

# THE NEBRASKA CIVIL ENGINEER



NEWSLETTER OF THE NEBRASKA SECTION OF THE AMERICAN SOCIETY OF CIVIL ENGINEERS

Volume XLVII

April 2000

Number 7

1999-2000  
Nebraska Section  
Officers

**President**

*Joe Waxse*

**President-Elect**

*Daryoush Razavian*

**Vice President**

*Bob Kalinski*

**Treasurer**

*Brad Levich*

**Secretary**

*Tom Marnik*

**Director**

*Steve Kathol*

**Director**

*David Klostermeyer*

**Past President/  
Webmaster**

*Brad Chambers*

**Newsletter Editor**

*Rick Kaufmann*

**District 16 Council**

*Scott Gilliland*



## Meeting Information

**DATE:**

Thursday, April 13, 2000

**HOST:**

Transportation Group  
Nebraska Section ASCE

**TOPIC:**

"Runway 14R/32L Surface Recon-  
struction in 1999, Eppley Airfield,  
Omaha, NE"

**SPEAKER:**

Daniel B. Owens, P.E.  
Senior Project Manager  
Lamp, Rynearson & Associates  
Omaha, NE

**TIMES:**

5:30-6:30.....Social Hour  
6:30-7:30.....Dinner  
7:30-9:00...Meeting and Program

**LOCATION:**

House of Hunan Restaurant  
2405 South 132nd Street  
Omaha, NE

**MENU:**

Family Style Dinner

**PRICE:**

**\$13.00**  
(Includes Tax and Gratuity)

## DINNER RESERVATIONS

RSVP by noon on **Monday 4/10/00**

**In Omaha Area and Eastern Nebraska:**  
contact Bob Kalinski at (402) 894-2678  
or [rdgge@rdgge.com](mailto:rdgge@rdgge.com)

**In Lincoln and Central or Western Nebraska:**  
contact Daryoush Razavian at (402) 474-6320  
or [drazavian@oaconsulting.com](mailto:drazavian@oaconsulting.com)

## Daniel Owens

Runway 14R/32L is the primary, commercial service runway at Eppley Airfield, 9,500 feet long by 150 feet wide. The existing 13-year-old asphalt runway surface was deteriorating rapidly due to heavy traffic, poor drainage, and local environmental conditions. Project manager for this airfield project (which was completed in October, 1999) was Dan Owens from Lamp, Rynearson & Associate's Transportation Department.

The project's major design and construction hurdles included:

- Project Phasing to minimize closure of the airport's primary runway.
- Construction within the intersection of the airport's two runways.
- Surface drainage improvements to lower the hydroplaning risk.
- FAA asphalt mix design and statistical methods for material acceptance.
- Replacement of 300 in-pavement lights.

*Continued, Page 2*

## President's Comments



Joe Waxse, President  
Nebraska Section, ASCE

Greetings Fellow Engineers,

The section meeting sponsored by the Environmental Committee on March 16<sup>th</sup> featured Mike Covert who gave an overview of an award-winning environmental remediation program for Dallas's new convention center site. Coordination of work with numerous regulators, contractors, owners and site characteristics to achieve remediation criteria that were changing during the project was certainly chal-

lenging and made for an interesting talk! Thanks to Environmental Committee Chair, John Hartwell for arranging another great program.

April's meeting, hosted by the Transportation Committee, will feature Dan Owens of Lamp Rynearson & Associates. He will provide an informative presentation on design of airport pavements. We also hope to have some honored guests from local aviation authorities in attendance. (I'm also looking forward to the great food at the House of Hunan!) Hope to see you there!

ASCE Nebraska section has been contacted by ASCE National to be one of 10 sections in the country to participate with The Boys' and Girls' Club and National Public Television in hosting the "Building Big" program for our area. This will entail using the four-part civil engineering documentary called "Building Big" to create an outreach program to interest area youth in civil engineering. This will provide an excellent opportunity to improve public image and recruitment for our profession. I'll provide additional information on the program as it develops. Please contact me if you'd be willing to volunteer to assist with this outstanding program.

We are continuing to accomplish much for the engineering profession this year! Thanks again to all of you who are so generously contributing your time and efforts. You really are making a positive difference!

