

Montana Society of Engineers

A state society of the National Society of Professional Engineers



Founded 1887

Quality Plans = PE Stamp

Doug Brekke, PE, President

Last I week I visited with a city building official. He was commenting on the poor quality of building plans that often cross his desk. I said to him, "Just for the record, do you like seeing P.E. stamps on submitted plans?" "Oh, yes!" was his reply. He went on to comment that engineers typically keep track of changing building requirements, and don't use the "we did it this way last time" excuse.

Building officials, contractors, and end-users should always welcome our stamps. Our challenge is to persuade owners to consistently hire Professional Engineers and recognize the benefits of our stamps. Many project designs require P.E.s. My hope is that owners hire P.E.s because the project will be successful and less costly, not because they are required to do so.

When I was first elected to the MSE board, past-President Dan McCauley advised me to pick one project and stick with it. For me that project has been working with the Joint Engineers Conference. The JEC provides a wonderful opportunity to keep track of changing requirements, interact with other engineers, and visit with product vendors. Thanks to everyone that has helped grow the JEC into the largest gathering of engineers in Montana.

I recently sent in my P.E. license renewal application. The continuing education requirement has been a great addition to the renewal process and helps our profession in many ways. I encourage all engineers to take advantage of

June, 2004

Building officials, contractors, and end-users should always welcome our PE stamps.

Attend the Joint Engineers Conference!

Doug Brekke, PE, President

The Joint Engineers Conference will be held November 4 and 5, 2004 at the Red Lion Colonial Hotel in Helena. The conference features continuing education, a trade show, and board meetings for the sponsoring societies.

The Joint Engineers Conference is an ideal opportunity to obtain the continuing education credits required for Professional Engineers license renewal. The two-day conference provides 12.5 continuing education hours. Everyone with an interest in engineering related topics is encouraged to attend. We especially encourage students and engineers in training to participate. MSE members are asked to encourage young engineers, contractors, and other design professionals to consider attending the Joint Engineers Conference.

The Joint Engineers Conference is

jointly sponsored by MSE, ASCE, ITE, ASHRAE, IEEE, ACEC, and SAME. This year, we welcome three new sponsors: Intelligent Transportation Systems (ITS), Structural Engineer's Association of Montana (SEAMT), and International Code Council - Montana Chapter (ICC). Session topics cover a broad range of interests and disciplines. Topics will include the Structural Engineering Emergency Response Plan, Structural Wood Design, Advanced Transportation Technology, DEQ Regulations, and AutoCAD Productivity. We will feature project management engineers for The Woodrow Wilson Bridge Project near Washington, D.C. and the "Big Dig" project in Boston.

The Burns Telecom Center at Montana State University handles promotion and registration for the Joint Engineers Conference. Watch your mailbox for literature and registration forms.

The two-day Joint Engineers Conference provides 12.5 continuing education hours.

Inside This Issue

<i>2003-04 MathCOUNTS: State Competition.....</i>	<i>2</i>
<i>Special Thanks to the 2003-04 Corporate MathCounts Sponsors.....</i>	<i>3</i>
<i>As "Girl Day" Turns Four.....</i>	<i>3</i>
<i>Don't Sabotage Your Job Search with Faults Assumptions.....</i>	<i>4</i>
<i>MATHCOUNTS Support.....</i>	<i>5</i>
<i>Plan Attend the 2004 JEC in November 4-5 in Helena.....</i>	<i>5</i>
<i>Visit www.nspe.org TODAY!.....</i>	<i>5</i>
<i>2003-2004 State Officers.....</i>	<i>6</i>

MATHCOUNTS NEWS:

National Results

Dan Munson, PE, State Coordinator

The 2004 MATHCOUNTS season officially wrapped up on May 7th when 228 “Mathletes” from around the nation gave it their best at the National Competition in Washington D.C. An 8th grader from Illinois took the National title, and the Illinois team placed first in the nation.

Closer to home, the Montana MATHCOUNTS team placed 36th out of 57 national teams. Ross Rowsey, Antony Speranza, and Kate Dreamstad from Helena’s CR Anderson Middle School, Alec Patterson from Missoula’s Rattlesnake Middle School, along with the CR Anderson Middle School Math teacher Chuck Bozdog, represented Montana as our official state team. Our MSE Executive Secretary Connie Dempster attended the national competition as a volunteer.

