

## The South Dakota Engineer

November 2015

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## SDES 2015-2016 EXECUTIVE COMMITTEE

**PRESIDENT** 

Stacy Froelich, P.E.

PRESIDENT-ELECT

Brian Jenner, P.E.

VICE PRESIDENT

Philip Gundvaldson, P.E. **SECRETARY-TREASURER** 

Steven Myer, P.E.

**PAST PRESIDENT** 

Todd (T.J.) Yerdon, P.E.



#### President's Message Stacy A. Froelich, MS, P.E., 2015-2016 President

Hello again SDES members and I hope that this message finds you in good spirits during the start of this holiday & hunting season! SDES' comments regarding the NSPE PP/PS 168, 1737, and 1739 are summarized below based upon feedback from the members. Thank you to all the members that commented.

The South Dakota Engineering Society (SDES) offers the following comments regarding Professional Policy 168 and Position Statements 1737 and 1739 (Group 3).

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#### PP 168 Engineering Education Requirements

SDES does not support the changes to the PP168. In addition, further clarification to the alternative approaches need to be defined. SDES believes that practical application of engineering disciplines provides more professional development towards a professional engineer licensure than additional formal engineering education.

In addition, higher education institutions require various credits to graduate with a degree in engineering. Furthermore, each state board has different standards and statutes required to obtain a professional engineering license as well as different continuing education requirements. Thus, requiring additional education would not be standardized for individuals obtaining a professional license.

SDES is not opposed to additional formal education requirements, but believes a more standardized and equivalent level is necessary across the board.

PS 1737 Licensure and Qualification for Practice

SDES is in support of PS 1737 as amended.

PS 1739 Engineering Education

SDES is in support of PS 1739 as amended.

#### NSPE Leadership Toolbox

Have you remembered to pay your membership dues? If you need an invoice, please go to www.sdes.org, where you can pay your dues online or contact Gail Boddicker at 394-6674 or gail.boddicker@sdsmt.edu for a copy of your invoice.

It is a good idea to periodically check your records to be sure your contact information is correct. You can update your information online or contact Gail with the information.

In addition, thank you to the volunteers in the Eastern Chapter for putting an excellent Fall PDF conference together for our engineers across the State. It was a tremendous success with quality presentations resulting in record attendance. I truly believe these conferences are a centerpiece for what we do, it's always a highlight of my year to see friends and associates from around the state, and I am highly encouraged to see the strong participation by our members.

As our Chapters get together this fall and winter for regular meetings or social gatherings, please bring a prospective new member with you and introduce them to our engineering society.

Happy and Safe Holiday Travels and Season to everyone!

Sincerely, Stacy A. Froelich, MS, P.E.

# SOUTH DAKOTA ENGINEERING SOCIETY 2016 ANNUAL CONFERENCE APRIL 6-8, 2016 HOLIDAY INN, SIOUX FALLS, SD

#### **SDES Members In the News**



Stacy A. Froelich was selected Bureau of Reclamation's Great Plains Region Federal Engineer of the Year. The Great Plains Region is the largest and most ecologically diverse region in Reclamation, encompassing all or parts of nine western states and extending from the Canadian border to the southern tip of Texas and encompasses all or parts of nine states including Montana, North Dakota, South Dakota, Wyoming, Colorado, Nebraska, Kansas, Oklahoma, and Texas. Stacy will now compete against the other Regions with in Bureau of Reclamation across the United States for the Bureau of Reclamation Federal Engineer of the Year.

The Federal Engineer of the Year Award, sponsored by the Professional Engineers



### ENGINEERING A STRONGER PROFESSION

NSPE is on a mission of organizational innovation and development to effectively serve the licensed professional engineer and those on the licensure path.

If you haven't already seen the video and other resources related to the Society's new Statement of Strategic Direction, check out www.nspe.org and the link to "Mission: Engineering a Stronger Profession."

LEADER WEBINARS

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in Government, honors engineers employed by a federal agency that employs at least 50 engineers worldwide. The Federal Engineer of the Year will be selected by a panel of judges established by the NSPE Professional Engineers in Government. All federal agencies employing at least 50 engineers worldwide are eligible to compete. Individual agency nominees must be presently engaged in the practice of engineering as an employee of the federal government in either managerial or technical positions. Only licensed professional engineers or engineers in training are eligible for nomination to the Top Ten Finalists. An awards ceremony will be held in Washington, D.C. on February 26, 2016. All agency nominees will be recognized and are expected to attend the event.

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HURON, S.D. – Lt. Col. Trent Bruce, of Sioux Falls, took command of the South Dakota Army National Guard's 153rd Engineer Battalion during a change-of-command ceremony, Saturday, Oct. 3, at the Huron National Guard armory.

Bruce assumed responsibility from Lt. Col. David Daily, of Sturgis, who served in the position since September 2013.

"It is a humbling experience to get this opportunity to take command of the 153rd Engineer Battalion and follow in the footsteps of the great leaders that have come before me," said Bruce, a native of Custer. "I am truly honored to lead the men and women of the units that comprise the battalion all across the state."

As the commander of the 153rd, Bruce is now responsible for the command and control of about 800 Soldiers in seven units in 12 communities throughout South Dakota. The 153rd assists assigned units in meeting training, administrative and logistical requirements to maintain the unit's readiness in support of their state and federal missions.