Sincerely Yours,

## Speaker, Continued from Page 1

At LRA, Dan's primary job responsibility is managing & designing transportation projects including airport runways & taxiways, airfield navigation aids, state highways, urban streets, storm sewers and sanitary sewers. Since 1995, he has completed taxiway, runway, cargo apron, and navigation aid projects at Eppley Airfield in Omaha, Nebraska totaling over 20-million dollars.

Mr. Owens is a registered civil engineer in Nebraska with a Bachelors Degree in Civil Engineering from the U.S. Coast Guard Academy in New London, Connecticut and a Masters Degree in Civil Engineering from the University of Illinois in Urbana, Illinois. He served eight years as a commissioned officer in the U.S. Coast Guard. After leaving the Coast Guard and a two year stint as a consulting engineer in Miami, Florida, Dan relocated to Omaha, the hometown of his wife Jenni. Dan & Jenni are the proud parents of five children.

## UNL Concrete Canoe, Steel Bridge Teams Prepare for Competition

The student chapter of ASCE at UNL will participate in the Concrete Canoe and Steel Bridge regional competitions at The University of Missouri-Rolla, from April 27-29.

The canoe is in the process of being sanded and painted this month. The bridge is being fabricated at Lincoln Steel.

UNL would like to thank all of its sponsors, particularly Peter Keiwit Construction, Kirkham Michael, and Vulcraft. It is possible to view the canoe and steel bridge at the College of Engineering's E-Week, on Thursday April 20 in Lincoln. If you are interested in sponsorship, please contact Mark Meisinger at [meis@inetnebr.net](mailto:meis@inetnebr.net).



The UNL concrete canoe team works on the canoe in the basement of the structures lab. (From L-R: Mark Meisinger, Stephanie Dill, Dave Johnson, Sarah Buechler, and Doug Maaske)

## Officer's Spotlight

This month, we feature Steve Kathol of The Schemmer Associates, one of the Section's two Directors.



Steve Kathol is a Director of the Nebraska Section of ASCE. Prior to serving as Director, Steve served as Secretary for 3 years.

Steve is a structural engineer with The Schemmer Associates in Omaha. His responsibilities include structural design of bridges, health care, commercial, and industrial buildings, and special purpose structures. In addition, Steve has served as project manager on various bridge and industrial building projects. He has designed numerous bridges in the State of Nebraska from widenings to multi-lane urban structures. He also assisted in the design of a bridge superstructure utilizing High Performance Concrete (HPC). This was one of the first bridge structures in the United States constructed using HPC. Steve has also designed or assisted in the design of several building structures. Representative local projects include: Creighton University Lied Education Center for the Arts, University of Nebraska Medical Center- Food and Nutrition Connector, Millard Library Addition, Nebraska Health System Connector (between Clarkson and University Hospital), and the new Airlite Plastics facility. Steve is a registered professional structural engineer in Nebraska, Iowa, Minnesota, and Montana.

Steve earned an M.S. in Structural Engineering in 1994 and a B.S. in Civil Engineering in 1992 from the University of Nebraska-Lincoln. While pursuing his master's degree, Steve performed extensive research on a full scale, steel plate girder bridge and subsequently, published technical papers and a thesis.

Steve and his wife Michaella have two children, Kalyn (3) and Michael (1 1/2). He enjoys, skiing, golfing, and spending time with his family.

### Last Month's Meeting

Twenty-six people attended the March meeting at Tony Roma's in Omaha.

Ray Hogrefe	Dan Maht
Bob Kalinski	Brad Levich
Tim Papstein	Jeff Kopocis
Dave Svingen	Laurie Carrette Zook
Rick Kaufmann	Mike Covert
Mike Hagemeister	Brad Chambers
Reed Colton	Ed Prost
Mark Meisinger	Sarah Buechler
Jeff Thompson	Jeff Krist
Loras Klostermann	Don Lieberknecht
Mark Stark	Daren Konda
Brian Wanzenried	Thomas Strauss
Mike Reif	Joe Waxse

## A Note from the Editor

Due to a problem with the database, the last names on the address labels on the March newsletter were incorrect. The problem has been corrected, and we apologize for any inconvenience (or confusion in the mailroom) this caused.