Help MSE Kick-Off the 2004-2005 MATHCOUNTS Season:

Although the students are breaking from MATHCOUNTS for the summer, the coordinators are still busy doing a lot of volunteer work behind the scenes. The seven Montana MATHCOUNTS chapters are looking at ways to get additional schools, coaches, and volunteers to participate in their areas. Here is the current list of Chapter Coordinators if you would like to help in your area of the state:

North Central Chapter

Bill Burkland, Coordinator
406-447-5054
Bill@rpa-hln.com

Eastern Montana Chapter

Elton Stickel, Coordinator
406-359-7320
Elton.stickel@wbip.com

Kalispell Chapter

Tom Heinecke, Coordinator
406-752-2216
Rgwubwxjw@m-m.net

Billings Chapter

Dan Munson, Coordinator
406-655-2540
Dan.Munson@northwestern.com

Missoula Chapter

Guy Sharp, Coordinator
406-273-2461
Guy@guy-sharps.com

Bozeman Chapter

Jerry Stephens, Coordinator
406-994-6113
Jerrys@ce.montana.edu

Butte Chapter

Brian Sullivan, Coordinator
406-496-9844
Sullivan@asimimt.com

Corporate and individual fund raising continues all year round. We are also putting our heads together to come up with ideas to make the 2005 MATHCOUNTS season the best yet. That’s where I would like your help.

We can always use volunteers to help with the February and March competitions. Schools are always looking for community help to assist in coaching their MATHCOUNTS teams before and after school. Fund raising efforts are always ongoing. We are also looking for an interested engineer that would like to help co-coordinate the Bozeman chapter program. Once you get involved, you quickly find out how meaningful and rewarding this program is to both the kids, and the professional volunteers as well. If you would like to get involved with this great program, contact Dan Munson at dan.munson@northwestern.com for more information.

The MATHCOUNTS program is organized by the National Society of Professional Engineers on a national level. Locally, MATHCOUNTS is organized by the Montana Society of Engineers, with local volunteer effort being provided by area engineers, students, and professionals. Montana has always had a great contingent of fellow engineers volunteering their time to make the program run smoothly.

A special thanks to all of you who have helped make this program so successful!

***The seven Montana
MATHCOUNTS chapters
are looking at ways to get
additional schools,
coaches, and volunteers to
participate in their areas.***

Special Thanks to the 2003-04

Corporate MATHCOUNTS Sponsors!

Advance Silicon Materials, Inc.
Butte, MT

AlSCO Linen
Billings, MT

Ash Grove Cement Company
Clancy, MT

Blackfoot Telephone Coop, Inc.
Missoula, MT

CHS (Cenex)
Laurel, MT

ConocoPhillips
Billings, MT

**Dennis & Phyllis Washington
Foundation**
Missoula, MT

Engineering, Inc.
Billings, MT

EXXONMOBIL Foundation
Billings, MT

MDU - Montana Dakota Utilities
Billings, MT

Montana Refining Company
Great Falls, MT

Robert Peccia & Associates
Helena, MT

Smurfit-Stone Container Corp.
Missoula, MT

Stillwater Mining Company
Columbus, MT

Western Sugar
Billings, MT

Yellowstone Electric Company
Billings, MT

Montana MATHCOUNTS

*Corporate Sponsors are
making a difference!*

Through the financial support of these corporate companies, Montana MATHCOUNTS has been able to continue to grow and reach more students in Montana. These students are introduced to the wonderful world of mathematics and are able to take advantage of these skills at an earlier level making their future and ours brighter. THANK YOU!

3

Architects as Explorers
2004 Northwest & Pacific AIA Regional Conference



AIA Montana Invites You to the 2004 Northwest & Pacific AIA Regional Conference:

Make Plans to Bring the Family to the BIG SKY RESORT: AIA

Montana is hosting this Regional Conference at Big Sky Resort in Big Sky, Montana August 18-22, 2004 and would like to extend an invitation to all Montana Professional Engineers at AIA MT Member rates. Visit the conference website, if you would like to take us up on this offer, call the AIA Montana Office and you will be given a temporary membership number that

will allow you to register and receive the reduced registration rates. It is not often that Montana is able to enjoy a conference with this many extras in our own back yard.

