



THE OBSERVER

SEPTEMBER 2013

Published by the New Hampshire Society of Professional Engineers

A WORD FROM THE PRESIDENT

By: Jason J. Beaudet, PE
NHSPE President

It is with great pride and honor that I assume the position of President of NHSPE. I have had the privilege over the past few years to work with many great individuals that have comprised our Board of Directors (BOD) and this year is no exception.

As is tradition, the BOD as a whole convenes prior to the start of the official term for an annual planning session to outline and

(Continued on Page 3)

INSIDE

A Word From the President	1,3
NHJES Conference	1,2,
VSPE/NHSPE Annual Joint Meeting	1
NHSPE Scholarship	2
September Meeting	3
Fresh Direction-Renewed Energy	4,5
2014 JES S.T.E.M. Excellence in Teaching Awards	6
MATHCOUNTS	7
Engineer & YOE of the Year Nominations	8

NHJES 7th Annual Conference October 10, 2013, SERECS Center, Bedford, NH

The New Hampshire Joint Engineering Societies are holding their 7th Annual Conference on Thursday, October 10, 2013, at the SERESC Conference Center in Bedford NH. This year's program features a full line up of subject matter experts speaking on a broad range of work and career related topics that are pertinent across all engineering disciplines. This is a great opportunity to attend a worthwhile all day conference to further your knowledge in key technical, professional and career related areas while earning credit toward your registration licensure requirements.

In addition to an informative technical program, the conference also provides a unique opportunity to network with colleagues and leaders across NH's broad technical community.

This is our second year at the SERESC Conference Center. SERESC offers outstanding meeting room accommodations with state of the art A/V facilities and full technical support. Guests will enjoy an upscale dining experience featuring a delicious selection of SERESC's renowned signature display items and desserts.

The sponsor program has been expanded this year to include exhibit tables. This is an opportunity for your company or organization to showcase their product and services to key members of NH's technical community while supporting a unique continuing education program.

Please take a few minutes to visit our website, www.nhjes.org. The Advance
(Continued on Page 2)

VSPE/NHSPE Annual Joint Meeting

This year's joint Annual Meeting of the Vermont and New Hampshire Chapters of NSPE was conducted in Quechee, VT at the beautiful Quechee Inn at Marshland Farm. Approximately 30 persons gathered on June 27 to attend the event that was hosted by VSPE this year. A couple of major highlights from the event were an update on the focus of the National Society from our keynote speaker, Harve Hnatiuk, PE, F.NSPE, NSPE Vice-President and the installation of new officers from each chapter. Mr. Hnatiuk spoke about the work being

done by several task forces at a national level to address issues affecting NSPE members. He urged board members to reach out to membership to help meet their needs. He also urged members to get involved and discussed the focus of the national societies Race For Relevance. After his presentation, Mr. Hnatiuk led the installation ceremony by announcing the new board members from each state and leading the recitation of the Engineers' Creed.

Submitted by Ted Setas, P.E.

NHJES 7th Annual Conference (Continued from Page 1)

Program Book provides a full set of abstracts along with registration and sponsor information. I'm sure you will agree that this year's conference continues past traditions of providing a strong program with wide interest not only to our PE community, but al-

so to an increasing number of folks from New Hampshire's broad technical and academic communities as well. The full agenda can be found on Page 5 of this Newsletter.

Submitted by Don Sherwood, P.E.

NHJES Scholarship Award Announcement

NHSPE awarded the 2013 John Alger Memorial Scholarship to Joshua Utterback of Nashua, New Hampshire. Josh is a talented scholar, musician, athlete, and community volunteer with multiple chess tournament titles under his belt. He graduated this past spring from Nashua High School South and entered Dartmouth College to study Physics and Engineering. Although his scholarship application displayed many outstanding attributes, his cover letter started with a statement that is common to all engineers. "I have always been fascinated by how things work..." We wish Josh the greatest success in his endeavors.

Scholarships for engineering students are made possible through the generous contributions of NHSPE members, donor corporations, and fundraising activities. The intent of the scholarship is to encourage growth and career development at the state level

within the areas of General Civil, Structural, Mechanical, and Electrical Engineering professions. NHSPE offers at least one annual state \$1,000 scholarship each year. Multiple scholarships may be awarded depending on the performance of the scholarship fund for that year. Scholarships are granted to high school seniors or college undergraduate students who are currently, or will be enrolled in an ABET-EAC accredited engineering program. Applicants must be in-state (NH) residents and preference will be given to students planning on attending a New Hampshire university or college. In general, the scholarships are awarded based on financial need, academic achievement, and general community involvement.

