# Montana Society of Engineers

*A state society of the National Society of Professional Engineers*

***Founded 1887***


## *President's Message: Our Future is Bright*

*Jeff Ruffner, PE, President*

Well here I am again, late getting this column to Connie. It is 6:00 in the morning here in Tennessee and the race is on. The articles were due to her on the 10th by the close of business. However, I operate on the premise that 8:00 am on the 11th is equivalent to the close of business on the 10th. Any way that is how I rationalize my poor schedule performance in my own mind. Now we shall see if I can meet my newly revised schedule.

Since this will be my last article for our newsletter as President of the Montana Society of Engineers, I wanted to first thank a few people for the help and support over the last year and the very first one is Connie. She is the glue that keeps the volunteers in the organization moving forward. She keeps us in line, provides our institutional memory, and best deals with the operational details of running the organization. Connie thank you, on behalf of myself and all of us in the organization.

I also want to thank very much our past, present and even future board members for their dedication to the profession as shown by their willingness to serve the organization. As I transition out of the Presidency, Mr. Tom Able of Kalispell will transition in as President. Tom will be supported by Ken Phillips of Helena, and Crystal Kuntz of Billings. Getting to know these people over the last couple of years has been a real pleasure. They are indeed dedicated to the profession and I look forward to the changes they will imprint on the organization.

Last but not least I would like to thank Dan Munson and Doug Breke. Dan has been leading "MathCounts" it seems like forever, and the same for Doug both with the JEC and the Hall of Fame. Both Doug and Dan truly deserve our recognition and thanks.

When you talk to both Dan and Doug about "MathCounts" or the "Hall of Fame Award" on their projects, the one thing that is readily apparent is their individual passion for these particular programs. What else would keep them so involved long after their original obligation was completed. They serve as great role models for all of us. Find what you are passionate about and get involved.

It has been an interesting year. The changes made in our business operations have had a positive impact on our finances. This positive change in our finances have allowed us the opportunity to not only meet our financial obligations to the operation but also to make monies available to those areas and organizations who are taking the lead in special projects or events in support of the engineering profession. I would encourage any of you who are involved in these events in your area to contact one of your board members. The organization can provide monies in support of these worthy activities.

This year as every other year, the main issue has been growth in the organization (or lack thereof). This is not unique to us. It appears to be a trend with all service type organizations. This will always be our top issue. However, I am encouraged for the future by what I see happening in Kalispell led by Tom and Helena led by Ken and also by what I see happening at NSPE. Yes you read it right. I am encouraged by what I see happening at NSPE.

The folks at National are facing the same issues that we are here at the state level only on a larger scale. A few years back they instituted some changes. Now we are starting to see some of the results of the changes. There is a long way to go but again I remain very optimistic. I would encourage everyone to support them in their efforts.

The near term future of our profession will be real interesting. The coming engineer shortage, bachelors plus 30, the H1B visa discussions, globalization and reciprocity as well as what appears to be much more aggressive enforcement by states on engineers practicing outside of the industry exemption without a license, should make for some interesting times. When I talk to students I always point out these issues and remind them that they have chosen this profession so "get involved", regardless of your position on these issues, because they will impact you. I would encourage everyone in the profession to "get involved".

I sometimes find it beneficial to step back and look at the big picture. The Montana Society of Engineers is one of the oldest Engineering Societies in the nation. We have a long history that we can be very proud of. We have programs in place that are the envy of much larger states with many more resources. We have something very special here and it has been a real pleasure to be part of the organizational leadership.

Thank you all. —Jeff Ruffner, P.E.

## *June, 2008*

***The Montana Society of Engineers is one of the oldest Engineering Societies in the nation. We have a long history that we can be very proud of. We have programs in place that are the envy of much larger states with many more resources.***

## *Inside This Issue*

# *Gold Medal Award—Montana Tech*

*Jeff Ruffner, P.E., President*

***This year's winner was Levi Briese of Havre Montana. Levi received his B.S. Degree in Petroleum Engineering.***

Each year I have the pleasure of interviewing students for the Gold Medal award at Montana Tech. This is indeed unique. It has been ongoing since 1929 and recognizes the outstanding engineering student of the class.

