



The

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Engineers Without Borders attracts Portland members

By Ralph Drewfs, PE

PEO has the opportunity to begin a cooperative alliance with the Engineers Without Borders Portland Professional Partners (EWB-PPP). The EWB is a national non-profit organization established in 2000 to partner with developing communities worldwide to improve quality of life by implementing environmentally and economically sustainable engineering projects. These partnerships bring the added benefit of involving and training globally responsible engineering students and professionals. The Portland Chapter of EWB was established in January, and is holding monthly meetings at the Portland office of David Evans and Associates. This new chapter has rapidly attracted a cadre of enthusiastic young engineers, including students from local universities.

Unlike relief agencies, EWB concentrates on building permanent and sustainable infrastructure projects, with an emphasis on providing clean water, sanitation facilities, shelter, and affordable energy sources. EWB projects are initiated by and completed with contributions from the host communities, which are then trained to operate the systems without external assistance. Thus EWB ensures that its projects are appropriate and self-sustaining.

EWB operates primarily in developing nations, but also has projects within the borders of the United States. EWB is currently creating long-term solutions to the tsunami in South Asia. EWB-PPP anticipates participating in some of these upcoming projects as well as building partnerships with developing communities in other parts of the world.

The mission of the EWB-PPP is to: facilitate the completion of EWB projects; support the involvement of students in all aspects of the project pro-

cess; and create opportunities for professionals to contribute to the EWB mission. The chapter's goals for 2005 are to:

- Help establish student chapters at local colleges and universities.
- Identify and communicate specific ways for professionals to get involved.
- Submit at least two projects to EWB-USA for approval.
- Integrate students and professionals on project teams.
- Develop partnerships with like-minded organizations.

EWB-PPP is currently working with the Puget Sound Chapter on a project to rebuild nine schools in Sri Lanka destroyed in the December 2004 tsunami; and assisting elder-care facilities in Nicaragua with basic improvements, including installation of water tanks, and wastewater management (needing some experienced professional help). They may also soon be involved with the construction of health clinics in Guatemala, and some unspecified projects in Burma.

For further information on how you can get involved or learn more about Engineers Without Borders, check out: www.ewb-usa.org and www.ewbportland.org, or contact Ralph Drewfs, PEO Area Vice President, Columbia Chapter, at ralph_drewfs@msn.com.

EWB: ORIGINS AND HISTORY

In April 2000, Mr. Angel Tzec, a representative of the Belize Ministry of Agriculture invited Dr. Bernard Amadei, Professor of Civil Engineering at the University of Colorado at Boulder, to visit San Pablo to examine the possibility of designing and installing a water delivery system to the village. Since the village had no electricity, running water, or sanitation, and because most villagers work at a nearby banana plantation, the responsibility for carrying drinking and irrigation water from a nearby

Continues on page 2

NPSE Convention mulls re-organization

The Professional Engineers of Oregon were very well represented at the NSPE 2005 Annual Convention, held in Chicago, Illinois. I was joined for various portions of the Convention by PEO President, Bill Tye, PE, and PEO members Steve Dyrnes, PE (Western & Pacific Region PEPP Vice-Chair) and H. Chik Erzurumlu, Ph.D., PE (ABET Evaluator Trainer). Our PEO Ex-

ecutive Director, Belinda Holcombe-Rasmussen was also able to participate.

Similar to chapter and state society activities, but on a much larger scale, the convention provides many opportunities for continuing education, as well as an excellent venue to network with NSPE members from other parts of the country. The convention also provides the

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President's Message by Bill Tye, PE, PEO President



It is my goal as your new President to increase participation in the individual chapters. I presume this will be difficult, but with the leadership of your chapter board members and the support of our Executive Director Belinda Holcombe-Rasmussen and Heather Anderson at NSPE, I believe we can substantially increase membership participation.

Questions for you – When is it a good time and

place to hold the meetings? Secondly, what speakers and programs will be beneficial to you as engineers?