Submitted by Peter King, P.E.

- Survey
- Land Development
- Traffic/Transportation
- Civil & Structural Design
- Bridge & Highway Design
- Environmental/Permitting
- Inspections/Reviews
- Water/Wastewater
- Solid Waste Management
- Construction Management

Quality • Experience • Value

Hands Across the Merrimack Bridge
Manchester, NH



CLD Consulting Engineers, Inc.
540 Commercial Street, Manchester, NH 03101
P: 603-668-8223 / F: 603-668-8802
www.cldengineers.com

JACOBS

NATIONALLY RECOGNIZED, REGIONALLY FOCUSED

- Railroads and Transit
- Highway, Bridge, Tunnels/Underground
- Intermodal Facilities
- Telecommunications
- Ports
- Water/Wastewater
- Buildings

www.jacobs.com

Jacobs' size, reach and project achievements give our clients the tools they need to achieve their goals.



Boston, MA • Manchester, NH • Providence, RI

THE OBSERVER

The Observer is published quarterly by the New Hampshire Society of Professional Engineers for its members. Its purpose is to inform members of NHSPE activities and related topics.

Address all correspondence to the Editor:
Theodore Setas, P.E.
c/o Jacobs Engineering Group, Inc.
Two Executive Drive
Bedford, NH 03110
(603) 518-1793 Phone
Ted.setas@Jacobs.com

Word from President

(Continued from Page 1)

formulate what we intend to accomplish during the upcoming term. Many topics and issues are discussed over its duration, but the focus of them all is how we can continue to provide and improve the benefits to our membership. The benefits we provide range from networking and professional development opportunities to working with New Hampshire legislators on issues related to licensure and engineering.

The BOD is a small sampling of our overall membership and the engineering community within the State of New Hampshire. Our understanding of the benefits desired and the issues members are facing come directly from our interaction with

them. For this reason, we encourage you to attend and engage with the BOD at NHSPE sponsored events or contact the BOD directly. The BOD welcomes interested members to find out more about what the BOD does, attend one of our monthly meetings, or potentially become a member of the BOD. The key to the strength and effectiveness of NHSPE is the direct and open communication between its members and leaders.

In closing, I would like to encourage you to contact me or anyone else on the BOD to let us know how best to continue providing, improve and/or expand the benefits to our membership.

Submitted by Jason Beaudet, PE

NHSPE September Meeting

Merrimack Premium Outlets — A Case History in Complex Permitting

On **Thursday, September 26, 2013**, NHSPE will host R. Gordon Leedy, Jr. of Vanasse Hangen Brustlin, Inc. at the Puritan Backroom (Suite A) on 245 Hooksett Road in Manchester, New Hampshire.

Mr. Leedy was the lead planner responsible for permitting and site development of the Merrimack Premium Outlets (MPO) located in Merrimack, New Hampshire. The MPO project consists of a 175-acre site at the northwest side of Exit 10 on the Everett Turnpike. The project involved cutting and filling up to 70 feet in height; the majority of the excavation consisted of bedrock. Permitting issues included a zoning change, obtaining a complex conditional use permit, off-site infrastructure and highway improvements, water supply, groundwater quality, and 1.2 million cubic yards of blasting and rock fill. He will be discussing all of the above interesting aspects of this complex site.

Mr. Leedy is a licensed Landscape Architect in New Hampshire and Maine. He earned his Bachelor of Landscape Architecture in 1978 from the University of Illinois, and is currently the Director of Land Development for VHB.

Schedule:

11:00-11:30	Registration
11:30-12:00	Lunch
12:00-1:00	Speaker Presentation

Menu:

Buffet lunch consisting of salad, assorted sandwiches, chicken tenders, meatballs, coffee, tea, and dessert.

Cost:

NHSPE Members:	\$25 pp
Non-Members:	\$35 pp
Students:	\$20 pp

Registration forms and directions are available at <http://www.nhspe.org/events/>

Registration deadline is Tuesday, September 24. Cancellations after that date will not be refunded.

There is one (1) PDH for attendance at this event.

2013 NSPE Annual Meeting “Fresh Direction — Renewed Energy”

The title of this article pretty much sums up our thoughts and experiences from the recent NSPE Annual Meeting that was held in Minneapolis, Minnesota this past July. Ted Setas, PE and I attended the meeting to represent the NH Board while Paul Schmidt, PE, F, NSPE also attended as the incoming Chair of the Licensure and Qualifications for Practice (L&QP) Committee. Paul follows on the heels of outgoing Chair, Craig N. Musselman, PE, F, NSPE and now has some large shoes to fill in that role. On that note, I would like to openly thank Craig, a NHSPE Past President for his years of service and competent and steadfast stewardship.