**For more information
and to register, visit:
www.aia2004nwpregconf.org**

ROOM RESERVATIONS: A block of sleeping rooms have been reserved at Big Sky Resort in the name of AIA Group Room Rates for August 17 - 23, 2004. By identifying yourself with AIA Architect, you will be entitled to a reduced room rate. To make a room reservations, please call 1800-548-4487. There are a number of different room styles available starting at \$115/night to \$225/night. This block will close on July 15, 2004.



**AIA Montana
PO Box 20996
Billings, MT 59104**
Phone: 406-259-7300
Fax: 406-259-4211
aia@assoc-mgt.com

Conference High-Lights:

Wednesday—August 18, 2004

Golf Scramble
Fly Fishing or Hiking for Credit
Kick-Off Reception
Saloon 'Watch'

Thursday—August 19, 2004

Tour of Virginia City for Credit
Reception Big Timber Works
Teepee Pitching & Outdoor BBQ

Friday—August 20, 2004

Marsha Maytum & Clark Stephens
Plus 2 Tracks of Three Ea. LU Sessions
Over 80 Exhibitors/Vendors
AIA Montana Awards Banquet
Vigilante Theatre: Clark and Lewis

Saturday—August 21, 2004

Frank Barkow, Larry Scarpa & Robert Ivy
Plus 1 Track of Three Ea. LU Session
GALA with Regional Awards

14.0 Learning Units Available

Each
14 Learning
Units in
BIG SKY
COUNTRY!

Web Site Raises Concerns About Sealing Engineering Work

(From NSPE's Engineering Times, June 2004)

A PE from Pennsylvania has caused uproar within the profession over a business Web site that has many accusing him of illegally sealing documents, prompting some state licensing boards and NSPE state societies to take action.

The site, www.engineerapprovals.com, offers "a quick, convenient way for you to get documents sealed for your local or state authorities by a registered engineer." The site uses questionnaires and confirmation processes to "determine the pertinence of affixing our seals to your documents." The site explains that the responses to the online questions simplify the review process, "ultimately helping us determine whether your documents meet the appropriate engineering standards."

The site, owned by Professional Engineer James Koppenhaver, advertises a cost of \$149 for a single plan sheet or as little as \$19 for 30 sheets or more. The site also claimed that its mission is to "provide a fast, convenient, cost-effective way for you to get documents sealed... thereby gaining compliance and adding credibility to your documents."

The site offers seals in Pennsylvania, New York, New Jersey, and Maryland, which has the licensing boards in these states particularly

interested in the case. A review of licensing board Web sites shows that Koppenhaver is licensed in New Jersey, New York, and Pennsylvania, but his name was not found in the database of Maryland professional engineers.

In New York, the State Office of Professional Discipline is investigating the matter, and the Pennsylvania Society of Professional Engineers has filed a formal complaint with the state licensing board. A public relations official for the Pennsylvania State Registration Board for Professional Engineers, Land Surveyors, and Geologists would not say if the board was going to launch an investigation.

Koppenhaver wants to provide good engineering services at an economical rate for those whom he calls "everyday people" working on small private projects. "There are technicians using software that has been developed by PEs, and as long as the input and output is correct, I feel that those are worthy documents that I can get involved with and help them produce," he says. "And most of this takes the form of shop drawings for private residential projects."

Koppenhaver's Web site says he is licensed in Pennsylvania, Maryland, New Jersey, and New York. He says he has no plans to get licensed to do work outside of these states.

A PE from Pennsylvania has caused uproar within the profession over a business Web site that has many accusing him of illegally sealing documents, prompting some state licensing boards and NSPE state societies to take action.