Fellow students first recommend the nominees and then the faculty narrows the selection down to three individuals. Then a local selection committee composed of practicing engineers makes the final selection and the presentation to the winners at graduation. If you would be interested in serving on this committee, please contact me — we would be happy to have you!

This year's winner was Levi Briese of Havre Montana. Levi received his B.S. Degree in Petroleum Engineering.

I must tell you when you see the caliber of the young engineers graduating and all of their accomplishments at such a young age, the future of the profession is in good hands.

# *Hello Fans of JEC*

***To date, we have an established agenda with over 50 sessions presenting topics in power, water resources, structural engineering, geotechnical engineering, and renewable resources among other great topics.***

The 2008 JEC is off to a fantastic start. To date, we have an established agenda with over 50 sessions presenting topics in power, water resources, structural engineering, geotechnical engineering, and renewable resources among other great topics. We have nearly 40 qualified speakers coming from across Montana as well as Colorado, Washington and Texas. Although everyone has taken some time to get used to the new planning schedule, the JEC committee has really stepped up to the plate this year brining in some very interesting sessions. I am proud to say that the following societies have really done their part to bring in qualified speakers to address various topics of interest.

| Society | JEC Sessions brought in by this society |
|---|---|
| IEEE | 11 Sessions |
| MSE | 17 Sessions |
| SEAMT | 4 Sessions |
| ASHRAE | 6 Sessions |
| ITE | 6 Sessions |
| ASCE | 4 Sessions |
| USGBC | 3 Sessions |
| SAME | 2 Sessions |
| **Total** | **53 Sessions** |

Some of these sessions are still tentative as we have not yet confirmed speakers or topic details, but things are beginning to come together. On the flip side, Connie has been doing a FANTASTIC job getting the 2008 JEC Vendor Show off the ground. Mark this point in history folks – it is JUNE – and our 2008 November JEC Vendor Show is SOLD OUT!! These are the words we all long to hear, so we owe a hearty 'at-a-boy' to Connie for her diligent foot-work. The conference is doing well budget-wise and we look to be solidly in the black come November. A hearty 'thank you' to those of you that have taken your responsibilities to the JEC seriously by meeting our conference committee goals and schedule – and also to those that have endured my constant nagging, thank you. I look forward to a fabulous conference in November! More details to come…

*A complete list of the 2008 Vendors are listed on the following pages of this newsletter and for more information on the JEC or any of these Vendors—please visit www.mtengineers.org*

*Any VENDORS still wishing to show at the 2008 JEC, please contact Connie at mse@assoc-mgt.org or 406-259-7300. With the help of K & J Convention Services, we have added some additional booths!*

**2008 JEC—November 6-7, 2008**

# *News from the Capitol City*

*Kenneth Phillips, PE, Vice President*

A couple of months ago, I received a flier that was entitled "Burritos without Borders" it was for a fundraiser to be held at a popular local burrito shop. The fundraiser was for a group known as Engineer's without Borders, (EWB). In checking on their website they are affiliated with ASCE and have 4 chapters in Montana, 2 are professional chapters Helena and one that is being developed in Missoula and 2 are students chapters MSU Bozeman and Carroll College. So intrigued I decided to attend the fundraiser.

From what I have gleaned the Chapters form and pick projects to implement in developing countries. The Helena chapter is working on two projects, one in a place called Rio Chico Mexico 6 hours drive from El Paso and the other in Copper Canyon Mexico 12 hour drive and a hike to 9000 feet. Both of these are water projects involving supply, distribution and treatment. The Rio Chico also has an economic development angle, as the EWB are going to try and build a facility so that the native peoples can make and sale local crafts.