The deadline for the May edition of *The Nebraska Civil Engineer* is Friday, April 28, 2000. Send ideas for items that could be included in this newsletter, articles, or information to:

ASCE Newsletter Editor  
 c/o Rick Kaufmann  
 Terracon  
 2211 South 156th Circle  
 Omaha, NE 68130-2506  
 Office No.: (402)-330-2202  
 Fax No.: (402)-330-7606  
 email address: [rakaufmann@terracon.com](mailto:rakaufmann@terracon.com)

### **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 the national ASCE office are updated monthly at your local Nebraska section.

### Upcoming 2000 Meetings

<u>Date</u>	<u>Group</u>	<u>Location</u>	<u>Organizer</u>
Apr 13	Transportation	Omaha	Massoum Moussavi
May	(Annual Meeting)	TBA	Daryoush Razavian

### **We Need Your E-Mail Address**

In order to provide better lead time for our monthly meetings, the Nebraska Section of ASCE will now send email messages to our members when the monthly newsletter is published on our web site. If you did not receive an email prior to receiving this newsletter, it is because we do not have your email address or the address we have is outdated. Please send your updated email address to Brad Chambers at [neasce@radiks.net](mailto:neasce@radiks.net)

Visit Us



on the Web

[www.radiks.net/~neasce](http://www.radiks.net/~neasce)

## Marketplace

### STRUCTURAL ENGINEER

HDR Engineering has an 80+ year history of proven excellence in service to our clients; providing innovative, environmentally acceptable and cost effective solutions. As one of the nation's leading design firms, we have an opportunity for a proven team player in our OMAHA corporate headquarters.

We require a BSCE, PE and 8-15 years structural design experience. Must be proficient with structural software programs, as well as reinforced concrete and structural steel design. Experience with large industrial, water and wastewater projects preferred.

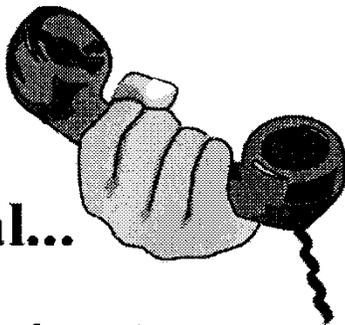
HDR offers employee ownership, competitive salaries, benefits, and the opportunity to advance your career in a challenging and professional work environment. For immediate and confidential consideration email your resume to [rjohnson@hdrinc.com](mailto:rjohnson@hdrinc.com), fax to 402-399-1214 or send to:

Mr. Rob E. Johnson  
HDR ENGINEERING, INC.  
8404 Indian Hills Drive  
Omaha, NE 68114

EOE M/F/D/V

Affirmative Action Participant  
<http://www.hdrinc.com>

## ASCE Central...



**Great Service at  
your fingertips!  
Call 800-548-2723 (ASCE)  
TODAY!**

## Government Agency Membership Program

Over the years, there has been growing concern about the low membership of government employed civil engineers in ASCE. Therefore, the ASCE Membership Committee and the Membership staff are making an effort to increase the membership of government engineers in ASCE.

Through the ASCE Government Agency Membership Program, we afford government agencies a discounted group rate. Our program is patterned after a similar program offered by the American Public Works Association with which many of you may be familiar.

Each participating agency will be allotted a minimum number of members for their group membership, based on the population that agency serves. An agency may purchase additional individual memberships at the discounted price of 10 percent off the full member rate.

Here are just a few of the ways ASCE will benefit your agency:

- **Technical Competence.** ASCE offers numerous opportunities both at the local and national level to participate in technical activities that will broaden competence in the engineering field.
- **Government Engineer's Perspective.** ASCE provides a forum where the interests of government engineers are addressed. It also allows government engineers an opportunity to join together to address their unique needs.
- **Leadership/Management Development.** Being active in ASCE provides opportunities for developing skills in communications, public relations, negotiation, and leadership.
- **Peer Contact.** Active members of ASCE have the opportunity to network with other engineers both in government and private sectors. This networking allows ideas and solutions to many technical and professional engineering problems to be shared.
- **Continuing Education.** Continuing education courses and conferences are available to ASCE members, providing the required continuing education credits needed to maintain professional registration.