The renewed energy in the organization stems from National's desire to streamline and improve communications and operations within the national organization as well as with individual states. As some of you already, much of the campaign over the last couple of years has centered on a book entitled “The Race for Relevance” which provides insights and guidance for the continued success and management of professional organizations in general. The result of our leadership's (national) persistence in making wholesale improvements led to the formation of a number of action groups made up of national and state representatives that were charged with identifying areas of necessary change, defining possible solutions and then immediately implementing where possible. See the results and initiatives that resulted from this monster effort by clicking on the following link: <http://www.nspe.org/AboutNSPE/nspe-enters.html>.

Part of the outcome is a renewed focus on the states that make up the National Society. Immediate efforts that will benefit NH include financial support for a targeted membership campaign which will focus primarily on newly licensed NH PE's while also helping to bolster retention efforts for our current members while also providing additional supports for on-line tracking of state and national legislation that may impact how Licensed PE's practice in NH.

On the National side, NSPE public policy agenda for the coming year will focus largely on QBS pro-

tection, STEM Education, and addressing licensure issues for Active Military personnel and Veterans. Another top item that will be tackled through the L&QP Committee includes evaluating a provision that would allow for the early taking of the PE Exam.

At the House of Delegates (HoD) meeting, Timothy Austin, PE,F, NSPE was voted in as the next Vice President while Julie Harrod, PE, F, NSPE (2013-2014) came in as Treasurer. Tim will ultimately succeed Harve Hnatiuk, PE, F, NSPE who is the current President-Elect. Tim was instrumental in organizing many of the committees and subcommittees that carried out the work of the Race for Relevance initiatives over the last two years. We wish him the best as he steps through the chairs and look forward to his energy and leadership.

Perhaps one of the most riveting sessions that I had the opportunity to attend was that of the new Executive Director, Mark Golden, FASAE, CAI as he presented his vision for the National Society for the coming years. His energy, passion, and vision for the Society seemed to fill a void that has persisted at the National level for years. Listening to him express his goals, desires, direction, and vision certainly gave me new life and energy into our unified efforts to protect the License and to be “the recognized voice and advocate of licensed Professional Engineers”. You can view Mark's complete presentation by clicking on the link: <http://www.youtube.com/watch?v=Vm3Dm4XQ2nU&feature=youtu.be>.

Last, a new year is shaping up so keep an eye out for a broad range of events that we are working on for this year. Also, we are always looking for new volunteers so if you have interest in serving our profession beyond just paying your renewal every 2 years, please contact any Board Member listed in this newsletter and we can give you more information on available programs or volunteer positions that are available. The next Regional NSPE meeting will be held in Washington DC over the July 4th holiday. This stands to be a wonderful event and is open to all membership if you care to attend. Look for details in coming event notices or check our website at www.nhspe.org.

Submitted by Roch Larochelle, PE

NHJES 7th Annual Conference Agenda

NHJES 7 th Annual Conference: “Tools of the Trade” (6 PDH)		
7:30 – 8:30	Registration, Breakfast, Welcoming Remarks	
Session	Track A: Room 209	Track B: Room 210
1 8:35 - 9:35	<i>The Basics in Engineering Ethics</i> Arthur Schwartz, Deputy Executive Director NSPE	<i>Ownership Transition – Planning Ahead</i> Peter Bennett J.D. Winer & Bennett, LLP
2 9:50 - 10:50	<i>High Resolution Geophysical Tools for the Engineer’s Trade</i> Jeffrey Reid, P.G., Vice President Steven Grant, P.G., Sr. Geophysicist Hager-Richter Geoscience, Inc.	<i>Choosing an Analytical Testing Laboratory</i> Mike Serard & Jeff Gagne, Analytical Chemists, Eastern Analytical, Inc.
3 10:55 - 11:55	<i>3D Printing</i> Vic Lushear, Application Engineering Specialist Solidscape	<i>Current Topics in Engineering Licensure</i> Craig Musselman, P.E. President, CMA Engineers, Inc.
Lunch 12:00 - 1:15	<i>The History of Golf Courses & The Evolution of Golf Course Design</i> Ross Forbes, Founder & Director Forbes Golf Design, LLC	
4 1:30 - 2:30	<i>The Virtues of the 0% Tax Bracket</i> Dave McKnight, President, Signature Financial Group, Michael Abbott & Chris Bennett, The Abbott Bennett Group, LLC	<i>Tools to Save Your Mind - Recognize, Capture, & Profit from Intellectual Property (IP)</i> David A. Rardin, Esq. Partner Maine Cernota & Rardin, Registered Patent Attorneys
5 2:45 - 3:45	<i>Understanding the Perils of Electronic Communication in a Trial Lawyer’s World</i> Barry Needleman, Partner, McLane, Graf, Raulerson & Middleton, PA	<i>The True ROI of Information Modeling: Merging Geospatial Data, LiDAR, 3D Models, and Business Data to Increase Project Efficiencies</i> Speaker: TBA Bentley Systems, Inc.
Exhibits 7:30 - 3:45	Sponsor Tables for Products and Services	