Pay Raises for Entry-level Engineers, but . . . Dips for Executive-level Engineers

ALEXANDRIA, Va. (April 28, 2004) — The median salary for full-time engineers of all disciplines declined from \$72,842 in 1999 to \$70,200 in 2004 according to the *NSPE 1999 Income and Salary Survey* and *The Engineering Income & Salary Survey, 2004*. The latter survey is a new comprehensive, revolving salary survey recently released in partnership by the National Society of Professional Engineers (NSPE), the American Society of Civil Engineers (ASCE), and the Institute of Industrial Engineers (IIE). Additional results from 2004 show that nearly all disciplines are on the rise: \$87,045 for chemicals, \$81,000 for electricals, \$80,000 for mechanicals and \$70,500 for civils. In 1999, according to the NSPE Salary Survey, the median salary for chemicals was \$80,000, \$75,372 for electricals, \$72,000 for mechanicals and \$66,816 for civils.

Other interesting findings to date:

- Engineers in the Northeast and West Coast earn more than in other parts of the country. In the Northeast, engineers earn an average of \$75,000 a year, while those on the West Coast earn \$74,346. By contrast, engineers in the North Central states earn an annual salary of \$68,000.
- Petroleum engineers have the highest median annual salary of all disciplines at \$100,000, followed by nuclear engineers at \$94,848 and marine engineers

at \$92,549.

- The salaries of executive-level engineers had declined from \$120,000 in 1999 to \$114,400 in the recent survey.
- The median salary for engineers in training is up from \$37,688 in 1999 to \$44,295.

Survey results are available to credentialed members of the media. All others are welcome to purchase a subscription to "The Engineering Income & Salary Survey" by visiting these web sites: <http://nspe.salaries.com>, <http://www.asce.org/corporate>, <http://iie.salaries.com>, or contacting Karin Hadlock at NSPE, (703) 684-2891 or Carlos Hinayon at ASCE, (703) 295-6227. With the purchase of an unlimited access subscription, both corporations and individual engineers have the option of purchasing a printed report for their reference containing minority, gender, bonus, layoff, organization structure, benefits reporting, and much more. Also included is a look at salary and benefit trends from previous years.

The National Society of Professional Engineers (NSPE) is the national society of engineering professionals from all disciplines that promotes the ethical and competent practice of engineering, advocates licensure, and enhances the image and well-being of its members. Founded in 1934, NSPE serves more than 50,000 members and the public through 53 state and territorial societies and more than 500 chapters. For more information, please visit www.nspe.org

Engineers in the Northeast and West Coast earn more than in other parts of the country.

Met Your New MSE Board Member:

Sandra S. Anderson, PE

Sandra was born in Billings, and raised on her family's cattle ranch at Big Horn, about 70 miles east of Billings. After graduation from Custer High School, she attended Montana State University – Bozeman. She graduated in 1991 with honors, earning a bachelor of science in electrical engineering. While in college, Sandra started her career with the Montana Power Company, working four summer internships. She spent one in Power Operations in Butte, the next at Units 3 & 4 in Colstrip, the third at Tetragenics, and the last in Electric System Engineering. She passed the EIT exam while a senior in college. She was inducted into the Order of the Engineer in 1989, the Tau Beta Pi Engineering Honor Society and the Mortar Board Collegiate Honor Society in 1990, and the Eta Kappa Nu Electrical Engineering Honor Society in 1991.

In August of 1991, Sandra joined MPC's engineer training program. For the next two years, she was mentored in a variety of areas, including Substations, Transmission, Communications, Relay, Electric System Engineering, Hydro Operations, Gas Engineering, Gas Supply/Transportation, Cut Bank and Shelby Gas Field Offices, and Butte Division. In September of 1993, she became part of the Energy Services group in Butte, working as a demand side management engineer.

Two and a half years later, Sandra was transferred to the Great Falls Division. There, she designed overhead and underground electric primary and services and natural gas distribution systems for residential and commercial customers. Her areas included Ulm and Cascade, central Great Falls, the Bootlegger Trail, and Fort Benton. While she was in Great Falls, she sat for and passed the PE exam, gaining MT PE License #10321 on April 24, 1998.

In 1999, MPC decided to replace its 200+ computer programs with an integrated software package. SAP, a German enterprise system was chosen. Sandra transferred back to Butte to become part of the Materials Management team, responsible

for system design and configuration for purchasing of materials and services, inventory management, and accounts payable. The project, ConnectMPC, successfully went live in May of 2000. When the MPC utility was purchased by NorthWestern Energy of South Dakota, she was the MM Team Lead for Project Impact, to roll out SAP to the South Dakota and Nebraska operations in 2002. She was also the MM team member for the first SAP data archiving project, which completed in May 2004.