If you would like to know more about ASCE and its benefits to you and your agency, please contact Greg DiLoreto, Chair of ASCE's Membership Committee at (503) 848-3032 or Nancy Berson, ASCE's Director of Membership at 800-548-2723, ext 6010.

## “E” WEEK TRUSS BUSTIN’ COMPETITION

The twelfth 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 60 trusses were entered in the competition. All trusses were loaded at third points across a 24- inch span to failure. Trusses were entered from Elkhorn, Millard West, Gross, North, and Northwest. The winning truss from Gross High weighed 47.4 grams (1.7 ounces) and carried a total load of 386 pounds at three-concentrated load points over the 24-inch span. The load-to-weight ratio of the winning truss was 3.10. The third place truss made by Matt Jansen weighed 131 grams (4.6 ounces) and carried a total load of 1,020 pounds which is the most load a truss has ever taken in the twelve years of the competition. The load-to-weight ratio of the third place truss was 2.30. (Note: Weight is taken to the 1.25 power in calculating the load-to-weight ratio)

The top three finishers in the Twelfth Annual Balsa Wood Truss Competition for 2000 are:

- 1<sup>st</sup> Place : Michelle Blecha & Kelly Flanagan (Gross High)
- 2<sup>nd</sup> Place: Justin Cole (North High)
- 3<sup>rd</sup> Place: Matt Jansen (North High)

1<sup>st</sup> place prize was \$100, 2<sup>nd</sup> place was \$50 and 3<sup>rd</sup> place \$25

Joe Waxse, President of the Section, and Bruce Harris, “E” Week and High School Chairman participated in presenting prizes and a framed certificate of their accomplishment.

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.



Kelly Flanagan from Gross High School receiving her first place certificate and half of the \$100 check. Pictured from left, Bruce Harris, “E” Week and High School Chairman and Kelly Flanagan.

Michelle Blecha from Gross High School receiving her first place certificate and half of the \$100 check. From left, Bruce Harris, “E” Week and High School Chairman and Michelle Blecha.



From left, Bruce Harris, Michelle Blecha and Kelly Flanagan holding their winning truss, and Steve Hamersky (Gross High Instructor).



Justin Cole from North High School receiving his second place certificate and \$50 check and Matt Jansen from North High School receiving his third place certificate and \$25 check. From left, Bruce Harris, Justin Cole, Dr. Lee Kollstrom (North High Instructor), Matt Jansen, and Joe Waxse, President of Nebraska Section ASCE.



Matt Jansen from North High next to his truss just before testing at the Oakview Mall. Matt’s truss held over 1000 pounds and weighted only 4.6 ounces.



# YOU'RE INVITED!

GET A FIRST HAND LOOK AT THE CONSTRUCTION OF  
OMAHA'S NEWEST LANDMARK.

THE YOUNGER MEMBER COMMITTEE OF THE NEBRASKA SECTION,  
ASCE IS HOSTING A SITE VISIT TO THE

## TOWER AT FIRST NATIONAL CENTER

**WHEN: 5pm THURSDAY, APRIL 20<sup>th</sup>**

**WHERE: 17<sup>th</sup> & DOUGLAS, DOWNTOWN OMAHA**

**WHO: EVERYONE IS WELCOME**

Park in garage west of First National Bank Building, on-street, or at the Doubletree Hotel. Meet at the west entrance of the Brandeis Building, 17<sup>th</sup> and Douglas (south of the Tower)

Contact Ryan Paradis, Younger Member Committee Chair, for more details at 399-1482.

**Note: Bring your hard hats & boots if you have them!**



**hgm**  
ASSOCIATES INC.

ENGINEERS • ARCHITECTS • SURVEYORS

Omaha Council Bluffs  
(402) 346-7559 (712) 323-0530

(800) 332-1005  
e-mail: hgm@radiks.net

**CONTECH**  
CONSTRUCTION PRODUCTS INC.

For the finest in  
land improvement products call  
**CONTECH® Construction Products**

Aluminized ULTRA FLO® Storm Sewer Pipe  
Corrugated Metal Pipe • A2000™ PVC Pipe  
Earth Retention Systems • TENSAR® Geogrids  
Geotextiles • Sheeting & Erosion Control Products