"This battalion has been recognized two years running as the very best in the nation, and I look forward to working with the Soldiers and leaders within these ranks to maintain that reputation, train hard, and be ready when the nation or state calls," said Bruce. "I look forward to maintaining the tradition of excellence that has been established for the battalion and continuing the momentum the Soldiers have built."

In civilian life, Bruce is an engineer and serves as vice president of the consulting

firm DeWild, Grant, Reckert and Associates Company (DGR Engineering) of Rock Rapids, Iowa. He currently serves as office manager and department head for DGR's Sioux Falls office.

Daily, also a native of Custer, will be assigned to the Joint Force Headquarters in Rapid City as the deputy for the Construction and Facilities and Management Office.

Bruce's career in the SDARNG began in 1993 as an enlisted bridge crewmember of the 211th Engineer Company in Custer. In May 2000, he received his commission as a second lieutenant through the South Dakota State University Army ROTC program where he was assigned as an engineer officer in Company C, 153rd Engineer Battalion, in Parkston.

Some of Bruce's career highlights include company commands of Company B, 153rd Engineer Battalion and the 211th Engineer Company of Madison, both plans and operations officer for the 153rd and executive officer for the 153rd and 196th Maneuver Enhancement Brigade of Sioux Falls.

Bruce has been mobilized twice for deployments overseas where he served as commander of Company B, 153rd, in Iraq from 2004-2005 and as the engineer operations officer for the 196th MEB in Afghanistan from 2010-2011.

Some of Bruce's military awards and decorations include the Bronze Star Medal, Meritorious Service Medal, Army Commendation Medal, Army Achievement, National Defense Service Medal, Afghanistan Campaign Medal, Iraq Campaign Medal and Global War on Terrorism Service Medal.

Bruce is married to his wife, Nicole (Nedved), a native of Woonsocket, and they have two children.

(Reprinted with permission by Maj. Anthony Deiss, SDARNG.)

#### SDES October Board Meeting <u>Draft</u> Minutes

(Will be enacted on at the January board meeting)

SOUTH DAKOTA ENGINEERING SOCIETY
FALL BOARD OF DIRECTORS MEETING MINUTES
WEDNESDAY, OCTOBER 14, 2015

Members and Guests Present: Stacy Froelich, President

Brian Jenner, President-Elect
Philip Gundvaldson, Vice President
Steven Myer, Secretary-Treasurer
TJ Yerdon, Past President
Al Berreth, CE Chapter State Director
Mike Perkovich, CE Chapter President
Ray Pierson, Eastern Chapter President

Ben Scholtz, Eastern Chapter State Director Chad Hanisch, University & Public Relations Gail Boddicker, Executive Director

President Froelich called the meeting to order at 2:00 p.m. (CT). Froelich reported that the executive committee and the chapter state directors and chapter presidents are allowed to vote on SDES issues. Secretary-Treasurer Myer confirmed a quorum for the meeting. The IRS is now inquiring whether non-profit tax-exempt entities have adopted a Conflict of Interest Policy; hearing no conflicts from the board members in attendance, Froelich proceeded with the meeting.

#### **Approval of the Agenda**

The agenda was revised to include the approval of filing the IRS Form 990 plus the merging of state awards with ACEC/SD. Jenner made a motion to approve the revised agenda, Yerdon seconded the motion and the motion passed.

#### **Minutes of Previous Board Meeting**

Yerdon made a motion to approve the July 10, 2015, board minutes, Gundvaldson seconded the motion and the motion passed.

#### President's Report - President Stacy Froelich, PE

Kathryn Patterson was recently hired as the executive director for the South Dakota Board of Technical Professions. Froelich will work on scheduling a meeting to discuss the appropriate process for documenting PDH attendance.

#### <u>President-Elect's Report - President-Elect Brian Jenner, PE</u> No report.

#### <u>Vice President's Report – Vice President Phil Gundvaldson, PE</u> No report.

#### **Executive Director's Report – Boddicker**

Boddicker provided a written report: *Membership* 

Sent welcome letters to new members, emailed appropriate chapter representatives with new member information, sent applications with payment to NSPE.

State only membership is currently at 138 members. Total members are 482.

This summer I was invited and attended a meet and greet event for Senator Rounds. I had the opportunity to thank Senator Rounds for his support of the highway bill.

<u>Professional Development Hours – SDES Annual Conference</u>

The Fall PDH registration brochure was distributed by mail and sent to members online. I have been registering attendees and depositing their payments. I have been in consistent contact with Jonathan Wiegand, the conference chair. I will be printing nametags and certificates for the attendees. I will also be working at the registration table on October 15.

#### **Awards**

Each year, NSPE highlights the state Young Engineer of the Year recipients in the PE Magazine. I followed up with Michelle Carter, SDES Young Engineer of the Year, to have her provide her bio/photo so that she can be recognized in the upcoming issue.

#### **Endowment Promotion**

At the April meeting, the board approved distributing \$1200 for scholarships. Each chapter sent me information on awarding the scholarships – that information was sent to the Community Foundation for a fall award. I followed up with the CF and was told the funds had been sent to the universities.

#### **MATHCOUNTS**

Received notice from 3M that nine schools will be receiving \$750.00 for their local program. Those funds will be sent to me and I will be responsible for distributing them to the schools. 3M will also be contributing \$2500 to the state program.

#### **Design Professionals Coalition**

No activity has occurred with the DPC since the closing of the 2015 legislative session.

