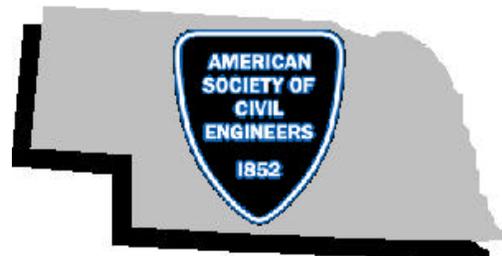


# THE NEBRASKA CIVIL ENGINEER



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

Volume XLVIII

January 2001

Number 4

## 2000-2001 Nebraska Section Officers

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## January Meeting Information

### DATE:

Thursday, January 18, 2001

### HOSTS:

ASCE NE Section Water  
Resources Group and UNL  
Student Chapter

### TOPIC:

"Water Rights Issues"

### SPEAKER:

**David Cookson**  
Assistant Attorney General  
State of Nebraska

### TIMES:

6:30-7:15...Meeting and Program  
7:15-8:00....Dinner

### LOCATION:

University of Nebraska-Lincoln  
West 213, Nebraska Hall  
16th & 17th Streets north of Vine

### Directions:

I-80 to 27th St. Exit-South.  
Right (west) on Holdrege.  
Holdrege turns into 16th Street.  
Park north of Nebraska Hall.

### MENU:

Pizza (\$10.00)

Checks payable to ASCE-UNL  
Student Chapter

## DINNER RESERVATIONS

RSVP by Monday 1/15/01

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

**In Lincoln and Central/Western Nebraska:**  
contact Brad Levich at (402) 466-3911  
or [balevich@terracon.com](mailto:balevich@terracon.com)



If you are receiving this newsletter for the first time in a while, you are probably not a subscribing member of the Nebraska Section. Membership in the Section requires checking the "Section Dues" box on your renewal application, and nominal dues of \$7.50. This issue of the newsletter is being sent to all ASCE National members in Nebraska; however, only subscribing Section members will continue to receive it. To join, please contact ASCE National at 1-800-548-ASCE or [www.asce.org](http://www.asce.org)

## President's Comments

### Connect With A Student!



Daryoush Razavian, President  
Nebraska Section, ASCE

Happy New Year my fellow engineers. The November meeting, organized and hosted by Mark Stark (the Management Committee), featured Mr. Jim Suttle of HDR Engineering. Mr. Suttle made a presentation on the proposed design-build legislation for public schools in Nebraska. He eloquently argued the need for design-build and construction management at risk as new alternate delivery methods, and discussed the important elements of the proposed design-build legislation being introduced in this session of the Unicameral. Mr. Gordon Kissel, a lobbyist for the Professional Engineers Coalition (PEC), was also present at the meeting. He provided an update of his activities on behalf of PEC and a prognosis for the upcoming legislative session. Overall, the presentation was excellent, the main entree was great (Lee's fried chicken), and a good time was had by all attendants.

This month's meeting will be held on Thursday, January 18, and will be co-hosted by the UNL Student Chapter and Mark Wagner (the Water Resources Committee). The featured speaker for the meeting will be Mr. David Cookson, from the Nebraska Attorney General's office. His topic will be water rights issues. I hope that we will have a great turnout for this meeting, and am sure looking forward to seeing you at the meeting.

This month, I would like to present a message and challenge for practicing professionals in our membership ranks. One of the Nebraska Section's priorities for this year is to foster meaningful interaction between practicing professionals and students (university and high schools). I submit to you that as practicing engineers, we are obligated to convey some of the knowledge we have obtained throughout our careers to the aspiring engineers. Consider how much you benefitted from those who took you under their wings, and reflect on what their commitment now means to you. Also, imagine the positive influence you might have on the next generation of engineers, and the rewards associated with inspiring and mentoring students. In all likelihood, this would be a tremendously fulfilling experience.

This month, I would like to present a message and challenge for practicing professionals in our membership ranks. One of the Nebraska Section's priorities for this year is to foster meaningful interaction between practicing professionals and students (university and high schools). I submit to you that as practicing engineers, we are obligated to convey some of the knowledge we have obtained throughout our careers to the aspiring engineers. Consider how much you benefitted from those who took you under their wings, and reflect on what their commitment now means to you. Also, imagine the positive influence you might have on the next generation of engineers, and the rewards associated with inspiring and mentoring students. In all likelihood, this would be a tremendously fulfilling experience.

It is vitally important for our Society and profession to attract and retain students to become civil engineers and future leaders of our Society. According to a recent study, highlighted in the January 2001 issue of *Civil Engineering*, there has been an 11 percent reduction of enrollment in civil engineering between 1989 and 1999. This is happening despite unprecedented economic growth and infrastructure development. It is a real dilemma for most organizations, particularly in the private sector, to recruit and retain engineers at all levels. Recruitment and retention of members are also high priorities and challenge for ASCE. Therefore, it is absolutely essential to lead by example and encourage high school students to consider civil engineering as a career.

For these and many other reasons, I would challenge you to connect (not just contact) with a student in your communities. I realize that the demands of today's life style prevent most families from spending time on civic or professional activities. However, in my judgement, personal satisfaction and gratification associated with this challenge far outweighs the inevitable sacrifices. To those of you living outside of Lincoln and Omaha metro areas, consider making arrangements with your area high schools. Information kits are available at the National ASCE to help you with student activities. For those of you living near the Lincoln or Omaha metro areas, I encourage you to connect with a student at the UNL and/or UNO campuses. You may also participate in a variety of high school activities sponsored and coordinated by ASCE or other engineering organizations. I am very anxious to know about the involvement of our members in this worthy cause. Please e-mail me at [drazavian@oaconsulting.com](mailto:drazavian@oaconsulting.com) with any news, comments, questions, or suggestions you may have.

The January 18<sup>th</sup> meeting will be held at the UNL campus, and will be attended by a large number of civil engineering students. This will be a wonderful opportunity for our practicing professionals to respond to my challenge of *connecting* with students. I am looking forward to meeting and greeting you on the 18th.

Yours truly,

Daryoush



## Balsa Wood Truss Competition

Mark your calendar for Engineers Week, February 18-24, 2001. One of the activities sponsored by ASCE during Engineers Week is the metro area High School Balsa Wood Truss competition. The competition will be held at the Westroads Shopping Center, 102<sup>nd</sup> and West Dodge Road. The testing machine that will load the trusses to failure will be set up in the mall leading to Von Maur. The testing will start at 1:00 P.M. and run most of the afternoon. So, if you like to see the creativity of High School students, hear and see things get broke, join us at the Mall on Saturday, February 24, 2001. For any questions or further details, please call Bruce Harris at 221-4440 (W) or 498-0296 (H).



Above: Rich Kotan with OPPD testing a truss from North High during last year's competition

## Last Month's Meeting

The attendees of the November 2000 meeting at Lee's Restaurant in Lincoln were:

Mark Stark	Doug Maaske (UNL student)
Steve Kathol	Steve Nickel
Jim Suttle (speaker)	Mark Meisinger (UNL student)
Ray Moore	David Admiraal
Kathy Moore (guest)	Tom Mamik
Kyle Risa (UNL student)	John Hill
Daryoush Razavian	Dick Taylor
Phil Rossbach	Rick Kaufmann
Ryan Paradis	Tom Strauss
Laurie Carrette Zook	Kristi Nohavec
Linda Beacham	Sandi Keehn
Bob Kalinski	Todd Hermann (UNO Student)
Brad Levich	

## Student Member News

### FREE National Student Membership

National ASCE Student membership is now available free of charge! ASCE's members also voted to open membership up to students who wish to join ASCE National, but *do not* have a chapter or club at their school (those who have chapters or clubs still *must* be a member of them before joining National). And, as of January 1, 2001, a new online Student Community will debut. At this time, all services and resources provided to students will be available exclusively on ASCE's web site. This is aimed at providing a greater number of students with the latest and most complete civil engineering information available.

Please spread the word about this opportunity to all civil engineering students. For further information about ASCE's new, free National Student membership please send an email to [ccatlin@asce.org](mailto:ccatlin@asce.org), or call Claudia Catlin, Coordinator of Student Member Services, Membership Division at 800-548-2723 ext. 6296.

## University of Missouri-Columbia's PE Civil Exam Cyberview Jan. 22 - Apr. 19

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 ...Foundations...Hydraulics...Water Supply...Open Channel Flow...Wastewater...and More!*

### **Check out the course for specifics:**

1. Get on MU's Civil & Environmental Engineering page at [www.missouri.edu/~ceewww](http://www.missouri.edu/~ceewww)
2. In "Special Interest", select "Civil PE Exam Cyberview"
3. Browse pages by linking to the "Course Pages" for assistance and lesson titles. Here you will see how the course is organized.

### **Fees:**

Full course (8 modules) and books (*Review and Solution manuals and PE Sample Questions and Solutions Manual 2000, First Ed.*), \$595 (Five-module and module-by-module options also available)

Contact John Atkinson at (573)882-8880 or [atkinsonj@missouri.edu](mailto:atkinsonj@missouri.edu) for further course content information.

**E-WEEK BANQUET**  
**FRIDAY, FEBRUARY 23, 2001**  
Sponsored by the Engineer's Roundtable

**“Growth and Challenges of the Metroplex”**

**O**maha Mayor Hal Daub will be speaking on the economic development opportunities and challenges facing the City in the upcoming years particularly in the downtown and riverfront areas.

**Location:**

Cascio's Steak House  
1620 South 10<sup>th</sup> Street

**Dinner Selections & Prices:**

10oz. Club Steak \$20.00  
9 oz. Broiled Chicken Breast \$18.00  
10 oz. Grilled Halibut \$22.00

**Time:**

6:00 PM – Social Hour (Cash Bar)  
7:00 PM – Banquet & Speaker

Dinner selection includes salad, baked potato, bread, vegetable, choice of beverage and dessert.

**Lead Society & Master of Ceremonies:**

The lead society for this year's national E-Week is the National Society of Professional Engineers. Dennis Wilson, past president of the Eastern Chapter of NSPE and Economic Development Aide to Mayor Daub will be our Master of Ceremonies.

*In order to provide a total attendance count to Cascio's, only advanced reservations will be accepted. Advanced reservations, menu choices, attendee's name and payment must be received by **Tuesday, February 20, 2001**. Checks should be made payable to **the “E-Week Roundtable.”** Please clip the reservation form below (add an additional sheet if required), attach payment and send to the address shown.*

**Send to:** **Phil Rossbach**  
**HDR Engineering, Inc.**  
**8404 Indian Hills Drive**  
**Omaha, NE 68114-4049**

<b>Attendee's Name(s)</b>	<b>Quantity</b>	<b>Menu Choice</b>	<b>Total Cost</b>
_____, _____	_____	Club Steak x \$20	_____
_____, _____	_____	Broiled Chicken x \$18	_____
_____, _____	_____	Grilled Halibut x \$22	_____
		<b>Total Cost</b>	_____

## GEO-Omaha 2001

ASCE GEOTECHNICAL CONFERENCE  
FRIDAY, FEBRUARY 9, 2001

The geotechnical committee of ASCE has put together another fine agenda for the upcoming geotechnical seminar. Building on the success of last year's program, we have contacted outstanding professionals in the geotechnical field to share their knowledge with us. John Schmertmann, P.E., Ph.D. will speak on the no-filter factor of safety against piping through sands. Michael O'Neill, P.E., Ph.D. will speak on procedures for design of axially and laterally loaded ACIP piles. M.T. Davisson, P.E., Ph.D. will speak concerning the topic of when things go wrong in geotechnical construction and team efforts. We are very pleased to have Jorj Osterberg, P.E., Ph. D. speak about capacity of rock socketed drilled shafts. In addition to his talk, Dr. Osterberg will present an overview of the load testing of rock socketed drilled shafts currently being conducted in Omaha for the new UPRR headquarters. William F. "Bubba" Knight, P.E. will speak about the effects of construction method on drilled shaft foundation capacity. Dr. Kord J. Wissmann, P.E. will present information about Geopier soil reinforcement solutions. Finally, Jim Wheeler, P.E. with the firm of Haywood Baker will speak about jet grout construction of groundwater barrier walls. We know the weather for this year's seminar will be better than the snowstorm that occurred during last year's seminar, so there should be no excuse for not attending this fine program.

We are also pleased to announce that Jorj Osterberg, P.E., Ph.D. will be speaking at the upcoming Nebraska Section ASCE meeting on the evening of February 8, 2001. His topic will be the shoring failure that occurred several years ago at the City-County Building in downtown Omaha, Nebraska. This case illustrates the need for redundancy in design in order to prevent a total failure should one element of a design system fail. This will be an interesting topic and we encourage everyone to attend.

More information and a brochure/registration form for **GEO-Omaha 2001** will be published in the February issue of *The Nebraska Civil Engineer*.

