steel Buildings" by reference. Since their 1997 publication, these provisions have been updated on a regular basis, in order to incorporate new developments from the FEMA/SAC project on moment frames and other work in this area. The latest revision culminated in 2005 with the publication of a completely new set of provisions. This presentation will summarize the 2005 AISC Seismic Provisions and the use of the new moment connection pre-qualification standard. It will also address work that is underway to update the standard for the 2010 edition of the AISC Seismic Provisions.

James O. Malley is a Senior Principal with Degenkolb Engineers of San Francisco, California. He received both his Bachelors and Masters Degrees from the University of California at Berkeley and has over 25 years of experience in the seismic design, evaluation and rehabilitation of building structures.



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SEAO Structural/Seismic Design Manual Webinar



Design Buildings for Wind Load by
ASCE 7-05

This webinar will provide step-by-step approaches to applying the structural provisions of the 2006 International Building Code and 2005 National Design Specification. The design example will be for a Wood Light-Frame Three-Story Structure with wood structural panel shear walls (Example 2 in Volume 2 of the Structural/Seismic Design Manual). The design example will cover the technical as well as the practical side of the application of specific structural/seismic provisions as well as to why some of the new code changes have been implemented. A question and answer period will follow the session.

Douglas S. Thompson P.E., S.E., SECB is a partner at STB Structural Engineers, Inc. in Lake Forest, CA. He is an author of three design examples in the Structural/Seismic Design Manual, is a co-author of Timber Manuals for license review classes for the PE license exams, and has been involved with code development for nearly 20 years.

June 24, 2008

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