Your chapters are in the process in coordinating this year's programs. This is a great opportunity for you to get involved in the grassroots efforts to make this year a success for your local chapter. A list of chapter officers is available at www.oregonengineers.com and listed in this quarterly publication. Please contact them if you have any suggestions.

You may also be of great help by simply participating in the variety of surveys you will receive through

out the year. I want to thank you in advance for taking the time to respond to these surveys. We need your feedback to make this a vibrant and exciting organization to belong to.

Engineers Without Borders

Continued from page 1

river fell to the village children. Confident that a water project would help improve the quality of life of the villagers, Amadei returned to Boulder. There, he recruited eight engineering students in civil and environmental engineering, as well as Denis Walsh, a civil engineering expert.

The team set to work considering the options and settled on a ram pump as the most efficient, sustainable design under the local conditions. A waterfall provided the energy necessary to drive the pump. The water distribution system consisted of a water intake structure, a ferro-cement drive tank, and a storage tank connected by about 3,000 ft of PVC pipes. The pump was able to provide a steady flow of 1 gal/min to the village storage tank located about 120 ft above the river level.

One down—thousands more to go.

Diane M. Warner, PE
Regional Manager—Project Development

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Are Your Designs Up to the Latest Code?

New references based on the 2003 IBC® from ICC and Kaplan AEC are what every engineer needs to get up to code. They are also ideal for exam preparation.



Reinforced Concrete Masonry Design: An Application Guide

By Dr. Vilas Mujumdar, P.E., S.E., C. Eng.

Based on 2003 *International Building Code*® (IBC®) and ACI 530-02/ASCE 5-02/TMS 402-02, this guide covers the design of concrete masonry structures through numerous design examples with a step-by-step solution approach. The book offers extensive coverage of the strength design method. (304 pages)

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Seismic and Wind Forces: Structural Design Examples, 2nd Edition

By Alan Williams, Ph.D., S.E., C. Eng

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Structural Steel Design: LRFD, 2nd Edition

By Alan Williams, Ph.D., S.E., C. Eng

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New PEO Officers Installed for 2005–2006

Officers were installed at the May 19, 2005 Annual Conference in Canyonville, Oregon. The officers will be instrumental in the success of our local, state and national chapters. Please support these individuals. If you have an idea or want to get involved contact a board member.

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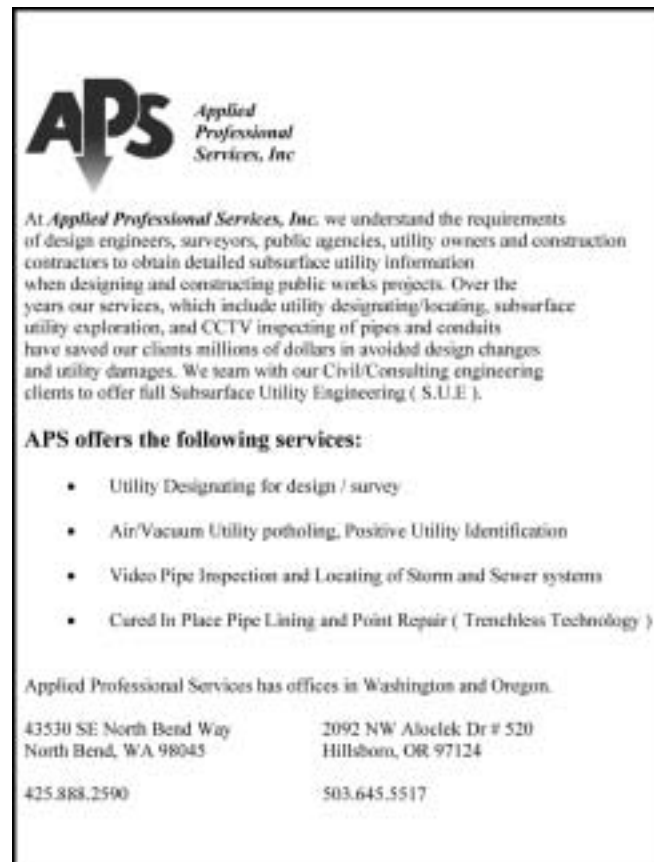


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NSPE convention

Continued from page 1

opportunity to participate in the governance of the organization for those who choose to do so.

