April 1999 Newsletter

THE NEBRASKA CIVIL ENGINEER

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Meeting Information

DATE: Thursday, April 22, 1999

HOST: Transportation Group - Nebraska Section ASCE

TOPIC: "Widening Omaha's 72nd Street"

SPEAKER:

Kyle Anderson
Vice Pres. & Director of Transportation
Kirkham Michael
Omaha, Nebraska

TIMES:

5:00 – 5:30……..Board Meeting
5:30 - 6:30.....Social Hour
6:30 - 7:30.....Dinner
7:30……..Meeting and Program

LOCATION:

Anthony's Restaurant & Lounge
7220 "F" Street
Omaha, Nebraska

MENU:

Steak……..$17.00
Fish……$17.00
Chicken……..$16.00
Pasta……..$11.00

(Prices include Tax & Tip)

Kyle Anderson

Four years ago, Kirkham Michael & Associates embarked upon an ambitious project: widening a clogged four-mile segment of Omaha's 72nd Street, one of the city's major urban arterials. At the helm was the University of Nebraska's College of Engineering & Technology alum Kyle Anderson, then Manager of Transportation in KM's Omaha office.

Anderson says his 19-year career has turned out to be "…more than I ever dreamed of." Before joining KM in 1985, he served as project engineer for the Stapleton International Airport Ground Access and Circulation Study. He is now Vice President and Director of Transportation at Kirkham Michael, with corporate responsibility for all transportation engineering services.

KM's projects stretch across a broad spectrum of assignments, from comprehensive transportation planning to traffic signal and roadway design. The firm has more than 200 full-time employess nationwide in 13 engineering and science disciplines.

When asked about the future of transportatiion engineering, Anderson anticipates no shortage of work. "The biggest challenge will be finding and retaining people (engineers). The competition for people will be tremendous."

Employee recruitment is just one of the issues Anderson is tackling in the development of a one- and five-year transportation business plan for the firm. His approach to this project, like others he has directed, is straightforward. "It's about doing my best work on time and under budget."

"E" Week Balsa Wood Truss Competition

The eleventh annual "truss bustin'" event during Engineers' Week was a huge success for local Omaha Area high school students.

The Balsa Wood Competition was held during Engineers' Week in February at the Oakview Mall. Altogether 102 trusses were entered in the competition. All trusses were loaded at third points across a 24- inch span to failure. Trusses were entered from Burke, Central, Elkhorn, Millard South, Millard West, Millard North, Gross, North, and Northwest. The winning truss from North High weighed 68.7 grams (2.4 ounces) and carried a total load of 676 pounds at three-concentrated load points over the 24-inch span. The load-to-weight ratio of the winning truss was 3.42, which is the highest in the eleven-year history of the truss contest. (Note: Weight is taken to the 1.25 power in calculating the load-to-weight ratio)

The top three finishers in the Eleventh Annual Balsa Wood Truss Competition for 1999 are:

1st Place: Abe Lippert (North High)

2nd Place: Chris Koslosky (North High)

3rd Place: Ben Kenny (North High)

1st place prize was $100, 2nd place was $50 and 3rd place $25.

Brad Chambers, President NE Section ASCE, and Bruce Harris, "E" Week and High School Chairman participated in presenting prizes and a framed certificate of their accomplishment. Photos of the event can be found on Page 3.

A special thanks to all the Nebraska Section members that helped to contact the metro area high schools and assisted during truss testing, the Student Chapter and Dr. Gary Krause Faculty Advisor from UNO that helped with weighing trusses, testing and documentation during the contest. Thanks to the Civil Engineering Round Table for our prime location at the Oakview Mall and those High Schools that participated. We are looking forward to more participation from the other metro high schools in the years ahead.

President's Comments

I would like to thank Bob Kalinski, the Environmental Chair, for the outstanding meeting last month in Lincoln. We had a good turnout to listen to the topic "Encouraging the Use of Innovative Remediation Technologies". The Transportation Technical Group, chaired by Massoum Moussavi, is hosting this month's meeting. At this meeting the section will honor UNO's fall and spring Civil Engineering Graduates. The topic at this meeting will be the reconstruction of 72nd street to 6 lanes from I-80 to Cass St. This will be a very interesting topic that will affect commuters for the next few years. Plan on attending this meeting and congratulating the seniors.

Please mark your calendars for Thursday, May 20, 1999 for the Nebraska Section ASCE Annual Meeting and Golf Scramble. Dana E. Snyder, a comedian, will be the entertainment at the Annual Meeting, and a Texas golf scramble will be the entertainment in the afternoon. Plan on attending the Annual Meeting and Golf Scramble. Details will be mailed in the May newsletter.

Also, at the Annual Meeting, the section will be electing a new slate of officers. As per the sections bylaws, the nominating committee has nominated the following members.

Daryoush Razavian: President Elect
Bob Kalinski: Vice President
David Klostermeyer: Director
Steve Kathol: Director

Hope to see you at the April meeting, and to all board members, please note the board meeting before the main meeting.

Brad Chambers
President

(ABOVE) Abe Lippert from North High School receiving his first place certificate and $100 check. Pictured from left are Brad Chambers, President, NE Section ASCE, Abe Lippert, North High, and Bruce Harris, "E" Week and High School Chairman.

