THE PELS NEWS
A Publication of the State Board of Licensure For Professional Engineers & Professional Surveyors

October 2013 Newsletter Thirty-Third Edition

THE PRESIDENT’S MESSAGE
By H. James Engstrom, P.E.

I am honored to be elected again to serve as President of the Board. As many of you know, I am a second generation Board Member. My father, Harold Engstrom (deceased), served on the Board and was its President in 1960, 1964, and 1968. My desire to become an engineer and make a contribution by serving as a Board Member, is due to his positive influence during my high school years. I observed two important results of his time on the Board. The first and foremost was that he made a significant contribution to the profession. The second was that the association/friendships with the other Board Members strengthened him as a person. I am striving to accomplish the first and am already benefitting from the second. I hope he would be pleased.

In the years I have served, I have witnessed substantial progress in the Board. We have five permanent and one part time employee and we own our building across from the State Capital. Our Director and staff deserve most of the credit for this progress.

Our current Director and staff, Steve Haralson, Linda Stone. James Atchley, Virginia Davis, Marilyn Smith, and part-time, Shirley Byers, continue to do a superb job processing and preparing all the information required for the Board to function properly. This is impressive since it is a relatively small staff for the large number of licensees compared to other professions.

It has been and is a pleasure to serve with fellow Board Members who are highly competent and have an honest desire to make fair and just decision with utmost integrity. It is my understanding from my father that this has been the case from the Board’s beginning.

I would encourage you to stay familiar with the changing Rules and Laws governing our professions by reviewing them on our website. During Disciplinary Hearings, I am often surprised to learn that a licensee is unaware of some aspect of these regulations.

I would also encourage you to attend a Board meeting (normally at two month intervals) or disciplinary hearing.

A personal concern of mine is the apparent lessening of educational requirements for obtaining an engineering BS degree when many other countries are making theirs more stringent. NCEES is addressing this with more extensive education requirements for licensure but I would prefer the universities also address it.

As you are aware, computer based testing for the Fundamentals of Engineering and Surveying exams starts in January, 2014. It has and continues to take time to make this transition, but eventually will be instituted for all the exams.

I look forward to serving as President of your Board and representing you and your profession with the purpose of safeguarding the life, health and property and promoting the public welfare.

If you have any questions, please contact me. ~ Jim Engstrom, P.E.

APPROVAL AND LICENSURE PROCESS FOR INTERN APPLICANTS HAS CHANGED

The Board’s Rules have been amended to accommodate the implementation of Computer Based Testing. As a result, the approval and licensure process for Intern applicants taking the Fundamentals of Engineering or Fundamentals of Surveying has changed.

The prior process required applicants to be approved to take an exam and then they would be sent to NCEES to register. Now individuals need not be approved to take an exam, they will go directly to NCEES to register.

When Engineer or Surveyor Intern licensure is desired, an application is submitted. After all required documentation has been received and the application is complete, the qualifications will be reviewed for licensure (see The Directors Corner for more details).

GOVERNOR REAPPOPOINTS ENGSTROM AND HAWKINS

Recently Governor Beebe reappointed H. James Engstrom III, P.E., Engineer Member and Ronald R. Hawkins, P.E., P.S. Dual License member, to additional four-year terms.

Mr Engstrom graduated from Columbia University with a BS in Civil Engineering in 1966 and an MS in Structural Engineering in 1967. He’s been a Professional Engineer since 1970 and the President and Owner of H. James Engstrom & Associates, Inc. since 1971. Mr. Engstrom was first appointed in 1993.

Mr. Hawkins graduated from the University of Arkansas at Fayetteville in with a BS in Civil Engineering in 1971. He’s been a Professional Engineer since 1976 and a Professional Surveyor since 1980. Until his retirement this year, Mr. Hawkins was President and CEO of Hawkins-Weir Engineers, Inc. Mr. Hawkins was first appointed in 2009.
THE DIRECTOR'S CORNER
by Steve Haralson, PE

CUTTING THE ENDS OFF THE HAM

One of my favorite stories starts with a young woman and her mother preparing Thanksgiving dinner together. One of the menu items was ham, and when the mother took a knife and cut some off of both ends before putting it in to bake, the young woman asked her mother why. The mother replied she didn’t know, but did it because she observed her mother always did it.

A few weeks later at the family Christmas gathering, the young woman sought out the grandmother and asked why she cut the ends off the ham. The grandmother replied that she, too, did it because she observed her mother always did it. A month or two later the young woman had a chance to visit the great-grandmother who was in an assisted-living center. The young woman asked why she cut the ends off the ham, and the great grandmother replied, “So it would fit in the pan.”

The obvious point of this story is that habits and practices often continue despite there being no further need or reason for them. Further, those habits and practices are usually stopped only when someone takes the time to question or challenge them. The impetus by NCEES to shift from administering pencil and paper exams held twice-a-year to computer-based, came as a result of something like that - see my column in the last newsletter for more details. That change also prodced both NCEES and its member boards, including this one, to look at some other long standing habits and practices like the ones listed below to see if there is any reason for them or if they were or are also just continuing to “cut the ends off the ham.”