EWB members will spend one week traveling and scoping the project. Of course with air fares the way they are that's very expensive. The fundraiser was to help with travel related expenses for this trip but at $800/ person they are a little short so far as they raised a respectable $1750 for this trip. The hope is to have a team that includes professionals in Hydrology, Water Treatment, Agriculture and a discipline called Translator Engineer. In my opinion the translator engineer will be of great importance as even speaking the same language Engineers have difficulty getting concepts across to laymen, so throw in a second language and culture I can see that as quite a challenge.

After the scoping trip, the team develops plans and the budget needed to implement and then through fund raising and volunteer time they go and build the project. I am not to familiar with this phase as I have only been tracking the project to this point, but just raising funds to do this would be a monumental task. Add to that the logistics of gathering building materials and manpower to then build the project it's going to be quite the project.

I think that there is a benefit to the Engineering community through their actions. What I saw at the fundraiser was lots of student engineers as well as other young non-engineers. This type of activity seems to appeal to the upcoming generation and it is very good exposure for the Engineering disciplines. So my hats off to the EWB professional and student membership, they are illustrating to the state and other countries that engineers do care and want to make the planet a better place to live for everyone. The amount of time and effort to do a project like this when all are busy with their regular jobs or studies is very commendable. So I hope to try and support their efforts, as I do believe it will inspire young folks to consider engineering as a career. So check out their website http://www.ewb-usa.org/ click on chapters and you will find the Montana chapters.

***The Helena chapter is working on two projects, one in a place called Rio Chico Mexico 6 hours drive from El Paso and the other in Copper Canyon Mexico 12 hour drive and a hike to 9000 feet.***

# *Visit: www.mtengineers.org*

The goal of the Montana Society of Engineering's website is to create a site that would be 'all-things-engineering' for Montana. This site is for all professional engineers.

- Need information and on-line registration for the Joint Engineers Conference — as the JEC Committee creates this year's program, updates will be made — visit often!
- Looking for a new position? Ready to make a job change? Visit JobTarget at mtengineers.org
- Trying to find an engineer, draftsman, or new office personal? Visit JobTarget at mtengineers.org
- Who is currently part of the PE Hall of Fame? This site has a complete list.
- Is your firm or engineering society offering a course for CEUs to maintain licensure? Please send the information to mse@assoc-mgt.com and it will be posted with links to this site.
- Is your firm linked? Download the Engineering Firm Profile and make it happen today!
- Are you involved in another professional engineering society? Create a link and make it easier for all to share information.
- Have a great idea that you think this site should offer? Let MSE know. The purpose of this site is to offer Montana Engineers a tool that works for all engineers.
- Looking for resources? Click on the link to NSPE for Mentoring Programs, Online Resume Posting, FE & PE Exam Review Courses and Preparation Materials, Scholarship and Internships for Engineering Students.
- Professional Engineers are facing many issues such as unlicensed practice. How can this site help?

This site is being developed for the professional engineer practicing in Montana. The site hopes to represent all societies and all engineering disciplines. The quality of the site and the type of information available on the site will be determined by you! Take a moment to visit, visit often and share your ideas, thoughts or vision.

***This site is being developed for the professional engineer practicing in Montana.***

# *Stray Thoughts*

*By Tom Abel, PE, Vice President*

***Try this for an exercise. Go to your favorite gas station and fill up your car with gas. Then rent the movie "Who Killed the Electric Car?".***

Once again my college class at Flathead Valley Community College participated in constructing a decision matrix on what to do about high gas prices. The rule was "What can you do as a poor college student to cope with rising gas prices." The choices ranged from walking, riding bike, upgrading your car, buying a car with better gas mileage, and a few high tech options such as buying a Prius. Again, as in years past, the best answer was "Drive Less". It makes more sense to keep what you are driving, but make less trips to the grocery store, combine trips, carpool, etc. If you change the rule to "What do we do to stop funding terrorists every time you pull up to the gas pump." The outcome changes. Now anything that uses fossil fuel is out the door. Unless we want to go back to riding horses and walking, high tech alternative vehicles now seem to be the only solution.