My primary reason for attending the Convention was to stay tuned in to the ongoing transformation of NSPE into a "State-centric" organization. If you have read my articles in the last few PEO newsletters, you should be aware that NSPE is attempting to transform itself into an organization whose resources are focused on supporting its members through partnerships with the local Chapters and State Societies. We have seen portions of the Future Directions Task Force (FDTF) work in previous reports, and during visits by regional and national officers. The state society officials overwhelmingly approved an outline for a new NSPE at the Winter Summit held earlier this year. The acceptance that NSPE must fundamentally change its focus was evi-

denced by the Board of Directors' unanimous approval of changes recommended by the FDTF (the full FDTF Action Plan can be found online at www.nspe.org/fdtf).

In Oregon, we have already seen a few of the benefits of a "state-centric" national organization. Many changes are still fairly high-level, and aren't visible at the chapter level yet, but some of the chapters have already used ethics and leadership training materials that NSPE provided in its local meetings. NSPE's staff was the first to identify two proposed bills in the Oregon House, which we were then able to track through the legislative session. Those who attended our Annual Conference in Canyonville had the opportunity to interact directly with senior NSPE staff when Stephan Yeager participated in the conference.

*Michael L. Hardy, P.E.
Past President, PEO*



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PEO Annual Conference educates


The annual conference was held in Canyonville, OR, May 19–20 in a traditional fashion, with an opening reception, a day of education and a closing, with a installation of officers and an awards banquet at the Seven Feathers Casino and Resort. Thank you to the Umpqua Chapter for hosting. Your time and energy that went into planning this event is appreciated. Thanks to: Robb Paul, PE, Gary Underhill, PE, Mike Parker, Nikki Johnson, EIT and Joel Smith, PE. The attendance at the conference was 45 engineers plus their guests.

The one-day of education was diverse. Thank our speakers: **Terry Bounds, P.E.** of Orenco Systems, Inc. for his talks on New On-Site Systems, AdvanTex Treatment, and VeriComm Monitoring; **Serge Yanez**, who spoke on Applied Digital Technology; **Chris Higgins, P.E.**, of Oregon State Univ., who gave a cracked bridge report and spoke about the load rating of bridges; and **Sue Kupillas**, who spoke on Healthy Forests after Fire, Reforestation, and gave a Biscuit Fire Update. We thank our speakers for their time and commitment to the engineering field. If you would like information on these speakers please contact Robb Paul, PE.


Two representatives attended from the NSPE. Updates from NSPE included the launch of a new Association Management System which will be a benefit to the individual members and the state society. We appreciate the presentation and the time spent in one-on-one discussions with Stefan Jaeger, NSPE Staff and Cliff Ishii, NSPE Board Member. To discover more about what NSPE has to offer, go to www.nspe.org.



Michael Henry, Wanda VanDuser, Mark VanDuser

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PEO Proudly Presents the '05 Award Recipients



Award winners James Stohr, left, and H. Chik M. Erzurumlu, center.

The PEO Annual Awards were presented at the Annual Conference in Canyonville, Ore. (see companion story, left).

Winner of a 2005 Fellows Award and the President's Award, **H. Chik M. Erzurumlu, Ph.D, P.E.**, is the founding dean of the Maseeh College of Engineering and Computer Science at Portland State University (PSU). Since joining PSU in 1962 as an instructor of engineering, he has been the guiding influence in transforming the pre-engineering program into a comprehensive college of engineering with over 1,200 majors enrolled in BS, MS, and PhD degree programs. In recognition of his outstanding contributions to engineering education statewide and nationally, PEO honored him with the Engineer of the Year Award in 1999. Recently, he received a more lasting recognition with the establishment of an endowment to name the deanship of the College as the H. Chik M. Erzurumlu Dean.