Exams are 8 hours long. Ivan Hoffman, Vice President of our Board and Chair of the national committee charged with developing and administering the surveyor exams, reported that no one at NCEES or on any of the exam committees could recall why the exam lengths were set at 8 hours – all but the PS of course. As a result, NCEES’ psychometric consultants reported and all agreed that a 6-hour exam was plenty long.

FE & FS examinees have to submit an application and be admitted. As licensees know, it has always been necessary to apply to the Board for a license before being admitted to the relevant exam(s). This practice may have actually served a purpose at one time because NCEES (and the Board before NCEES) had to know how many exams to print. The onset of computer based testing, however, has caused a majority of Boards, including Arkansas, to decide it would be just fine for an applicant to apply after taking and passing the exam, and the most recent rule amendment cleared the way for this to happen.

Professional applicants must have the required experience before taking the PE exam. Unlike the previous two, this is not a “done deal” (and may never be in Arkansas) but it is one that was discussed and debated at this year’s national NCEES meeting. Several mostly western states allow Professional Engineer license applicants to take the Principles & Practice of Engineering exam before the 4 years of experience. Those that pass are issued a license after the completion of the 4 years. This is generally an “engineer thing” and is an attempt to get more of those passing the FE to follow through and take the PE – right now only 30-35% do so. Stay tuned on this one.

Feel free to let me know your opinions on any of the above or anything else we do that you think may just be cutting the ends off the ham.

Board Elects Engstrom & Hoffman officers for 2013-2014

At its May, 2013 meeting, the Board elected Jim Engstrom, P.E., as its President and Ivan Hoffman, P.S as its Vice-President. Mr. Engstrom is the President and Owner of H. James Engstrom & Associates and became a Professional Engineer in 1970. Mr. Hoffman is the President of Hoffman & Associates, Inc. and became a Professional Surveyor in 1973.
CASE NUMBER #2012-12, in the matter of Russell Anthony Podgorny, P.S.

COMPLAINT Podgorny conducted a survey on a parcel of land in Newton County for a client and for which there was a dispute between his client and the adjoining property owner over the location of their common boundary. Podgorny later issued a second plat of the same parcel that moved the boundary in a way that appeared to the adjoining property owner as adverse to him.

RESOLUTION After a hearing on May 14, 2013, Podgorny was found to be negligent in the practice of surveying, and assessed a civil penalty of $500.

CASE NUMBER #2013-04, in the matter of Samuel A. Watson

COMPLAINT The results of Mr. Watson’s and another examinee’s October 2012 FE examination were identified by NCEES as indicating possible collusion or other irregularities. After an investigation, Watson admitted that he copied off the other examinee’s exam.

RESOLUTION After a hearing on May 14, 2013, Watson entered into a Consent Agreement with the Board which called for invalidation of his examination score, a one year suspension of examination privileges, and a requirement for ethics training before further examination.

CASE NUMBER #2013-12, in the matter of Thomas S. Hambuchen, P.S. (lapsed)

COMPLAINT Hambuchen’s Professional Surveyor license lapsed on June 30, 2006. After applying to reinstate his license on August 24, 2012, he admitted to continuing to operate his business during the period the license was lapsed. He also produced 149 survey plats and furnished financial records detailing his activities during the lapse.

RESOLUTION After a hearing on July 9, 2013, Hambuchen was found liable for 149 counts of unlicensed practice, and assessed a civil penalty of $14,900. In addition, his request to reinstate his Professional Surveyor license was denied by the Board.

2013

Oct 25 PE/PS & AR State Specific Exams, Arkansas State Fair Grounds
26 Last Pencil & Paper FE/FS Exams – AR State Fair Grounds

Nov 4 Registration with NCEES opens for FE/FS exam in Computer-Based Testing format
4 Registration with NCEES opens for April 2014 PE/PS exam
11 Veterans Day – State offices closed
12 Board Meeting, PELS Board Office
28 Thanksgiving Day – State offices closed

Dec 24-25 Christmas Eve & Day – State offices closed

2014

Jan 1 New Year’s Day – State offices closed
1 Cut-off date for PE/PS applications for April 2014 Exams
2 First available FE/FS exam in Computer-Based Testing format
14 Board Meeting, PELS Board Office
20 Dr. Martin Luther King, Jr., Birthday Day – State offices closed

Feb TBD Board Meeting, PELS Board Office
Feb 17 President’s Day – State offices closed
Mar 11 Board Meeting, PELS Board Office
Apr 11 PE/PS & AR State Specific Exams, Arkansas State Fair Grounds Little Rock
As early as 1951, Board minutes reflect an interest in legislation to regulate surveying, although it wasn’t until 1962 that it voted to take on administration of a surveyor licensing law proposed by ASPE. Act 101 was later passed and signed into law by Governor Rockefeller on February 16, 1967. In addition to “grandfathering” certain persons for the first year, the Act provided 3 other paths to registration: 1) by graduation and examination; 2) by experience and examination; and 3) by endorsement for those licensed in another jurisdiction by written examination.