Try this for an exercise. Go to your favorite gas station and fill up your car with gas. Then rent the movie "Who Killed the Electric Car?". After lightening you wallet at the gas station and viewing the movie, you will be sufficiently upset. After seeing the movie, you will see that fuel cell technology is way too expensive, not to mention we do not have a hydrogen infrastructure in place to fuel hydrogen powered cars. Biofuels cost as much or more to produce as the energy in the biofuel. Electric cars seem to be the only viable alternative to fossil fueled vehicles, and the infrastructure is already in place for plug-in cars - right in your own garage. The car manufacturers have little incentive to come out with a viable electric vehicle. Why would they and lose the aftermarket income of $1200 tune-ups, expensive oil and air filters, and all the rest? With an electric car, the only maintenance is to keep the batteries filled with water, and check air in the tires. The promise of GM coming out with a Volt car is like the sign in the bar that reads "FREE BEER …… (tomorrow)", and of course the next day the sign is still there. GM already had a viable electric car in the hands of happy consumers, but GM recalled all of them and now GM acts like it is such a big deal to come out with the Volt car.

If you want a reasonably priced electric car now you will have to build your own. This is not as difficult as it sounds. There are shops that will do it for you, or you can join a group like the Panhandle Electric Vehicle Club whose members will guide you through the process and have a list of vendors with quality products that work for electric vehicles. There are numerous converted cars and trucks available for sale on the internet, and there are some EV dealers around the country. The conversion to electric is a grass roots movement.

Don't expect an EV to replace your Hummer. For hauling loads, pulling the boat, long trips, and fast speeds, the gas guzzler is still the viable way to travel. You just have to close your eyes when you scan your credit card through the gas pump. The average American owns 2.6 vehicles. Think of the electric vehicle as the .6 vehicle owned, or roughly 20% of our travel. Most of our trips are to and from the store, commuting to work and back, taking kids to the ball game, down to the lake or river on the weekend. Many of these trips fall within the operating range of an EV. If 20% of our travel could be with electric vehicles, that would be a significant reduction in oil demand, especially here in the northwest where much of our electricity is produced by hydroelectric power.

Today you can buy an old VW, Geo Metro, VW Rabbit, 914 Porsche, 911 Porsche, Chevy S-10 pickups and many other lightweight cars and convert it to electric power. Complete electrical conversion kits for these popular vehicles are available from several vendors. The cost to convert is in the neighborhood of $ 6,000 to $12,000 depending on how much you do yourself and what vehicle you chose.

Don't expect to drive too far or too fast. Top speed is from 35 mph to 60 mph. Range is 25 to 50 miles. A general rule of thumb is 1 mile of range requires 20 lbs. of battery. A typical battery weighs 66 lbs. How many 66 pound batteries can you put in a Geo Metro or VW bug? Battery weight is the limiting factor. Losses to heat are reduced with increased voltage. For those of us rusty on our electrical engineering, heat = amps squared times the resistance. The amperage draw driving up a 6% grade (on the order of 150 to 250 amps) causes a lot of battery power wasted as heat. Limited storage, weight, and heat losses are the problems with electric cars.

Why not jump in right now? Gas prices are not coming down, and battery technology continues to improve. Maybe in 5 years there will be a lightweight battery that charges in minutes, and does not have much internal resistance. Solar panel technology continues to improve. If you have an EV conversion, you are in a great position to take advantage of new technology that comes along. In the mean time you can be comforted by the knowledge that you are not financially contributing to the next 9-11 attack. It cost me $42 to fill up my old VW van today. I kept thinking $42 is almost enough to buy a battery from Walmart. Six fill-ups and I would have enough batteries to power a small EV.