#### Licensure

After contacting the Eastern and Black Hills Chapter for approval, I sent the PE/PS examinees letters informing them of the lunch offer on October 30 – when the exam is given. I have also been in contact with the proctors to let them know as well.

#### Treasurer's Report

As of this writing, the executive committee has been provided a copy of the July 1, 2014 – June 30, 2015, IRS 990 Form for their review.

The order of business was revised in order to provide Chad Hanisch time to report on issues listed under New Business: TRAC Program and the Merging of the ACEC/SD and SDES awards program.

#### **TRAC Program**

Hanisch represents ACEC on the TRAC Program Committee that is sponsored by the SD DOT. He requested that the program be brought to the attention of the SDES board as well. TRAC is a hands-on education program sponsored by AASHTO and the SD DOT has joined with AASHTO to begin to offer the program in South

Dakota. The program is aimed at providing education in science, math, and social science classes to high school students. Riggs High School, Pierre, is offering an inaugural program. There may be a possibility of a need for engineers to assist with an education experience and thus, Hanisch requested this issue be discussed with the board. The DOT is funding the project; therefore, at this time, no funding is being requested. Hanisch will forward program information and this issue will be tabled to the January board meeting.

ACEC/SD - SDES Awards Program

Hanisch reintroduced the issue of merging awards with SDES and ACEC/SD. The SDES board is in favor of merging of an awards program. Gundvaldson made a motion to assemble a sub-committee of SDES members, along with representatives from ACEC/SD to explore a joint awards program with ACEC/SD. The motion was approved. Boddicker will ask for volunteers from SDES to form the SDES sub-committee.

### ALL REPORTS WILL BE SUBMITTED IN HARD COPY FOR DISTRIBUTION AT THE MEETING AND IN DIGITAL FORM TO BE PUBLISHED IN THE ENGINEER.

## Goal 1: Promote the competent, ethical, and professional practice of engineering.

Membership – Gail Boddicker, Executive Director Boddicker reported that State only membership is currently at 138 members. Total members are 482.

#### Goal 2: Enhance the image and stature of engineering professionals.

University and Public Relations No report.

## Goal 3: Provide education, professional development, networking opportunities, and other benefits to engineering professionals and students.

Over 140 registrations have been received for the SDES PDH Fall 2015 conference that will be held on Thursday, October 15, 2015.

Awards – Brad Ludens, PE No report.

Endowment Promotion – Jason Kjenstad, PE No report.

#### **MATHCOUNTS – Jesse Morris**

No report.

#### Goal 4: Advocate the interests of engineering professionals and protect the

#### public through an effective government relations program.

Design Professionals Coalition – Al Berreth, PE, Jeff Hines, PE No report.

Licensure – Brian Jenner, PE No report.

SD Local Transportation Assistance Program – Jason Kjenstad, PE No report.

## Goal 5: Align the structure, activities, and governance of the society to optimize support and resources for all programs.

#### Strategic Planning Task Force

Previously, Froelich asked for volunteers to begin working on a new Strategic Plan. No members volunteered for the task. The issue will be tabled for future attention.

Nominations – TJ Yerdon, PE

Yerdon reported on the nominations for the slate of officers for 2015-2016:

Stacy Froelich – Past President

Brian Jenner - President

Philip Gundvaldson - President Elect

Steven Myer – Secretary – Treasurer

Ryan Johnson – Vice President

Scholtz made a motion to approve the slate of officers, Myer seconded the motion and it was approved.

Treasurer's Report – Steven Myer, PE

Hearing no concerns, Gundvaldson made a motion to approve the 1<sup>st</sup> quarter financial reports, Jenner seconded and the motion carried.

#### **Chapter Activity Reports**

Black Hills Chapter, Kyle Young, PE

No report.

#### Central Chapter, Mike Perkovich, PE

Perkovich reported that the chapter held their annual ditch clean-up event and that they have commenced their monthly chapter meetings.

#### Eastern Chapter, Ray Pierson, PE

Pierson reported that several members volunteered to work on a Habitat for Humanity house building project; there was a record attendance of participants and sponsors for the Eastern Chapter golf outing; chapter monthly membership meetings have begun; and the Eastern Chapter winter social is scheduled for December 3.

#### Old Business

Review of SDES Bylaws - Section 1-8

At the July board meeting, Froelich requested discussion on a process to bring the SDES Bylaws up to date. Rather than undertake the entire set of bylaws at one session, it was decided that sections of the bylaws would be distributed to the board prior to a board meeting and then subsequently discussed and revised at the meeting.

Sections 1-8 were distributed to the board to be discussed at this meeting. However, Tom Gilsrud, CE Chapter member and former Bylaws Chair has volunteered to assist in the revision process. Since he just recently volunteered to assist in the process, he had not had time to review the sections; thus, Sections1-8 will be discussed at the January board meeting.

#### **Executive Director Contract**

The SDES board has reviewed, discussed, made revisions, and finalized the ED contract. Myer made a motion to approve the contract as presented and approved that it be signed by Boddicker and Froelich, Yerdon seconded and the motion carried. Froelich stated that the contract should be reviewed and signed on a yearly basis.

#### **New Business**

IRS 990 Form

As required by the IRS, Boddicker distributed the 990 to the board for their review prior to filing. Hearing no concerns, Gundvaldson made a motion to file the 990, Berreth seconded the motion and the motion carried. Boddicker will ensure that the form is filed with the IRS.

#### **NSPE Professional Policies**

Following a two-year review process by the NSPE Position Statement and Professional Policy Development Task Force (PSTF) and, then subsequently, by the NSPE Licensure and Qualifications for Practice Committee (LQPC), of PP 168 and the associated PS 1737 and PS 1739, the NSPE BOD proposed that the Society conduct member outreach and seek member input on the PP 168 and PS 1737 and 1739.

PP 168 Engineering Education Requirements

PS 1737 Licensure and Qualification for Practice

#### PS 1739 Engineering Education

Boddicker was instructed to redistribute the information to the membership to request their input on the above PP and PS's. Comments should be provided by October 30. Following the comment period, the SDES executive committee will meet by conference call to form a position to send to NSPE by their 11-13-15 deadline.

Jenner made a motion to adjourn, Myer seconded and the meeting adjourned at 4:20 p.m.

Respectfully submitted, Gail Boddicker, Executive Director

#### Welcome New SDES Members

Black Hills Chapter

Garlet Hocke Gary Kuhl

Central Chapter

Tanner Fitzke Neal Konda

Eastern Chapter

Brittany Brickman
Jimmy Coffee
Delvin DeBoer
Paul Deutsch
Jared Evers
Adam Haberman
Daniel Ostrem
Gregory Slowey

#### **NSPE NEWS**

Jennica Wilcox

Read on to see what is happening with NSPE!

NSPE Executive Director's Report to the BoD, November 2, 2015 FROM: Mark J. Golden, FASAE, CAE, NSPE Executive Director

DATE: 2 November 2015

RE: Board Update: October 15-31, 2015

A long report this time out, but there is so much happening it could not be adequately summarized otherwise. So bear with me and happy reading! Progress continues on our aggressive, two-pronged strategy to fuel growth and long-term sustainability in NSPE membership. Initial meetings with our outside advisers have been held and project plans are beginning to be implemented on:

1. Short Term Membership Stimulus: Data collection, immersion and planning is well underway for this intensive six-month sales effort to conduct two to three membership marketing promotions within the established three-tiered membership model. Based on initial work, we will be focusing on a lapsed-member strategy as one of these pilots. Market analysis is being gathered to identify two more that offer the highest probability for immediate results.

2. Engineering a Sustainable Future for Integrated Membership. As outlined in my last board update, an aggressive timeline has been established for NSPE and its state partners to collect reliable data and apply sound business principles to creating a new business plan and dues model that supports membership at all levels into the future. The immersion and planning phase is now underway, and will soon shift to assessment and market analysis. In the weeks ahead, input from key stakeholders (membership committee, board, state executives and volunteer leaders) will be used to identify the most promising models, which will then be subjected to benchmarking against similar models at other similar organizations and assessing market and financial potential.

At that point in the project we will have an understanding of NSPE's financial picture, input from NSPE's Board of Directors and state and local level executives, effective practices from other professional associations and a measurement of members' needs, expectations and preferences. With these findings in hand, we will be ready to develop initial membership and dues model options for consideration. McKinley will synthesize the research findings and present initial recommendations and model options to NSPE's Board of Directors at their February 27-28, 2016 meeting in Alexandria.

Armed with these findings, a detailed financial forecast that looks at members' current dues and non-dues contributions, as well as the impact the model options might have on state and local chapters, non-dues income, membership and other factors will be developed. The goal of this phase is to evaluate which model will most appropriately meet NSPE's objectives and uncover any possible trouble spots, so they can be addressed prior to roll out. In addition, we will provide NSPE with a forecast for planning and budgeting related to any dues changes. In the final phase, McKinley will report our findings and provide specific recommendations along with probable financial and other impacts for NSPE based on the dues model options and processes. We will then present final recommendations and dues model options to state and chapter executives at the NSPE annual meeting in Dallas, Texas in June 2016.

Throughout the project, McKinley will also provide status updates via teleconferences and meetings with NSPE staff, and regularly engage with the board, membership committee and other key stakeholder groups, to ensure that final recommendations are practical and align with the organization's financial realities and goals.

Also on the membership front, President Tim Austin's recent communication to state leaders on the impact of state-only memberships has been archived online. I am led to understand that a similar communication on renewal activities at the local level is in preparation.

#### 1. Advocacy

On October 22nd, the Department of the Interior released the findings of its independent investigation of the Gold King Mine blowout on August 5th. The Bureau of Reclamation (BOR) led the technical evaluation and coordinated with the Army Corps of Engineers and US Geological Survey for peer review of the work performed by the bureau. The evaluation team included six engineers, four of them licensed professional engineers.

The findings revealed that the blowout could have been prevented with the proper engineering expertise. However, federal standards of practice for reopening and remediating flooded inactive and abandoned mines are inconsistent from one agency to another. Various guidelines exist for this type of work, but there is little in actual written requirements that government agencies must follow when reopening an abandoned mine. Furthermore, mine guidelines and manuals provide detailed guidance on environmental sampling, waste characterization, and water treatment, with little appreciation for the engineering complexity of some abandoned mine projects that often require, but do not receive, a significant level of expertise.

NSPE continues to urge the Environmental Protection Agency and all federal agencies to require a licensed PE, with the necessary education, experience and qualifications, to perform all work that is the practice of engineering. This report, written by an agency of the federal government, makes the strongest case possible for requiring this practice across the federal government. NSPE will be working closely with Congress and federal agencies to institute this long overdue requirement.

On October 22nd, Rep. John Garamendi (D-CA) offered an amendment to the House Transportation and Infrastructure's markup of the surface transportation bill to strip the legislation of its provisions on qualifications-based selection. The amendment was met by stiff opposition from NSPE, other engineering organizations and committee members. Rep. Garamendi subsequently withdrew his amendment. This event clearly demonstrates the widespread congressional support for QBS, while also emphasizing the need for continuous efforts to educate and advocate for QBS.

On October 27th, NSPE participated in an informal congressional roundtable hosted by Rep. Paul Tonko (D-NY) to discuss how to best address our drinking water infrastructure. Professional engineers play a critical role in building, maintaining, and fixing the components of our nation's drinking water infrastructure. Tonko, who serves as the ranking member of the House Energy and Commerce Subcommittee on Environment and the Economy, is working with stakeholders such as NSPE to develop an overarching plan to address the need for a massive overhaul and rehabilitation of our nation's drinking water infrastructure.

Alaska is the latest state to start consideration of separate licensure for structural engineers. Bearing in mind that state actions do have an impact and influence that can extend beyond that state's boundaries, it is NSPE's firm and long standing policy that separate licensure of specialties would undermine and weaken the PE license to the detriment of engineers, regardless of area of practice or specialty, and that it would not enhance protection of the public health, safety and welfare. We are reaching out to the state society and members within the state to assist in their response to this initiative.

As reported in my September 16th board update, NSPE raised concerns over a draft "Model Code of Practice: Principles of Climate Change Adaptation for Engineers," proposed by the World Federation of Engineering Organizations (WFEO) standing committee on Engineering and the Environment, which will be considered later this month at the WFEO General Assembly in Kyoto. Our concern was that, as drafted, it arguably, albeit unintentionally created an entirely new standard of care that far exceeds the existing or reasonable duties and responsibilities of the professional engineer, and could expose professional engineers to increased claims and litigation. We communicated those concerns to the American Association of Engineering Societies (of which NSPE is a member, and who will represent the United States at the Kyoto conference). NSPE led the effort to make draft edits to the document to alleviate our concerns, and I am pleased to report that the WFEO committee working on the draft has accepted our edits, noting that "they are all excellent." The committee will be submitting the revised version (including NSPE's edits) as an "Approval Draft" to WFEO Headquarters on Monday or Tuesday at the latest for inclusion in the Executive Council and General Assembly agendas.

NSPE's Committee on Policy and Advocacy (COPA) has finalized its recruitment of subject matter expert's to address the committee's "Grand Challenge" charge to "provide a comprehensive review and overview of current policies, trends, and regulatory structure on autonomous vehicles prior to January 1, 2016; identify possible pathways and/or opportunities to engage the regulatory structure at the state and/or federal level; and develop a recommended platform and/or planks relative to autonomous vehicles." The timeliness and importance of this topic is very much in evidence in the general press. President Austin recently posted a good example of a news item underlining the relevance and priority of this matter to NSPE's longstanding commitment (throughout its history) to leverage professional licensure to ensure the ethical pursuit of technology and innovation. But this is just one and just the most recent in a rich and abundant body of discussion on this matter, which the COPA working group is now tackling. To quote Tim, when does the convenience of technology cross the ethical boundary, and if professional engineers aren't looking out for the public health, safety and welfare in this area, who will? (This topic will also be covered in a feature article in the January/February PE Magazine.)

With the 2016 election set to take place almost one year from today, NSPE's Political Action Committee (NSPE-PAC) has ramped up its fundraising activities to prepare for the election. In preparation for peak activity of the four-year cycle, NSPE-PAC has accumulated a war chest of more than \$40,000. This is the NSPE-PAC's highest level since the end of the 2006 election season. NSPE-PAC held a successful fundraiser at this year's annual meeting, exceeding its fundraising goal of \$5,000 by nearly \$2,000. NSPE has solidified its reputation as a leading voice on federal policy issues of great importance to professional engineers.

To continue to support champions of PEs in Congress, NSPE-PAC is preparing for a very busy and important election cycle. NSPE-PAC hopes that all NSPE members will contribute to ensure that PEs are well represented in Congress. Thank you to the many NSPE members who have helped with another successful fundraising year. As we discussed in Minneapolis, NSPE-PAC is very hopeful that this year

there will be 100% participation from the Board of Directors. If you are interested

in making a contribution, you can do so online.

#### 2. Content

The board has been engaged in ongoing discussions of increasing the member engagement and crowd-sourcing elements of staff's execution of NSPE's content management strategy. A key element of this is the ongoing upgrade of the IT infrastructure to support a more robust and state-of-the-art community platform (part of Phase III of AMS conversion). It will be later in 2016 before this platform will be fully visible to the membership, and "community platform" can sometimes sound rather amorphous or squishy, but it is a very concrete, complex and challenging tactic. The attached whitepapers (from Naylor and Higher Logic) offer a good idea of the kind of tangible resources we are diligently working to implement.

In a lighter vein, October 21st marked "Back to the Future Day," the date in the future that Marty McFly and Doc Brown visited in the movie released in 1985. NSPE got some play on Facebook, Twitter and LinkedIn, pointing out that "Back in 1985, NSPE had recently commissioned a symphony called "The Spirit of Engineering" as part of its 50th anniversary celebrations & had just finished moving into its current headquarters building in Alexandria. NICET and NAFE were newly-formed organizations, and MATHCOUNTS had just held their first national competition. And we're pretty sure engineering plans were made using pencil and paper with no CAD software in sight. While we still don't have the power clothes that wash themselves (anyone working on that?) it's still pretty amazing to see how far we've come!"

#### 3. Collaboration

Vice President Roberts and I participated in the Order of the Engineer Board of Governors meeting in Phoenix on October 26th and were extremely positively received. We laid out an ambitious plan for partnering with the Order for our

mutual benefit, backed up by a concrete action plan for the immediate future. I believe we left the meeting with a strong agreement in principle, and follow up has been promised in the weeks ahead to formalize a partnership agreement for both boards to formally enact.

Building appreciation for licensure begins early and is the key to those on the pathway to licensure staying the course through to earning the designation. Replenishing the population of licensed engineers who appreciate the importance of licensure (beyond a mere regulatory, occupational requirement) is the key to future membership. Focusing on the Order of the Engineer at the collegiate level is a strategy towards achieving that end.

The hard and concrete part of NSPE delivering on the mission (defining, promoting, protecting the PE) is the goal of our advocacy efforts. Winning the hearts and minds (through things like the Order of the Engineer) is also part of delivering on the mission. We have to do both. And do them both really, really well.

While we were in Phoenix, Tom and I also met with both state staff and local members to discuss reinvigorating a largely dormant state society. Thanks primarily to grassroots efforts by Director David Janover, I think we are building the base of locally committed members (something that has been missing in past discussions) necessary to achieving the goals we all share.

We also visited with two members of the Arizona State University engineering faculty and administration, providing valuable insights and ideas for tapping into this large program for mutual benefit.

This past week, the National Engineers Week Foundation board approved changes to its bylaws that will provide for the regular succession of NSPE's directors on the board by establishing a structure and process for regular rotation of directors on the NEWF Board (something that has been absent in its procedures in the past). The next step will be for NSPE to "slot" its current board members into staggered terms to allow for the orderly transition of longer-serving members off the NEWF board and (in consultation with the NSPE President and Board) appointment of new directors in a manner that allows for continuity and regular succession on its NEWF board and Steering Committee positions.

It is important to remember that while NSPE established the National Engineers Week Foundation (now doing business as "DiscoverE"), it is a separate and autonomous entity, governed by its own Board of Directors (supported by staff and staffing services administered by NSPE). However, NSPE maintains a controlling interest, with four of the seven board members designated by NSPE. ABET (the accrediting body for the engineering programs that provide the "education" leg of the three-legged stool supporting professional licensure) held its fall board and council meetings in Baltimore on October 14-17th. These

meetings marked the transition of ABET governance to a bicameral model quite similar to NSPE's, with a smaller governing board and a larger, House of Delegates-like Board of Delegates. Reports from those meetings, and NSPE Delegate Jon Nelson <sup>2</sup> have been circulated to the board. (Both Jon and I attended these meetings.)

#### 4. Member Engagement

The open member input period continues on Professional Policy 168 (Engineering Education Requirements) and will remain open through November 13th. Comments have slowed from the initial weeks, but continue to come in, both through the member portal and directly from member societies. At the close of the membership comment period, all comments will be collected and reviewed by the Committee on Policy and Advocacy (COPA) and form the basis of the final recommendation to the House of Delegates, which will be discussed (November 30th – December 4th), debated (December 7-11th) and voted upon (December 11-16th), electronically.

Both the overarching goal of the Order of the Engineer engagement and the specific performance goals proposed for the membership committee and Young Engineers Advisory Council (YEAC) are ambitious.

(The proposed overall goal we discussed with the Order was for every graduating engineering student within the United States being inducted into the Obligation of the Order by the year 2025 through links that have been established at all colleges of engineering within the United States. The specific goals for Membership Committee and YEAC are equally ambitious: for example, they include a NSPE regional strategy to reactivate one link and to create at least one new link in each region by June 15, 2016; identifying NSPE volunteers and participation in at least one OoE ceremony in each state by December 21, 2015, and reactivating at least one inactive State Chapter OoE link and creating three new State Chapter OoE links by June 15, 2016.)

Nothing in the world wrong with that. Stretch goals are a great motivator and establish really clear metrics for progress.

But success in achieving these goals is in your hands. The majority of the actual work that needs to be put in to accomplishing these goals cannot be done by staff (even if far more staff resources were available than we actually have). It requires organizing, and activating a small army of volunteers at the local or grassroots level. The staff liaisons assigned to this are responsible and can be counted on to do everything possible to support and ensure that these efforts are a success; however, none of this is going to happen if volunteers don't step up and follow through.

#### 5. Member Value

Total EJCDC<sup>3</sup> document sales were up for the 2015 fiscal year (\$250,573, up from

\$193,092 the prior year and \$81,858 in 2011). NSPE annual sales of EJCDC documents were up from \$89,400 in 2014 to \$191,000 in 2015; and NSPE continues to be the source of more direct document sales than any of its partners. (NSPE also receives a percentage of sales directly from the EJCDC.org website.) Electronic marketing is a growing source of sales, with EJCDC.org web traffic up 20% last year, reaching 2,800 new visitors each month. Municipalities compromise 10% of customers and is growing.

A key to sustaining this valuable and a valued source of member service is keeping the catalog current and introducing new documents. EJCDC just published four updated engineering documents this week, which will be promoted in the weeks ahead.

Our NICET operations are close to a final agreement with the U.S. Army to begin testing their soldiers enrolled at the Prime Power School at Fort Leonard Wood, Missouri. They currently offer three classes each year, with 20-25 students per class. While these numbers are not huge by themselves, they are large for the Electrical Power Testing program specifically; and this could lead to additional soldiers testing in other Civil Engineering Technology programs in the near future. Conceptually, these soldier students will test Level I and Level II while they are still at the school, and their instructors will be able to verify most (if not all) Level I performance measures based on the students' lab and classroom work activities. Thus these soldiers may be able to graduate from the School with a Level I NICET certification. Then, when they are assigned to an Engineer Battalion, they can gain the additional 6-months of "field" experience needed, and their supervisor can sign-off on their Level II performance measures to attain Level II certification. Hopefully they will then continue to pursue Level III and Level IV certifications while still in the Army.

The U.S. Army is willing to pay the application fees for these soldiers to attain Level I and Level II certification (and possibly the higher levels as well). In recognition of this commitment to NICET, and the service to the nation these candidates so selflessly provide, NICET is considering a military discount on application fees.

6. Finance, Administration, Operations and Staff Alignment
We are definitely into crunch time on the conversion to the new AMS (netForum)
and special kudos are due to Kim Granados, Rhoda Chari and Laura Meyer for
their superior efforts on this all-consuming task. (But this is a project that is
demanding time, attention, diligence and dedication from a large percentage of
the staff, at all levels.) Testing continues with new software and now includes its
integration with accounting and financial applications. The chart of accounts has
been finalized and product types (inventory) is almost finalized. While testing
continues on the membership side (and is going well), in the immediate future we
will next start the integration with the merchant accounts and banks.

It is a later stage of the implementation, but the necessary groundwork for the member engagement/community platform (discussed above) is being laid now. We have finalized the contract with Higher Logic and initial steps on implementation have already begun. In fact Kim, Rhoda, and Erin Garcia-Reyes attended a two-day conference (October 21st – 22nd) sponsored by Higher Logic and are very excited about the potential of this platform "out of the box," even before the more customized implementation is ready.

On the AMS project timeline, what is important to our state society partners and members is what they see and experience, not the complexity and intricacies of what is going on behind the scenes. On that front, let me briefly outline the planned roll out:

Improvements Visible at Time of Launch (January 2016)

#### For Members:

- Faster, more reliable access to content, products, and member information.
- Direct review and update of all contact information in their own member record (only unable to change their name for security reasons).
- Ability to easily see recent transactions, purchases, and downloads.
- Better individual member web experience.
- Ease of making online contributions when paying dues on the website.
- Single Sign On between website and data.
- Improved integration with NSPE electronic marketing and subscription platform allowing for opt ins and opt outs.

#### For State Societies:

- Faster, more reliable access to data.
- Improved reports, immediate API code calling of data instead of nightly uploads.

#### Administratively:

- Faster, more reliable access.
- Clean data; fewer records to maintain and corrections to system flaws.
- Improved integration with NSPE electronic marketing and subscription platform.
- A stable system not at risk of catastrophic failure.
- Improved standardization, consistent with SSEC decisions at the 2015 Annual Meeting.
  - o Retired member rate universally calculated at 50% of the prevailing rate at all levels.
  - o Licensed and non-licensed member prices normalized.
  - o Students free, not billed by national.
  - o Interest Groups treated as communities not dues package (There has not been an actual financial/dues component to affiliating with an Interest Groups for more than 15 years. This change takes them out of the financial/dues system and allows us to use the full power of our IT and database systems to support communications and engagement, not track non-existent revenue flows.)

• Improved integration with finance systems, new chart of accounts, better reconciliation and cash flow control.

Phase II Improvements (Within 3 months of launch – if not before) For Members:

- Community Platform integration allowing interaction among members and access to content of specific interest.
- Automated member engagement and follow up, particularly with new and highrisk members.

For State Societies:

• Automated member engagement and follow up, particularly with new and highrisk members.

Administratively:

- Community Platform integration allowing interaction, listservs and document library for committees and interest groups.
- Automated member engagement and follow up, particularly with new and high-risk members.
- Improved retention messages through automation, improved graphics capabilities, and ability to segment messages.

Phase III (Within 12 months of launch)

For Members:

- Printable membership certificate at renewal.
- Ability to pay dues, or make contributions, automatically in a recurring fashion.
- Online Membership Directory.

For State Societies

- State societies given ability to manipulate/analyze their data directly.
- Community Platform integration potentially available for state societies, allowing listservs and document libraries for communities of state members. Administratively
- Increased business intelligence to track trends and conduct business modelling.
- Automated member engagement and follow up, particularly with new and highrisk members.
- Realigning current staff from administrative tasks, allowing them to focus on the membership experience, with the potential for an increase in membership recruitment and retention activities without the need for additional staff.

Fieldwork by the auditors has been completed and the accounting staff are addressing follow-up requests by the auditors. The major open issue involves the Revenue and Deferred Revenue under the AMS system for last fiscal year. Prior customizations built into the old database and gaps in internal control systems (which are being closed) led to unreliable reporting for both. The result of this work has been positive: we could be seeing a substantial increase in membership revenue for last fiscal year over prior reported projections; however, rather than introducing a whole new level of complexity into reports at a time when there are already too many moving parts in play, the accounting staff recommended (and

the auditors have agreed it is more appropriate) to address this issue one time, when the new system goes on line in early 2016, rather than constantly readjusting past year records.