Loras Klostermann, P.E.  
Chairman, Geotechnical Committee

**ASCE** American Society  
of Civil Engineers

## Younger Member News

Essential Career Guide for Students and Young Practitioners

ASCE has just published an essential career tool for engineering and technical students or young professionals: *Engineering Your Future, Second Edition*. Author, Stuart G. Walesh, draws from his 35 years of experience to provide valuable advice and instruction crucial to success in today's work world. With the wisdom and insight of a mentor, Walesh covers such concepts as self-management, communication, interpersonal relationships, teamwork, project and total quality management, design, engineering economics, organizational structures, business accounting, law, ethics, consulting, and marketing. This completely revised edition includes references to useful web-sites, tips on preparation of graphics, an introduction to project management software, and a discussion of virtual organizations. Other key changes include a section on applying codes of ethics, a discussion of qualifications-based and fee-based selection of design professionals, and an updated treatment of the changing workplace.

*Engineering Your Future, Second Edition*, is designed to supplement the technical preparation of engineers and other technical professionals. The non-technical focus of this book supports the Accreditation Board for Engineering and Technology's (ABET's) *Engineering Criteria 2000*. Exercises at the end of the chapters help students review what they have learned and put it into practice.

List Price \$45.00 / ASCE Member Price \$33.75. To order, call 1-800-548-ASCE or visit [www.pubs.asce.org](http://www.pubs.asce.org).

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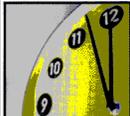
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## Officer's Spotlight

Rick Kaufmann, the Section's Newsletter Editor, is featured this month.



Rick is a geotechnical engineer at Terracon's Omaha office. He serves as project manager for geotechnical subsurface exploration projects for proposed buildings with shallow or deep founda-

tions (including driven piles, augered cast-in-place piles, and drilled shafts), bridges, communications towers, wastewater treatment lagoons, flood protection levees, and road construction or reconstruction projects. He is currently working on three separate highway construction projects for a state department of transportation. Terracon's work on these projects includes all soils design work: drilling and sampling in several hundred geotechnical borings, laboratory testing, engineering analyses (including slope stability, settlement, and borrow soil suitability), and producing drawings and tabulations for the agency.

Rick was born and raised in suburban St. Louis, Missouri. He received a BSCE from the University of Missouri-Columbia in December 1994. Shortly after that, he relocated to Phoenix, Arizona. Two years later, Rick moved to Omaha and accepted a position at Terracon. During his career, he has provided geotechnical engineering or construction materials testing services for projects in Nebraska, Iowa, South Dakota, Minnesota, Arizona, California, and Nevada.

Rick has served as Newsletter Editor for the Nebraska Section since 1998. He enjoys being involved in ASCE because of the personal and professional contacts he has made, the practical knowledge he's gained, and the creative challenge of putting together the newsletter every month.

Rick enjoys spending time with his wife, Tricia, and 1½-year-old daughter, Kate (and his chocolate Labrador, Dywidag.) The Kaufmanns are actively involved in their church. Music also occupies a lot of Rick's free time: he plays bass guitar, guitar, and drums; enjoys studying music theory; and appreciates various styles of music. Other hobbies include reading and watching science fiction, and rooting for his hometown St. Louis Rams, Cardinals, Blues, and Missouri Tigers.

## A Note from the Editor

The deadline for the February 2001 edition of *The Nebraska Civil Engineer* is January 31. 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: [rkaufmann@terracon.com](mailto:rkaufmann@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 [www.asce.org](http://www.asce.org). Address changes made at the national ASCE office are updated monthly at your local Nebraska section.

If you have not been receiving an email version of this newsletter, please send your updated email address. Remember to check the Section's website for additional information, contact information, and useful links. The URL is

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

Direct any updated email addresses, items of interest or comments to the Section Webmaster, Brad Chambers, at 444-6866 or [neasce@radiks.net](mailto:neasce@radiks.net). Items for publication can include job position postings, RFP's, corporate news releases, editorials, articles, or photos of ASCE-related events.

## 2001 Important Dates

<u>Date</u>	<u>Event</u>
Jan 18	JAN. MEETING (Hosted by Water Resources Group and UNL Student Chapter), Lincoln
Feb 8	FEB. MEETING (Hosted by Geotechnical Group), Omaha
Feb 9	<b>GEO-Omaha 2001</b> (Annual Geotechnical Conference)
Feb 18-24	<i>National Engineers Week</i>
Feb 23	E-Week Banquet, Omaha
Feb 24	Balsa Wood Truss Competition, Omaha
Mar 15	MAR. MEETING (Hosted by Environmental Group, Lincoln)
Apr 19	APR. MEETING (Hosted by Transportation Group and UNO Student Chapter), Omaha
May(TBA)	ANNUAL MEETING, TBA

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E-Week Banquet  
Officer's Spotlight

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C/O Rick Kaufmann  
Terracon  
2211 South 156th Circle  
Omaha, Nebraska 68130

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