Check out this brave pioneer EV manufacturer located in Bozeman, Montana. The Solar Bug (www.solarbug.com) is a viable neighborhood vehicle. It is capable of 35 mph, and uses six 12 volt batteries. The neat thing about the Solar Bug is the 500 watt solar panel mounted in the roof of the vehicle. When I was in Missoula on Earth Day looking at the car, the

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## *Stray Thoughts* — *Continued from Page 4*

solar panel collected enough energy to fully recharge the battery pack. A light came on while I was looking that indicated full charge. There was no extension cord or generator, just the weak sun coming through the clouds. This car will be available soon for under $10,000, and it has a "Made in Montana" sticker on it.

Electric cars have been getting a lot of attention lately in view of the high price of gasoline. Electric cars make sense especially in the Flathead since our power is generated from the Hungry Horse reservoir, a form of solar power. Purchasing electricity from Flathead Electric Coop does not fund any Middle Eastern agenda.

There are some concerns about electric cars, one of which is the high voltage usually associated with them. What if an electric with a 300 volt battery pack is in a wreck? Will the driver survive opening the door if the wires are touching it? Will the tow truck driver want to hook up to 300 volts?

There is one electric car out there available for sale. It is manufactured in Canada by the Zenn car company. The Green Car Company in Post Falls, Idaho is a Zenn dealer. A recent visit to the Green Car Company was interesting. The Zenn holds 2 passengers, and a few bags of groceries. It has 4 wheel disk brakes, power windows, heater, stereo, and most features available on most other cars. The performance listed on the brochure was 12.3 seconds, however this was not a quarter mile time, but the time to get to 18.3 MPH. The big disappointment was the top speed of only 25 MPH, more a limitation of federal standards than the capability of the car. Apparently Montana has passed a law allowing such vehicles to travel at 35 MPH.

Electric cars have been around for many years. The Baker Electric Car Company was one of the more popular ones at the beginning of the 20th century. It was interesting to compare the new Zenn car with a Baker Electric.

| | 1911 Baker Electric | 2008 Zenn |
|---|---|---|
| Top Speed: | 23 MPH | 25 MPH |
| Voltage: | 84 Volts | 36 Volts |
| Cost New: | $3000 | $12,700 |
| Range: | 100 miles | 30 – 50 miles |
| Battery: | Edison Iron-Nickel Alkaline | Lead – Acid |
| Battery Life: | 100 years + | 5 years |

The Baker Electric Torpedo reached a speed of 104 MPH at Daytona Speedway in 1904. It makes one wonder why electric cars have not advanced much in 100 years. What ever happened to the Edison iron-nickel alkaline battery?

***Electric cars have been getting a lot of attention lately in view of the high price of gasoline.***

# *Gold Medal Award—Montana State University*

*Dan Munson, P.E.*

For over sixty years, MSE has recognized a top MSU engineering graduating senior with the MSE Gold Medal Award. The MSU College of Engineering requests that departments submit one nomination from each engineering discipline. The criteria used to select outstanding seniors are:

- Distinguished academic record
- Involvement in extracurricular activities
- Leadership in extracurricular activities
- Commitment to the practical use of the sciences in the execution of engineering work
- Promise of service to their profession with integrity, devotion to high standards, and a sense of obligation to humanity

This year, Miss Amanda Andrikopoulos from Billings received this prestigious award at MSU's Commencement Exercises. Amanda graduated with a BS in Industrial Engineering in December of 2007 with highest honors and a 4.0 GPA. She kept busy with many extracurricular activities and was involved in numerous professional societies. She was the president of the student chapter of the Institute of Industrial Engineers, served on the advisory board of Women in Engineering, was involved in the Student Engineering Ambassador Program, and involved in Alpha Pi Mu. She helped institute a mentoring program for Industrial Engineers, and shows a strong passion to give back to society using her engineering education. This passion led her to employment at NAVSEA in Keyport, Washington where she uses her talents to work on military projects and support our USA troops.

SE is proud to honor Amanda with this award, and we wish her the best success as she upholds the high standards of our profession.

***This year, Miss Amanda Andrikopoulos from Billings received this prestigious award at MSU's Commencement Exercises.***

# *MATHCOUNTS News!*

*By Dan Munson, State MathCounts Coordinator*

The 25th annual MATHCOUNTS season officially wrapped up on May 9th when 228 "Mathletes" from around the nation gave it their best at the National Competition in Denver. Darryl Wu of Bellevue, Washington, answered this challenging math problem in less than 45 seconds to win the MATHCOUNTS National Champion title:

*A set of distinct positive integers has a total of 11 digits, and all the digits are 1s. What is the smallest possible sum of the integers in the set? (Answer: 11,234)*


*2008 State MATHCOUNTS Winners: Coach Linda Horst, Lexi Eagle, Laura Vonessen, Nicholas Peyton, and Shanli Jessop.*

***The Montana team consisted of Laura Vonessen from Missoula's Washington Middle School, Shanli Jessop from Corvallis Middle School, Nicholas Peyton from Bozeman Sacajawea Middle School, and Lexi Eagle from Billings Will James Junior High. Montana Coach Linda Horst from Billings Will James Junior High.***

After numerous local and state MATHCOUNTS competitions involving 442 middle school students from 63 schools across Montana, the official State Team to represent Montana at the National Competition was selected. The team consisted of Laura Vonessen from Missoula's Washington Middle School, Shanli Jessop from Corvallis Middle School, Nicholas Peyton from Bozeman Sacajawea Middle School, and Lexi Eagle from Billings Will James Junior High. Montana Coach Linda Horst from Billings Will James Junior High accompanied these four students.

This year we also selected a Montana MATHCOUNTS "*Champion of the Year"* to attend the National Competition. Jordan Graves from Reedpoint, an avid supporter of mathematic advancement in the state, was honored in front of all his peer teachers and given an opportunity to attend the National MATHCOUNTS competition this year. Jordan teaches 7th through 12th grade math in Reedpoint. He has coached hundred of Mathletes and prepared many students to compete neck-to-neck with the AA middle school students in the state. His enthusiasm is infectious, as he has engaged 23 of the 35 total junior high and high school students in Reedpoint to participate in math competitions. Reedpoint's math proficiency scores have increased over the past three years that Jordan has taught.

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.

*And as always, we send a special thank you to our Corporate Sponsors! Without this support, Montana would not be able to conduct competitions and help in motivating these students to excel in math! Thank you for your support and cheers!*

***2007-08 MathCounts Corporate Sponsors***

**Advance Silicon Materials, LLC**
**American Public Works Association—Rocky Mountain Chapter**
**Ash Grove Cement Company**
**Blackfoot Telephone Cooperative**
**CDM, Inc.**
**CHS, Inc.**
**Columbia Falls Aluminum Company**
**ConocoPhillips**
**Cretex Concrete Products West, Inc.**
**Dennis & Phyllis Washington Foundation**
**Electrical Consultants, Inc.**
**Engineering, Inc.**
**ExxonMobil**
**Great West Engineering, Inc.**
**HDR SSR Engineering, Inc.**
**Montana Engineering & Admin.**
**Montana Refining Company**
**Montana-Dakota Utilities**
**MSE Technology Applications, Inc.**
**NorthWestern Energy**
**Peabody Coal Company**
**Robert Peccia and Associates**
**Stillwater Mining CompanyWestern Energy Company**
**Western Sugar Company**
**Westmoreland Resources, Inc.**
**Yellowstone Electric Company**

Thank you all!

# Call for Nominations

## Montana Professional Engineers Hall of Fame

The Montana Society of Engineers (MSE) requests nominations for induction into the Montana Professional Engineers Hall of Fame. Plaques honoring the inductees will have a permanent home at the Montana State University College of Engineering.

The award was established in 2002 to recognize Montana professional engineers who have made outstanding contributions to the engineering profession and public welfare of Montana. This award is open to all professional engineers licensed in Montana.

**Qualifications/Method of Selection**

The MSE Executive Board will consider nominees for induction into the Montana Professional Engineers Hall of Fame. Professional engineers licensed in the State of Montana and working on projects in the State of Montana are eligible. Retired and deceased professional engineers are eligible. Current Officers and directors of MSE are *ineligible.*

MSE Executive Board members will consider these aspects of the nominee's career: The candidate's professional integrity is beyond question; the professional reputation is more than local in character; the undertaking of services upon which the award is based are of high order; and there is more than an ordinary relationship between the undertaking of services and the public welfare. Preference is given to candidates who have consistently promoted the social and professional interests of the engineer. This criterion closely follows the yearly NSPE Award.

**Nomination Format**

Please provide the following biographical information on each nominee:

- Personal information including current address and phone number. If nominee is deceased, so note and provide information of surviving family members.
- 500-word or less statement describing the nominee's education, professional achievements, professional and technical society membership, humanitarian and civic contributions, unusual consulting assignments, and family information.

**Presentation**

The award(s) will be presented at the Joint Engineers Conference Annual Banquet on Friday - November 7, 2008.

**Deadline**

Nominations must be postmarked no later than July 1, 2008 and sent to this address:

Montana Society of Engineers
Nomination for the MT PE Hall of Fame
PO Box 20996
Billings, MT 59104-0996

*Entries postmarked after July 1, 2008 will not be considered.*

*Take the course now and earn your PDHs from the comfort of your home or office at your convenience.*

*2008 Joint Engineers Conference*
*November 6-7, 2008*
*Red Lion Colonial Hotel*
*Helena, Montana*

*Registration to be posted at www.mtengineers.org*

*More information to come!*

# *NSPE: Your Source for On-Line Education*

**Web Seminars:**

Don't let the year-end without enough PDH credits for your license renewal. There are Web seminars! Register at www.nspe.org/education/ed1-onlineopps.asp. NSPE members only pay $119.00 per course.

**On-Demand, On-Line Courses:**

NSPE is offering on-demand courses through the Resource Catalog! If you missed the Web seminar because of your busy schedule? Take the course now and earn your PDHs from the comfort of your home or office at your convenience. Choose from a variety of topics presented by leading experts in the field. NSPE members only pay $89.00 per course.

## *2008 JEC Vendors*

The following Vendors are making their plans for the Joint Engineers Conference:

**Central Insurance Agency**
**Belgrade, Montana**

**Montana Contractors Association—Concrete Division**
**Helena, Montana**

**JCCS, P.C.**
**Missoula, Montana**

**Hilti, Inc.**
**Bozeman, Montana**

**AutoDesk—Rational Technology of ID, LLC**
**Boise, Idaho**

**Planned & Engineering Construction**
**Helena, Montana**

**TWEnterprises**
**Billings, Montana**

**Columbia Hydronics Corporation**
**Vancouver, Washington**

**NorthWestern Energy**
**Butte, Montana**

**Advanced Pump & Equipment, Inc.**
**Bozeman, Montana**

**Cretex Concrete Products, West**
**Helena, Montana**

**Coral Sales Company**
**Portland, Oregon**

**PacifiCAD, Inc.**
**Helena, Montana**

**iLevel Trus Joist**
**Helena, Montana**

**Square D**
**Westminster, Colorado**

**Unico Systems**
**Helena, Montana**

Make your plans to attend the 2008 JEC today! See page 2 of this newsletter for more information — over 50 breakouts are scheduled.

## *2007-2008 MSE Board*

**Jeff Ruffner,** President
*jeff.ruffner@mse-ta.com*

**Tom Abel,** President Elect
*tom@abelengineeringinc.com*

**Kenneth Phillips,** Vice President
*kennethphillips@bresnan.net*

**Crystal Kuntz,** Secretary/Treasurer
*Crystal.kuntz@eciblgs.com*

**Sandra Anderson,** Immediate Past President
*sandraa@ncat.org*

**Connie Dempster,** *Executive Secretary*
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Deadline for the Next Issue of this Newsletter is September 10, 2008

Submit articles and advertising to mse@assoc-mgt.com

**2008 JEC—November 6-7, 2008**