James Stohr, P.E., winner of a Fellowship Award, served in the US Navy from 1959 to 1963, where he trained as an electronics technician; he also received additional training and experience as an air traffic controller. Later, Stohr was employed by Western Electric (then part of AT&T), first as an electronics technician and later as an electrical engineer. In 1968, he went to work for engineering consultants Burns & McDonnell as a Senior Project Manager, where he managed both technical design and other engineers. He also worked as an engineering manager for Dillon Engineers, director of electrical engineering for David Evans &

Associates, and, since 1988, has served as the manager for electrical engineering at the Portland office of URS Corporation. He currently manages a large group of electrical engineers and technicians in the design of various private and public works facilities for domestic and foreign clients. With over 35 years of experience, his qualifications in the field of high voltage transmission /distribution and wireless communications are extensive.

George I. Johnston, MS, PE, CCE, CSP This year's Engineer of the Year Award recipient has worked in biomedical and clinical engineering since 1958, recently for Medical Service Corporation International as a biomedical engineering consultant on the Three Regions Project in Tanzania, Africa. He advised on biomedical teaching and laboratory equipment to be covered by an internal maintenance program; designed and drew plans for an internal biomedical maintenance facility; and prepared capital equipment and supplies purchase orders for proposed maintenance departments.

Following retirement, Johnston spent time in Asia and Latin America as an engineering consultant. He is currently President Emeritus of Dybonics, Inc. a biomedical engineering consulting firm, he conducts short courses in developing countries on troubleshooting and maintenance of electrical/electronic devices.

FELLOWS AWARDS

presented by Bob Gantenbien and Cliff Ishii

H. Chik M. Erzurumlu, Ph.D, P.E.,

James Stohr, P.E

PRESIDENT'S AWARD

presented by Michael Hardy

H. Chik M. Erzurumlu, Ph.D, PE

ENGINEER OF THE YEAR

presented by Michael Hardy

George I. Johnston, MS, PE, CCE, CSP

NSPE Council of Principals Provides Online Training

The NSPE Professional Engineers in Private Practice (PEPP) are developing a "Council of Principals" program in order to provide low-cost training opportunities that focus on career development for the individual engineer. "The PEPP Council of Principals is your one-stop resource for the tools and support needed to become a successful leader and principal in private practice. Re-

sources are available in a number of key career development elements necessary for success." Find more information on the "Council of Principals" as well as online discussion forums and training opportunities, at their website, www.nspe.org. Much information on the website is currently free to members and non-members alike, however there are fees for some of the training programs.

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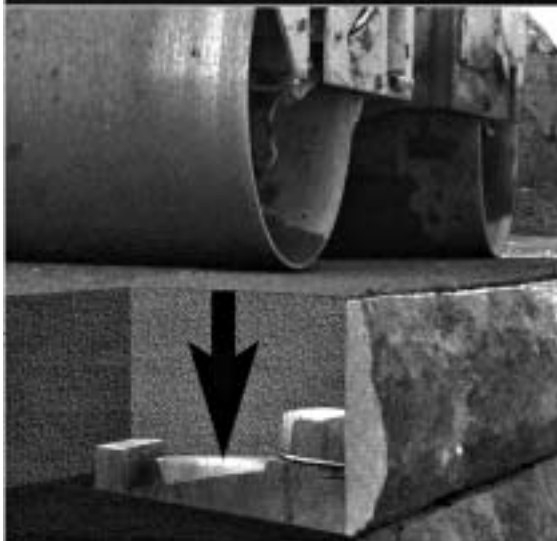
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