Surveyor applications were acted upon by a five member “Land Surveyor Committee” that consisted of 2 Board members and 3 others selected by the Board. The first three non-Board members were F.M. Methvin, Arthur Thomas and Floyd Weaver – C.H. Bond, Jr. and Max Mehlburger were Board member representatives.

The first record of a Land Surveyor Committee meeting is in August, 1967. It appears that much of the early meetings focused on those applying under either the grandfather clause or by endorsement because the first 540 licensees applied in one of those two ways.

For those seeking licensure by examination, the Rules provided that applicants would be given a numeric percentage “grade” with half of it being the exam results and the other half reflecting “education, experience, testimony of references, and other reliable sources of information.” A combined grade of 70 was necessary for registration unless the exam score was less than 60 in which case the exam had to be taken again regardless of the combined grade.

The first surveying examination administered was to a Mr. Woodson, then an Assistant Chief with the Arkansas Game & Fish Commission. The exam was given July 29, 1968 and Mr. Woodson later was awarded license number 541. Nothing was found to determine who developed this first exam but a good guess would be Mr. Methvin, who was also County Surveyor for Union County for many years. One of Mr. Methvin’s references described him as having performed “almost all surveying of any importance in Union County in [the] last 10 years.”

The first reported results found in Board records are for the December, 1972 administration in which 6 of the 12 taking passed. A separate score is reported for a “Closed Book” and “Open Book” portion and it is obvious that a minimum passing score was required for both because a couple of examinees reported as failing had a higher score on the open book portion but lower on the closed book than others reported as passing.

Grading the Land Surveyor exam was not without some controversy. Minutes from the January, 1978 Board meeting reflects a vote to regrade the November, 1977 exam and in the future to have someone besides the exam preparer grade it. The results from that administration show that only 1 of 12 were reported as passing the closed book portion. After it was regraded by a “U of A Committee”, 4 grades were changed from failing to passing and 1 examinee had his score raised from 29 to 70+. At the March, 1978 meeting, Mr. Methvin was asked to submit his proposed exam and solutions for the spring administration so it could be worked again by others to see if they agreed with his solutions.

Act 807 of 1977 created the “Land Surveyor-in training” (LSIT) program adding another examination to the surveyor licensing process, much like the engineer program. The added exam in the fundamentals of surveying was an NCEES exam and its first administration in Arkansas was April, 1978 where 25 out of 38 passed. Surveyor in Training licenses were issued alphabetically to those passing so Dale Arnold was given LSIT No. 1.

Even though a national professional exam was available from NCEES in 1973, the Board chose to continue using its locally-developed version until late in 1979 when the morning portion was an NCEES exam and only the afternoon portion was locally developed. Although not fully clear, it appears that the afternoon portion was developed by AARLS the predecessor of the current ASPS.
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**FUNDAMENTALS OF ENGINEERING**

- William Andrews: David Collier, Joshua Henthorne, Cary Lipscomb, Ayodeji Odeniyi, Micah Spurgeon
- Andrew Baker: David Cook, Taylor Herren, Nicholas Lombardo, Kristin Perrin, Robert Stallings
- Pratik Baral: Richard Corby, Kenneth Hiegel, Stephen Louks, Mary Pinnick, Stephanie Strunk
- Derec Bass: Samuel Cornejo, Zachary Hill, Clinton Mash, Benjamin Rainey, Javier Suarez Paz
- Shawn Batten: Robert Craig, Nicholas Huisman, Mitchum Maynard, Coleson Rakestraw, Jared Sullivan
- Daniel Beal: Brandon Cui, Matthew Irvine, James McCarra, Angie Rieger, Aaron Thomas
- Zachary Bearden: Zachary Dedmon, Dwayne Ishima, Wesley McConnell, Kale Regier, Nicklas Timmlerke
- Sydney Behrens: Thien Do, Gary Iwatsuru, Ryan McDougal, Brandon Richardson, Jeffrey Turk
- John Beyers: Preston Edson, Joanne Johnson, David Meints, Travis Ricker, Jeffery Turk
- George Bloom: Emilie Espino, James Jones, Caleb Melton, James Robbins, Xin Wang
- Steven Bray: Noa Frederic, John Keckler, Landon Miller, Ryan Robinson, Logan Wane
- Adam Burk: Diego Garcia Mosqueda, Anthony Keener, Kevin Moore, Charles Rogers, Nathan Warmath
- Brian Cable: Robert Gregory, Jolyon King, Dustin Morris, Jose Ruiz Fuentes, Ronald Watkins
- Casey Cerrato: Ryan Hadash, Dakota Kirkwood, Thomas Moss, Sean Salazar, Blake Watson
- Ethan Cobb: Tanner Hapeman, Jace Landthorp, Robert Murray, John Seals, Morgan Welch
- Elizabeth Coffield: Jessica Hart, Trevor Latham, Sophia Musiime, