NCSEA Annual Conference and ICC-ES Committee Meeting



at the Hilton Frontenac

St. Louis, MO

October 1-6, 2012



Monday – Tuesday, October 1-2 **ICC-ES** Committee Meetings: Environmental Committee on Monday. Evaluation Committee on Monday/Tuesday. For more information, visit www.icc-es.org/Criteria_Development/deadlines.shtml

Wednesday, October 3

ICC-ES Evaluation Committee Meeting - Structural engineering topics NCSEA Board Meeting NCSEA Committee Meetings Software and Non-Software Vendor Presentations

Wednesday Night, October 3

SECB Reception - Everyone invited. SECB video on Vimeo: http://vimeo.com/39919598

Thursday, October 4

The Spirit of St. Louis... Design Trends for the Future

8:00 - 8:15 a.m.



Ronald Hamburger, S.E., SECB, NCSEA Code Advisory Committee (CAC) Chair and Senior Principal at Simpson Gumpertz & Heger in San Francisco, California, will provide an overview of 2012 Codes and Standards.

8:15 – 8:45 a.m. – Where ASCE 7 Wind Provisions Might Go in 2016



Don Scott, S.E., Vice President, CAC Wind Subcommittee Chair and Director of Engineering for PCS Structural Solutions, will summarize the results of last year's NCSEA membership survey of wind design

practices, provide an update on the present ASCE 7 Wind Design Provisions, and speculate on the future direction of these provisions.

8:45 – 9:15 a.m. – Seismic Anchorage and Appendix D



Kevin Moore, P.E., S.E., SECB, CAC Seismic Subcommittee Chair and President, Principal and co-founder of Certus Consulting, Inc. in Oakland,

California, will provide an update on changes to ACI 318 Appendix D for anchorage to concrete, focusing on the implications to seismic applications.





Ed Huston, S.E., CAC General Subcommittee Chair and Principal, Smith & Huston, Inc., Consulting engineers, in Seattle, Washington, will provide an update on the new code provisions on Strength Design of Masonry and how they will impact design practice.

9:45 – 10:15 a.m. – ICC-ES Collaboration, Process, and Effect on Structural Engineers



Bill Warren, S.E., SECB, CAC Evaluation Services Subcommittee Chair and Principal with SESOL, Inc., in Newport Beach, California, and Jim Collins, Ph.D., P.E., Director of Engineering for ICC Evaluation Service, LLC, in Whittier, CA, will provide a description of how the ICC Evaluation Services (ICC-ES) program works, the effect this program has on Structural Engineering practice, and an ongoing program of collaboration between ICC-ES and NCSEA.

11:00 a.m. – 12:00 noon – Structural Engineering Practice – Instilling "A Culture of Discipline"

Keynote Speaker: Lawrence Griffis, P.E.

The practice of structuring engineering today involves working on projects with tight budgets, fast-track schedules and dwindling material resources. To achieve success, engineers must learn and practice a certain culture of discipline.



Lawrence Griffis, P. E., is a Senior Principal and President of the Structures Division of Walter P Moore and Associates, Inc. He serves on the code committees for both AISC and ACI and also as an on-going member

of the ASCE 7 Standards Committee.

1:00 – 2:00 p.m. – Snow Load Provisions in ASCE 7-10 This seminar will provide practicing structural engineers with an understanding of the new snow load provisions and will cover all 12 sections of ASCE 7-10.

Michael O'Rourke, P.E., Ph.D., has authored snow load publications for ASCE on ASCE 7-02, ASCE 7-05, and ASCE 7-10, has written numerous snowload-related journal articles, and has been the recipient of several snow-load-related research grants and contracts.

2:00 – 3:00 p.m. – The Performance of New England's Buildings in the Winter of 2010-2011

Hundreds of buildings in New England suffered structural damage or collapsed during the winter of 2010-2011. Mr. Zona will discuss lessons learned, with emphasis on the primary factors that lead to collapse.



Joe Zona, P.E., SECB, is a senior principal with Simpson Gumpertz & Heger Inc. and chairs the Structural Advisory Committee to the Massachusetts Board of Building Regulations and Standards.

3:30 – 4:30 p.m. – The 2011 Joplin Tornado

The Joplin Tornado of May 22, 2011 was one of the most damaging events to hit the state of Missouri in regards to casualties and costs. In light of the magnitude of devastation to the built environment, a SEAKM committee was formed to investigate the performance of some of the building types that were damaged by the tornado. As a result of this investigation, the committee found commonalities in damage patterns, regardless of building type.