Financial statements for August have been completed for NSPE (core) and NICET under the new chart of accounts; DiscoverE is complete under their old chart of accounts, and will be transitioned shortly. The one entity we are behind on is the Education Foundation, due to the limitations of staff resources. We are working to catch up.

Staff is currently working on fine-tuning budget mapping and overhead allocations and expect to be back on track with September financials by the first week in November. This will also create the basis for FY17 budget development, and the three-year business plan mandated by the board.

During the month of October two current or former board members, Chris Stone (chair of the Building committee) and Mike Aitken conducted on-site assessments of the NSPE headquarters building (from a structural and mechanical perspective, respectively). Both gave thoughts and context to forward thinking plans regarding unlocking the value of NSPE's largest asset, the building. Interim planning for consolidation of NSPE staff into a smaller footprint within the building is underway, which will lead to more productive use of this asset, as well as a much needed refresh and upgrade to facilities.

#### 7. Governance

Nominations for the position of 2016-2017 NSPE Vice President (to serve as NSPE president in 2018-19) are by January 1, 2016. Letters of nomination must come from the state society board or through a petition signed by 50 or more NSPE members. Candidates will also be called upon to solicit three (3) letters of recommendation that attest to "the effectiveness of the candidate's leadership abilities."

This is a reminder that 2016 NSPE Fellow member nominations are due in the NSPE headquarters office by February 1, 2016. All state societies are encouraged to participate in the NSPE Fellow member program by submitting applications for qualified NSPE members. Please be sure to carefully review the criteria and qualifications that are used for Fellow member selection as there have been some changes made. Instructions and guidance for completing the Fellow nomination form and the nomination form itself can be found here.

Finally, please remember that access to NSPE leadership resources is always available to you in the Leadership Toolbox at www.nspe.org/toolbox. You will need to log in with your user name and password.

This includes links to current talking point scripts and presentations for use by

NSPE officers, board members, and other leaders during state visits, chapter meetings, or other venues to promote NSPE and its activities. There are three versions of the presentation to suit your presentation style and skill – an animated PowerPoint with moving graphics and text, a static PowerPoint with no animation, and a Word document with an outline overview of the presentation. You will also find other sample presentations for volunteer leaders, sample promotional and other materials for membership, advocacy, association management, meetings, governance and other areas, and the latest advocacy news.

There is also great material on NSPE's purpose, mission, vision and a history of the Race for Relevance and the resulting Strategic Plan in a section called "Who We Are and What We Do."

You can also review a detailed calendar of NSPE and state society events on the website at: www.nspe.org/AboutNSPE/Events/index.html.

1 The other two legs of the stool are testing and experience.

2 Jon also represents NSPE on ABET's Applied Science, Engineering and Engineering Technology area delegations.

3 The Engineers Joint Contract Documents Committee (EJCDC) is a joint venture with NSPE, ACEC, and ASCE.

#### HOW THE INTERNET STARTED, ACCORDING TO THE BIBLE.

(I normally don't post jokes, but thought this was a good one.)

In ancient Israel, it came to pass that a trader by the name of Abraham Com did take unto himself a healthy young wife by the name of Dorothy (Dot for short).

Dot Com was a comely woman, large of breast, broad of shoulder and long of leg. Indeed, she was often called Amazon Dot Com.

And she said unto Abraham, her husband, "Why dost thou travel so far from town to town with thy goods when thou canst trade without ever leaving thy tent?"

And Abraham did look at her as though she were several saddle bags short of a camel load, but simply said, "How, dear?"

And Dot replied, "I will place drums in all the towns and drums in between to send messages saying what you have for sale, and they will reply telling you who hath the best price. The sale can be made on the drums and delivery made by Uriah's Pony Stable (UPS)."

Abraham thought long and decided he would let Dot have her way with the drums. And the drums rang out and were an immediate success. Abraham sold all the goods he had at the top price, without ever having to move from his tent.

To prevent neighboring countries from overhearing what the drums were saying, Dot devised a system that only she and the drummers knew.

It was known as Must Send Drum Over Sound (MSDOS), and she also developed a language to transmit ideas and pictures - Hebrew to The People (HTTP).

And the young men did take to Dot Com's trading as doth the greedy horsefly take to camel dung. They were called Nomadic Ecclesiastical Rich Dominican Sybarites, or NERDS. And lo, the land was so feverish with joy at the new riches and the deafening sound of drums that no one noticed that the real riches were going to that enterprising drum dealer, Brother William of Gates, who bought out every drum maker in the land. Indeed he did insist on drums to be made that would work only with Brother Gates' drumheads and drumsticks.

And Dot did say, "Oh, Abraham, what we have started is being taken over by others. "And Abraham looked out over the Bay of Ezekiel, or eBay as it came to be known. He said, "We need a name that reflects what we are."

And Dot replied, "Young Ambitious Hebrew Owner Operators." "YAHOO," said Abraham. And because it was Dot's idea, they named it YAHOO Dot Com.

Abraham's cousin, Joshua, being the young Gregarious Energetic Educated Kid (GEEK) that he was, soon started using Dot's drums to locate things around the countryside.

It soon became known as God's Own Official Guide to Locating Everything (GOOGLE).

That is how it all began. And that's the truth. I would not make up this stuff.

Special thanks to the following firms for their support of the South Dakota Engineering Society:



SD ACPA Chapter—Larry Engbrecht, 605-945-0572 SDRMCA—Jody Titze, PE, 605-274-0145, www.sdrmca.org



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