(ABOVE) Steve Bottom getting ready to load a very interesting arch truss entry during the truss testing ay at the Oakview Mall.

(ABOVE) Chris Koslosky from North High School receiving his second place certificate and $50 check. From left Brad Chambers, Chris Koslosky, and Bruce Harris.

(ABOVE) Ben Kenny from North High School receiving his third place certificate and $25 check. From left Brad Chambers, Ben Kenny, and Bruce Harris. Ben also won third place in the competition last year.

(ABOVE) Ken Koop, Instructor at North High School, receiving a plaque and recognition of his 11 years of participation and help with the Balsa Wood Truss Contest. The recognition of Mr. Koop was at the Engineers Week Banquet in Omaha ending National Engineers Week. From left Brad Chambers, Ken Koop, and Bruce Harris.

A Note from the Editor

The deadline for the May 1999 newsletter is Friday, April 30, 1999.

Send articles, information or photos to:

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Feel free to contact me if you have any ideas for newsletter items or comments.

CHANGE OF ADDRESS?

Please notify ASCE national of any address changes by calling 1-800-548-ASCE (2723) or contact them through their web site at http://www.asce.org. Address changes made at national ASCE are

updated monthly at your local Nebraska section.

ASCE's Cold Regions Conference Takes Engineers to the "Home of the World's Worst Weather" to Explore Practical Applications from Advanced Research

The extraordinary ice storms of 1998, which paralyzed operations in major cities in the northern United States and Canada, serve as a blunt reminder that even today, operating in the snow belts and cold regions of the world continues to challenge both engineers and governments. That's why civil engineers from around the world will be gathering at the home of the world's worst weather, Loon Mountain in Lincoln, New Hampshire, for ASCE's 10th International Cold Regions Conference August 13-16, 1999 to explore the latest advances and practical applications for cold regions research and discuss solutions to these unique engineering challenges. The conference theme, *Putting Research into Practice,* emphasizes the importance of getting new ideas and findings from the research world into the hands of practitioners.

The conference will bring together engineers, scientists, and other professionals from both the private and government sectors who work in snow belts and cold regions of the world to explore a powerful combination of research and applied engineering — and learn ways to make their organizations more effective in adopting them. Among the topics to be covered are:

Construction/Structures —foundation insulation, ice and snow loads on structures, cold weather concreting, construction of arctic water and waste-water systems, indoor building condensation problems, and driven steel piles in frozen ground

Atmospheric Icing — icing sensors, deicing techniques, and the ice storm of 1998's effects on trees, electrical lines, and transmission towers

Frozen Ground and Permafrost Foundations —foundation failures, properties of frozen soil, freeze-thaw dynamics, and frost heave

Environmental and Waste Management Issues —wetland restoration, bioremediation, sewage sludge management

Remote Sensing — as applied to oil spills, snowmelt, runoff forecasting, and detecting changes in permafrost environments

Transportation — permafrost subgrades, new pavement materials and insulation, frost heave, and thaw damage

Snow and Ice Engineering — ice forces on structures, ice loads on floating structures, vibrations due to sea ice movement

Hydraulics and Hydrology — modeling, control techniques, and navigation lock passage of river ice; submersible bridge design; pier scour; and sediment transport under ice

South Pole — the design, construction, logistics, and safety issues associated with the new Amundsen-Scott South Pole Station

FHA Short Course in Pavement Design

A pre-conference short course will present a new computer model for pavement design. This model integrates climatic variables of precipitation, temperature, and moisture content into the design of flexible and rigid pavements, calculating frost penetration, and heave with time. Funded by the Federal Highways Administration (FHA), the model will be mandated for use in FHA projects in the future.

Technical Tours

In addition to program sessions, the conference will feature a technical tour of the Mount Washington Observatory— "home of the world's worst weather," a title earned by the area's extreme weather conditions. Hurricane force winds occur every three days on average; fog prevails some 60 percent of the time, and on some snowy winter days frightening whiteout conditions limit visibility to mere inches.

Optional technical tours will take you to the US Army Cold Regions Research and Engineering Laboratory (CRREL), the site of some of the most advanced research on cold regions engineering, and to Dartmouth's Thayer School of Engineering.

Great Location

Tucked away in the spectacular setting of the While Mountains of New Hampshire, you'll find an abundance of free-time activities. Explore glacial caves, stretch your legs at an in-line skating park, go fly fishing, enjoy the wildlife theater, or hike through countless trails with some of the world's most glorious scenery. You'll also be minutes from the mesmerizing Franconia Notch, site of the famous "Old Man in the Mountain" rock formation.

For More Information

For more information about the 10th International Cold Regions Conference, visit the conference website at:

Sponsored by ASCE and the U.S. Army Corps of Engineers' Cold Regions Research and Engineering Laboratory, the 10th International Cold Regions Conference brings together a diverse group of coordinating organizations, including the American Concrete Institute's Cold Weather Concreting Commission, the American Water Resources Association, the Canadian Society of Civil Engineers, the Electric Council of New England, the Northeast Transmission Group, the Transportation Research Board, the Frost Action Committee, and the USDA Forest Service.