

# CIVIL ENGINEER



T H E N E W S L E T T E R

Tacoma ♦ Olympia Section of the  
American Society of Civil Engineers



Volume 52

Founded 1930

JANUARY 1998

**CIVIL ENGINEERS MAKE THE DIFFERENCE!**

**THEY PROVIDE THE QUALITY OF LIFE!**

The **Civil Engineer Newsletter** is published for the Tacoma/Olympia Section of the American Society of Civil Engineers monthly from September to June.

To submit ads or articles of interest, please contact the current President of the Section or the Editor. Information must be submitted not later than the 15th of the month prior to publication.

For address changes and corrections, contact the Editor.

**President**

Rebecca Vader.... (253) 922-9780  
timv@halcyon.com

**Pres.-Elect.**

Jim Brigham..... (253) 383-4940  
JBrigham@GeoEngineers.com

**Secretary**

Kathy Hargrave. (253) 474-9449

**Treasurer**

Kristina Nelson.. (253) 591-5765  
knelson@ci.tacoma.us

**Director**

Rob Armstrong.. (425) 251-6222  
rob\_a@barghausen.com

Perry Shea..... (360) 493-6002  
passca@mail.tss.net

**Younger Members**

Brian Matthews. (360) 491-3857  
bmatthews@skillings.com

**Past Pres.**

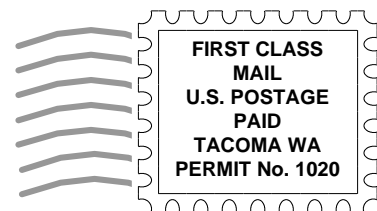
Richard Swanson(360) 357-2788  
Swanson@wsdot.wa.gov

**Editor**

Nancy Searle..... (253) 564-5885  
jessailor@aol.com

**CIVIL ENGINEER**  
**The NEWSLETTER**

c/o Searle J&N  
502 Contra Costa  
Fircrest WA 98466



# January Program

## Land Conservancy

Tuesday  
January 13, 1998  
Landmark Center

Social: 6:00 pm  
Dinner: 6:30 pm

Chef's choice buffet

A speaker from the Tahoma Land Conservancy will present a slide show addressing issues of interest to engineers. Some areas of interest are conservation easements and mitigation options. Depending on availability, the program will also include a discussion of specific projects that incorporated recent conservancy issues.

This program was kindly suggested and coordinated by long-time ASCE member Kris Kauffman. He is also a member of the Board of the Tahoma Land Conservancy.

If you have an idea for a great topic on engineering or of interest to engineers, please share it with a board member. New program ideas are always appreciated.

Rebecca Vader  
David Evans and Associates, Inc.  
3700 Pacific Hwy. E. Suite 311  
Tacoma, WA 98424

## February Sneak Preview

St. Martin's College and the Student Sections of ASCE, ASME, NSPE, SWE are hosting their Annual Engineering Banquet on Friday, February 6th, at Worthington Center. This is always a very social event. Look for your invitation in the mail soon.

## Attention Students

It is the Tacoma-Olympia Section's long-standing policy that your meal price is half off. Remember to say you are a student when you make your reservation. As always, there is no cost to attend the presentation.

## Reservations

Reservations for dinner are Strongly suggested. Members with reservations who do not attend will be billed.

For your reservations please call **Chris Beckman at (253)798-3557** or **Mark Leingang (360)586-6163** by the close of business, Friday, January 9, 1998.

It is very important to make firm reservations for the section meetings for the following reasons:

To make sure that we have a place set for everyone;  
So the presenter can bring enough hand-outs for all who are present;

We (section) give an advance count of attendees so the proper amount of food will be prepared;

We are charged for each person we make a reservation for; If the meeting is canceled, we can notify you.

## Directions

to Landmark Convention Center  
**From Tacoma or Olympia:** Take exit 133 (I-705) to downtown; take 15th Street Exit; up the hill past the Sheraton Hotel; turn right on Market Street and go three blocks past the Municipal Building. Continue onto St. Helens Avenue travel approximately 3 more blocks to the Tacoma Landmark Convention Center (old St. Helens Center) on the right at 47 St. Helens Avenue.

## Positions Available:

**Civil Engineering Project Manager** wanted at an unspecified privately held business in Federal Way. Applicant is required to be a socially adept, BSCE with: excellent written and oral communications skills; 4 years of experience in consulting firms; the ability to work under pressure to meet schedules and expectations set by the company and client; and a PE license (or obtained within 6 months) For complete information contact Wanda Ross, at 425-869-6622.

**Office-Senior Geotechnical Engineer** with David Evans and Associates, Inc. Tacoma with 15-20 years experience in foundation design, slope stability, land development, Level I and II ESA's. Marketing experience desired.

**Civil Engineering Project Manager** with 15-20 years experience in public works industry, experience with city and county government, strong project management skills, and PE. Marketing experience desired.

**Project Civil Engineer** with 5-10 years experience in private development industry; road, drainage, and utility design for subdivisions, strong project management skills, and PE. AutoCad/Softdesk abilities desirable.

## Section Resume Policy

Our section newsletter will provide free space for ASCE students and members to advertise their qualifications. The resume information needs to be received by the 20th of the month to make the next newsletter. If you still don't have a job, send it again the next month. The resume information is limited to: (See Resume Policy on Page 3)



### My Views on Continuing Education

A couple of weeks ago I received the latest installment of the Board of Registration's newsletter. This is always good reading, so I dove right in. Par for the course, I found a topic that brings opinions boiling to the surface. This time, it's on the subject of continuing education.

More accurately put, it's the subject of mandated, regulated, registered, and otherwise made into a whole pile of useless paperwork, continuing education. I haven't yet heard of a program where the benefits outweigh the burdens.

The two arguments I've heard for continuing education are: 1) It will greatly reduce quackery, and 2) It will move engineering practice closer to the cutting edge of new methods and materials. Neither of these do I believe.

A quick check of the disciplinary cases in the last Licensing newsletter shows that only 3 people were sent to more technical education -- and these, like most of the other cases, involved lapses in professional standards, rather than a slow deterioration from competence to inadequacy.

The stories my doctor friend tells me convince me that mandatory continuing education will not eliminate quackery by folks who like the prestige better than the practice. Her field is moving away from using course attendance as a measure of competence. Now, to stay Board Certified as a practitioner of Internal Medicine, she must retake the exams every ten years.

It's harder to make the case that mandatory continuing education will not move engineering practice significantly toward the cutting edge of new methods and materials. Accountants and lawyers rely on their continuing education courses to discuss changes in the tax codes, important new case law, etc. Why wouldn't engineering be the

same? It's not the same, because the engineers coming up with ideas are largely of a lower caste than the engineers (or elected and appointed non-engineering officials) who approve the ideas. Admit it, you've come across more than one situation where the decision was constrained by policy, not by practicality. Lawyers and accountants may spar with their peers in court and in the financial markets, but their methods and materials are always allowed to be up-to-the-minute and are not restricted by local ordinances and policies, written or otherwise. (There is no, "Sorry, we don't use that Supreme Court Decision in our county.")

To put it more bluntly, it really doesn't matter if I'm up on the latest research if the regulating agency is still using a thirty-year-old design standard developed for a material that is no longer used. And some agencies are using some practices that are even older than that. For lawyers and accountants, new ideas can be used immediately. For engineers, the important thing to know is what's allowed, not what's possible or good. Until the people who decide what's allowed are required to be engineers, new education won't help new information become new practice any faster than it does today.

The one argument that I haven't heard is the one I do believe. Mandatory continuing education is being championed by the professional trainers who stand to expand their market if they prevail. Well, they have a service to sell, and education can be of value. My employers and I have even bought some over the years. I just can't stand the high-pressure sales tactics.

Rebecca Vader, President  
Tacoma Olympia Section  
timv@halcyon.com

### Resume Policy

(Continued from Page 2)

Name, engineering degree/year, position desired, years of related experience, membership status ASCE section, address to obtain more information, and daytime phone.

Please send information to Rebecca Vader, 2917 South 17th Street, Tacoma, WA 98405 or e-mail <timv@halcyon.com>

Technical people are needed to present papers on water resources, arrange sessions of local interest, and moderate sessions. Technical tours, perhaps to Mount St. Helens or Lake Union to the Sound are also in the works.

People with fund-raising skills are needed to help with financial sponsorship.



Sociable people are needed to make this whole thing fun, with ice breakers, maybe a Dinner Cruise (hey, see the Tacoma Narrows bridge up close and personal), some programs for guests, and an Exhibitors Social. Research into all these fun things is probably in order. Hey, Bruce MacDonald, this must be right up your alley!

To sign up call Ray Walton, WEST Consultants, Inc. at 425-646-8806 or Fax at (425) 646-0570 or e-mail Rwalton@WESTConsultants.com.

### ASCE Activities

Your're a good driver aren't you? Well then, maybe you should volunteer to be on the Steering Committee for the 1999 ASCE Water Resources Engineering Division Conference. Ray Walton is heading up a group to put together another national conference to be held August 8-11, 1999 at the Westin Hotel in Seattle.

Organized people are needed to fight entropy and create a conference out of confusion.

## Book Review

### *Oath of Fealty*

by Larry Niven and Jerry Pournelle, 1981, 277 pages. For science fiction fans, this book review is completely unnecessary, because they read this book years ago. For those of us with other interests, this book might make a good introduction to the world of the *What Might Be Soon*, and I do mean very soon.

One great thing about this novel is that the major character is a civil engineer. An engineer's engineer who does structures and mechanical systems, transportation, and even a little geotechnical work and enough psychology to build a city in one large building. And lest you dismiss the concept as too far out, Paolo Soleri's Arcosanti project, an experimental ultra-high density community is (still) under construction.

I love the way the story treats the engineer as the one to turn to for creative solutions to just about any problem. The book is definitely written from a technologists point of view, with murderous eco-terrorists as the bad guys. My favorite line of the book comes from the engineer character, "*Think of it as evolution in action.*"

The book also makes some interesting explorations about how culture might change if people were living at very high densities and felt completely secure in their physical environments. Although I agree with the authors, I thought they could have made a better case for their concept that ultra-high density environments are co-dependent with more traditional density cities.

Okay enough of the analysis. The book is just plain fun to read, rates about even with prime time TV drama on the wearing, sex, and violence scale, and is probably available in paperback at a bookstore or library near you.

## Thank You

Thank you very much to Skillings - Connolly Inc. of Lacey for donating the goodie bag for our last meeting's student activities raffle. The wine, cheese, sausage, and crackers drew many entries.

## SEAW Trade Show



The Southwest Chapter of Structural Engineers Association of Washington will hold its 2nd annual exhibit of structural engineering products on Wednesday, January 21, 1998 at the Best Western Executive Inn in Fife. The 2:00 - 9:00 PM event will take the place of the regular Southwest Chapter meeting. Firms that manufacture and/or promote products that are of specific interest to structural engineers are currently filling thirty booths.

This is the only show in our state with products and information specific for structural engineering applications such as structural software, pre-engineered products, concrete/masonry specialty products and professional associations.

For booth applications or other information please call Sarah Porter of APA at (253)565-6600. She will also be taking reservations for attendance. If you are unable to reach Sarah, please contact Pete Barlow, ConTech Services, Inc. at (206)763-9877 or Pat Merriman, Masons Supply Co. at (800)537-3407.

This event is free to attend, and a meal with beverage will be provided to all, thanks to the gracious hospitality of the exhibitors. If you attended last year's show you will recall how much good information was available and what fun this event was.

---

## FE (EIT) Exam and PE (CIVIL) Exam Review Courses

Saint Martin's College Engineering Division 5300 Pacific Avenue SE, Lacey, WA 98503-1297 Phone (360) 438-4320.

### FE (EIT) EXAM REVIEW COURSE:

Feb. 3 - April 9 (20 classes total) Tuesday & Thursday, 6:00-8:00 PM  
COURSE FEE: \$ 250. Topics: Ethics, engineering, economics, materials science, computers, mathematics, thermodynamics, electrical circuits, statics, dynamics, mechanics of materials, fluid mechanics, chemistry, physics.

### PE (CIVIL) EXAM REVIEW COURSE:

Feb. 4 - April 8 (10 classes total) Wednesdays, 6:00-9:00 PM  
COURSE FEE: \$ 350. (\$ 300. for SMC alumni) Topics: Engineering, economics, hydraulics, water supply, sewage, wastewater treatment, mechanics of materials, structural analysis, soils, foundations, reinforced concrete design, wood design, structural steel design, highways, pavements.

TO REGISTER: Send your name, address, phone, and course fee to: Ron Vandergriff, Administrative Assistant (at above address) or call for more information.

---

## ASCE Calendar

### January

7 Board Meeting, Olympia  
13 Section Meeting, Tacoma

### February

4 Board Meeting, Tacoma  
6 (Friday) Section Meeting  
Annual Engineering Banquet,  
Hosted by St. Martin's. Social starting at 6 PM, banquet at 7 PM

### March

4 Board Meeting, Olympia  
10 Section Meeting, Tacoma

### PELP Programs

Effective Writing for Technical Professionals January 12, 14, 21, 26 and 28, 1998 (five sessions): 3:30 P.M. - 6:30 P.M.. \$320 (early registration)/\$345

Fundamentals of Urban Surface Water Management January 14 and 15, 1998: 8:30 A.M. - 4:30 P.M..\$345 (early registration)/\$375

Effective Project Negotiation Skills February 18 or February 21, 1998: 8:30 A.M. - 4:30 P.M. \$195 (early registration)/\$220