2014 Joint Committee of Engineering Societies S.T.E.M Excellence in Teaching Awards

NHSPE will again be joining forces with other engineering societies, the NH PE Board, the University of New Hampshire College of Engineering and Physical Sciences, the New Hampshire Teachers of Mathematics and the New Hampshire Science Teachers Association to recognize deserving teachers at the elementary, middle and high school levels who are promoting S.T.E.M. in the classroom.

This year will mark the 8th consecutive year of this exciting program, and we have had the pleasure of honoring many outstanding teachers throughout New Hampshire. These great teachers are the motivators and educators for our next generations of en-

gineers, inventors, mathematicians, and scientists.

Application forms will be available and distributed in the near future with a submittal deadline of January 2014. Teachers who are selected for awards will be notified and presented with a plaque and stipend in the spring of 2014. Please consider nominating that motivating and deserving teacher that you know!

Submitted by Matthew J. Low, P.E., Teachers Awards Chair



DOUCET[®]
SURVEYING

- ◆ **Topographic Surveying**
- ◆ **Construction Layout**
- ◆ **Geodetic Surveying**
- ◆ **GIS Mapping**

Visit us at:
www.DoucetSurveying.com

MATHCOUNTS

The coming 2013-2014 season will be the 31st year for the MATHCOUNTS Program. During the month of September, MATHCOUNTS National will be sending invitations and application information to all the Middle Schools in the State of New Hampshire. The program, which serves the 6th, 7th and 8th grade students, is entirely voluntary, and we need to encourage more schools to take advantage of it. Mathematics is a vital part of our students' education. In conversations with students, teachers,

and anyone connected in any way with our educational system, we need to emphasize the benefits of MATHCOUNTS and encourage greater participation.

Submitted by Ben Pratt, P.E. (MATHCOUNTS State Coordinator)

NSPE Annual Meeting, July 2013 Minneapolis, Minnesota



Engineer and Young Engineer of the Year Nominations

IT'S NEVER TOO EARLY!!

It's difficult to think about Engineers Week 2014 when we're enjoying some fabulous summer weather, but our distinguished Engineer of the Year and Young Engineer of the Year awards await. NHSPE will be asking each professional society to make nominations for deserving young and old talented New Hampshire engineers. We all know they are out there and they deserve our recognition, so get those nomination packages started early.

The rules and deadlines will soon be posted on the NHSPE website, but expect the nomination packages to be due early January. The nominations will be reviewed and winners selected by a jury of society representatives by the middle of January, followed by news releases, invitations, etc. A glimpse of what is required is listed below:

Eligibility Requirements:

Engineer of the Year:

1. Member in good standing of his or her engineering society.
2. Citizen of the United States.
3. Licensed Professional Engineer in the State of New Hampshire or E.I.T.

Young Engineer of the Year:

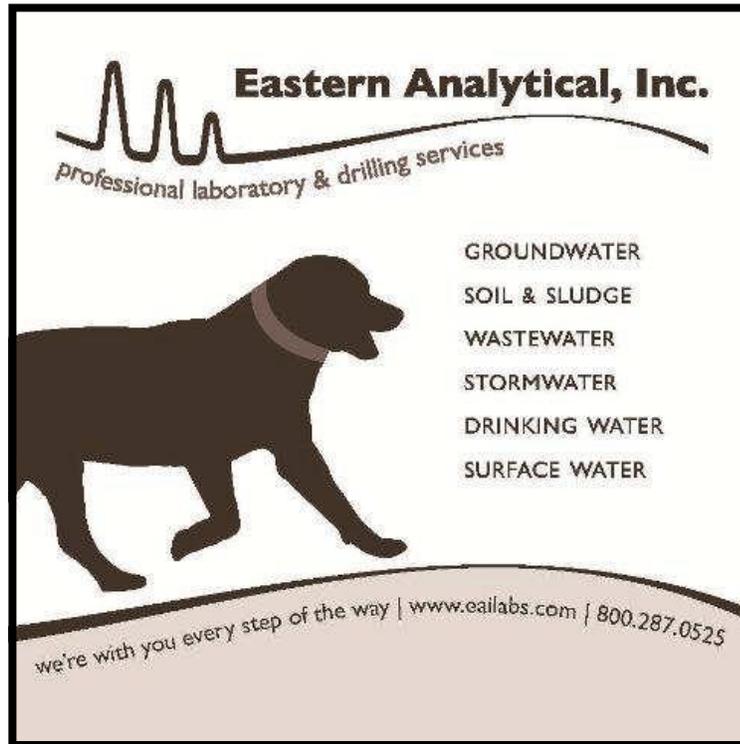
1. Member in good standing of his or her engineering society.
2. Citizen of the United States.
3. 35 years of age or younger on December 31, 2013.

Nomination Package Information:

1. Name, Title, Address, Home and Business Phone Numbers
2. Employer (or related work experience)
3. Date of Birth (required for Young Engineer of the Year only)
4. Biographical Information
 - a. Education, including continued education
 - b. Memberships in both technical and non-technical organizations
 - c. Industrial experience
 - d. Engineering experience
 - e. Engineering research and development experience
 - f. Technical and non-technical papers authored
 - g. Patents held
 - h. Service to the profession
 - i. Service to the community and for the benefit of humankind
 - j. Honors or awards bestowed (technical, professional, governmental, educational, and civic)
 - k. Unusual assignments
 - l. The individual and his/her family
 - m. Support of, and participation in interesting activities

For questions, you can contact any of the E-Week Planning Committee members including Ted Setas PE, Gregg Comstock PE, Dirk Grotenhuis PE, Chuck Gregory PE, or Larry Dwyer PE.

Submitted by Larry Dwyer, PE



Eastern Analytical, Inc.
Professional laboratory & drilling services

GROUNDWATER
SOIL & SLUDGE
WASTEWATER
STORMWATER
DRINKING WATER
SURFACE WATER

we're with you every step of the way | www.eailabs.com | 800.287.0525

Board of Directors

PRESIDENT

Jason J. Beaudet, PE
(603) 668-8223
jasonb@cldengineers.com

PAST-PRESIDENT

Theodore T. Setas, PE
(603) 518-1973
ted.setas@jacobs.com

PRESIDENT-ELECT

Dirk Grotenhuis, PE, LEED-AP
(603) 339-3774
dirk.grotenhuis@rsginc.com

VICE-PRESIDENT

Vacant

SECRETARY/MEMBERSHIP

Corey Dietrich, EIT
(617) 449-1453
Corey.dietrich@parsons.com

TREASURER

Charles L. Gregory, PE
(603) 668-8223
treasurer@nhspe.org

STATE DELEGATE TO NSPE HOUSE OF DELEGATES

Roch D. Laroche, PE
(617) 603-6344
Roch.laroche@hdrinc.com

STATE DIRECTOR

Gregg Comstock, PE
(603) 271-2983
gcomstock@des.nh.gov

STATE DIRECTOR

Lawrence J. Dwyer, PE
(603) 206-1115
ljdwyer@terracon.com

STATE DIRECTOR

Raymond L. Barrett, Jr, PhD, PE
(603) 424-2202
raybarrett@comcast.net

STATE DIRECTOR

Julie Whitmore, PE
(603) 391-3983
jwhitmore@vhb.com

MATHEMATICS & SCIENCE TEACHER AWARDS CHAIR

Matthew J. Low, PE
(603) 669-5555
[mlow@hoyletanner.com](mailto:mjlow@hoyletanner.com)

NH MATHCOUNTS DIRECTOR

Ben Pratt, PE
(603) 588-6740
bpratt@mctelecom.com

QBS REPRESENTATIVE

William A. Straub, PE
(603) 431-6196
wstraub@cmaengineers.com

STUDENT OUTREACH

Vacant

ENGINEER'S WEEK CHAIR

Lawrence J. Dwyer, PE
(603) 206-1115
ljdwyer@terracon.com

JOINT SOCIETIES CHAIR

Vacant

SCHOLARSHIP CHAIR

Vacant

NSPE Website www.nspe.org

NHSPE Website www.nhspe.org

NSPE Member Services 1-888-285-6773 or
www.memserv@nspe.org