Randall Bernhardt, P.E., S.E., is Chief Structural Engineer for the St. Louis region at Burns & McDonnell Engineering Company, St. Louis, MO. He has served as a member of NEHRP Technical

Subcommittee 5, Masonry, and is a member of the NCEES Structural Exam Committee.



Malcolm Carter, P.E., S.E., is a consulting structural engineer in Lenexa, Kansas. During his 43 years in the profession, he has been responsible for numerous structures located throughout the world.

4:30-5:00 p.m. – Speakers' Forum

Thursday Night, October 4

5:30 – 6:30 p.m. – President's Reception for Delegates 6:30 – 8:30 p.m. – Welcome Reception with Exhibitors

Friday, October 5

8:00-9:45 a.m. – Roll call and Member Organization Reports 10:30 a.m.–12:30 p.m. – ATC Cliff Notes: What you Should Know but Don't Have Time to Read

This session will present key findings, conclusions, and discoveries from recently completed and ongoing projects funded by the Federal Emergency Management Agency (FEMA) and the National Institute of Standards and Technology (NIST). These projects will include:

- ATC-63: Quantification of Building Seismic Performance *Factors* (FEMA P-695).
- ATC-71-1: Seismic Evaluation and Retrofit of Multi-Unit Wood-Frame Buildings With Weak First Stories (FEMA P-807).
- ATC-72-1: Modeling and Acceptance Criteria for Seismic Design and Analysis of Tall Buildings (PEER/ATC 72-1).
- ATC-82: Selecting and Scaling Earthquake Ground Motions for Performing Response-History Analyses (NIST GCR 11-917-15).

NCSEA Webinars in May

• ATC-83: Soil-Structure Interaction for Building Structures (NIST GCR 11-917-15).

The session will also include a detailed overview of the ATC-58 project report, *Seismic Performance Assessment of Buildings* (FEMA P-58), and associated products such as the Performance Assessment Calculation Tool (PACT).

Jon Heintz, P.E., S.E., is Director of Projects at Applied Technology Council in Redwood City, California. Ronald Hamburger, S.E., SECB, is Senior Principal at Simpson Gumpertz & Heger in San Francisco, California. Mr. Hamburger serves as Chair of the ASCE 7 Committee, the AISC Connection Prequalification Review Committee, and the NCSEA Code Advisory Committee.

1:30 – 3:00 p.m. – Diaphragms and Wall Anchorage Dr. Timothy Mays will present major components of NCSEA design guides titled *Guide to the Design of Diaphragms, Chords* and Collectors and Guide to the Design of Out-of-Plane Wall Anchorage. The presentation will focus on example problems and appropriate hand and computer modeling techniques.

3:30 – 5:00 p.m. – Serviceability and Foundation Systems

Dr. Timothy Mays will present major components of newly released NCSEA design guides titled *Guide to the Design of Building Serviceability and Guide to the Design of Foundation Systems*. The presentation will focus on practical example problems, 2012 IBC Chapter 18, ASCE/SEI 7-10, and all areas of building serviceability.



Timothy Mays, Ph.D., P.E., is President of SE/ES and an Associate Professor of Civil Engineering at The Citadel in Charleston, SC. Dr. Mays currently serves as NCSEA Publications Committee Chairman. He has received two

national teaching awards (ASCE and NSPE) and both national (NSF) and regional (ASEE) awards for outstanding research. He is a prolific speaker who sits on several code writing committees.

Friday night, October 5

6:00 – 7:00 p.m. – NCSEA Awards Banquet Reception 7:00 – 10:00 p.m. – NCSEA Awards Banquet Black tie requested

Saturday, October 6

8:00 - 12:30 p.m. - NCSEA Business Meeting

May 3: Specialty Structural Engineering – Façades, Means and Methods, and Repairs William Bast, P.E., S.E., SECB

May 10: Ethics – A Practical Guide for the Practicing Engineer Barry Arnold, P.E., S.E., SECB

Register at <u>www.ncsea.com</u>.

Cost: \$225 for NCSEA members, \$250 for SEI/CASE members, \$275 for non-members, FlexPlan option still available. Several people may attend for one connection fee. 1.5 hours of continuing education. Approved for CE credit in all 50 States through the NCSEA Diamond Review Program. Applicable for SECB recertification. No fee for continuing education certificates. **Time:** 10:00 AM Pacific, 11:00 AM Mountain, 12:00 PM Central, 1:00 PM Eastern. Miss a webinar that you wanted to see? Purchase the recording at <u>www.ncsea.com</u>.