Sandra married Eric David in Walkerville's historic St. Lawrence church on the Butte Hill in September of 2002. Eric is the Human Resources manager for Butte School District. She gained three great step-children, as well: Jennifer (24) is a 3rd grade teacher in Boca Raton, FL; Jason (23) is a freelance videographer in Houston, TX; and Julie (21) will join the Catholic Charities in August in St. Louis, MO.

Sandra is also a partner with her mother, Marlene Anderson, in the Anderson Cattle Ranch in Big Horn. She is an avid reader, and enjoys spending time in Yellowstone Park at any time of the year.

Activities & Honors:

IEEE, 1987 - Present. Montana Section Chair, 1994 - 1996; Montana Section Professional Activities Committee for Engineers Chair, 1991 - 1994; Montana State University Student Branch Secretary, 1989 - 1991. NSPE, 1991 - Present. Butte Chapter Vice-President, 1995 - 1996; Butte Chapter Secretary-Treasurer, 1994 - 1995; MATHCOUNTS Coordinator: Great Falls 1998-1999 & Butte 1993 - 1996; Montana State University Student Branch Treasurer, 1989 - 1991. American Association of University Women, 1991 - Present. Montana Membership Co-VP, 2001-2004; Butte Branch Finance Director, 1999 - present, 1994 - 1996; Great Falls Branch Finance Director, 1997 - Present; Great Falls Branch Secretary, 1996 - 1997. First Church of Christ, Scientist, Butte, Montana. Board President, 2004 - present, 1996; Board Vice-President, 1995; Board Member, 1994. Montana State University Alumni Association, Life Member.

Sandra S. Anderson, PE

will begin serving on the

Montana Society of

Engineers Executive Board

as Secretary/Treasurer on

July 1, 2005.

● About NSPE ● Contact NSPE ● Join NSPE ● Members Only



**National Society of
Professional Engineers®**

- NSPE Job Board
- NSPE 2005 Convention
- New EJCDC Custom CDs
- NSPE Spring Ethics Form
- Membership
- Licensure, Ethics & the Law
- Employment
- Education
- Government Relations
- Forums
- Engineering Practice Areas
- Student Information
- Partners
- And Much, Much, More . . .

- Engineering Times
- Products & Services
- Contract Documents

Visit www.nspe.org TODAY!

MSE extends our thanks to Bill's past and present service and for the positive light he casts on engineering in general by actively contributing to our organization and other worthy causes in the community.

Member Profile: Bill Buxton

Dan Hogan, P.E., Vice President

Bill Buxton is an Idaho native having grown up in the Boise area. After Boise, he migrated north to the town of Moscow where he pursued his engineering studies. After receiving a BS in Civil Engineering, he was enticed to stay on at Idaho and participated in their Master's program. He successfully completed that course of study in 1994. Upon graduation he joined the firm of Morrison-Maierle in May of 1994.

Since joining MMI Bill has consistently met project challenges head-on, resulting in occasional headaches, and has moved up the ladder to the position of Project Manager. After spending nine years in Helena, Bill transferred to the Kalispell office of MMI.

Bill has been an active participant in MSE, culminating in a stint on the board with service as President. MSE is not the only board on which he has served. The Bigfork Chapter of Montana Ducks Unlimited is lucky to have him as their Committee Chairman. As his commitment to DU demonstrates, Bill is fond of out door activities. He enjoys hunting, fishing rafting and camping with his family including Susanne and their three children, Caleb, Amanda and Jordan.

MSE extends our thanks to Bill's past and present service and for the positive light he casts on engineering in general by actively contributing to our organization and other worthy causes in the community.

03-04 MSE Board

Doug Brekke, President
DLB@5400.TV

Dan Munson, President-Elect
Dan.Munson@northwestern.com

Dan Hogan, Vice President
dhogan@aegis-eng.biz

Brad Wright, Secretary/Treasurer
bwright@salient-tech.com

Bill Buxton, Past President
bbuxton@m-m.net

Connie Dempster, Executive Secretary
MSE Office
PO Box 20996
Billings, MT 59104-0996
406-259-7300
406-259-4211 Fax
mse@assoc-mgt.com