Mike Heer Phone: 402-330-4170  
Sales Engineer Fax: 402-330-6487

INNOVATIVE CIVIL ENGINEERING SOLUTIONS

**rdg** Geoscience & Engineering

- Geologic Site Characterization
- Water Resources
- Computer Modeling & Imaging
- Environmental Site Assessments
- Environmental Engineering

10360 Sapp Bros Drive (402)894-2678  
Omaha, NE 68138 fax (402)894-9043  
www.rdgge.com rdgge@rdgge.com

**Terracon**

Geotechnical • Materials Testing • Environmental •  
Facilities Engineering • Pavements

*The comprehensive  
solution to your  
engineering needs.*

2211 S. 156th Cr  
Omaha, NE 68130  
402.330.2202

[www.terracon.com](http://www.terracon.com)

402.391.8111

**LEO A DALY**  
leoadaly.com  
Mr. Terry Holmes



**HDR**

Transportation • Environmental • Waste  
Management • Energy • Water • Wastewater

8404 Indian Hills Drive • Omaha, NE 68114-4049  
Phone: 402 399-1000 • Fax: 402 399-1238  
<http://www.hdrinc.com/>

Employee Owned

**HDR Engineering, Inc.**

**TRANSYSTEMS**  
CORPORATION

Transportation Engineering Services  
Roadway, Traffic, Environmental  
Planning and Track Design  
Roadway and Rail Bridge Design  
Field Surveys  
and Construction Management

tjkellogg@transystems.com (402) 895-5400  
5332 So. 138th St. - #300 Fax (402) 895-3500  
Omaha, NE 68137 www.transystems.com

engineers planners scientists surveyors

**OLSSON ASSOCIATES**

1111 Lincoln Mall  
Lincoln, NE 68508  
402.474.6311 Fax 402.474.5160

[www.oaconsulting.com](http://www.oaconsulting.com)

LINCOLN OMAHA GRAND ISLAND HOLBECK KANSAS CITY RHODEX

**KIRKHAM  
MICHAEL**  
CONSULTING ENGINEERS

Omaha • York • Columbus • Kearney • Des Moines  
Denver • Phoenix • Ellsworth and Louisburg, KS

[www.kirkham.com](http://www.kirkham.com)

**THE  
SCHEMMER  
ASSOCIATES**

Architects Engineers

**Omaha Lincoln Denver Quad Cities**

**LYMAN-RICHEY  
CORPORATION**

**Quality Materials to  
Build the Next Century**

DIVISIONS:  
Lyman-Richey Sand & Gravel Co.  
Ready Mixed Concrete Company  
Central Sand & Gravel Company

SUBSIDIARIES:  
Gerhold Concrete Company, Inc.  
United Products Company

General Offices:  
4315 Cuming Street  
Omaha, NE 68131  
Phone (402) 558-2727

**URS Greiner Woodward Clyde**

- Environmental and Pollution Control
- Industrial Hygiene and Safety
- Hazardous/Solid Waste Management and Engineering
- Geotechnical and Civil Engineering
- Design and Construction Management

One Old Mill Building (402) 334-8181  
101 South 108<sup>th</sup> Avenue Fax (402) 334-1984  
Omaha, Nebraska 68154 <http://www.urscorp.com>

**lamp, ryneason & associates, inc.**

professional engineering & surveying services  
since 1959

14710 west dodge road, suite 100  
omaha, ne 68154-2029  
[www.lra-inc.com](http://www.lra-inc.com)

**e+a**

E&A CONSULTING GROUP, INC.  
ENGINEERS • PLANNERS • SURVEYORS

*"Building Our Reputation on Quality and Service"*

- Land Development Engineering
- Civil /Site Engineering
- Transportation Engineering
- Construction Management Services

Omaha, Nebraska Lincoln, Nebraska  
1-402-895-4700 1-402-420-7217

***Thanks to the Businesses That Support This Newsletter***

---

## **The Nebraska Civil Engineer**

C/O Jeff Ehler  
The Schemmer Associates, Inc.  
1044 North 115th Street  
Omaha, Nebraska 68154-4416

DATED MAILER

<p><b>FIRST-CLASS MAIL</b> <b>U.S. POSTAGE PAID</b> Omaha, NE Permit No. 479</p>
--

RETURN SERVICE REQUESTED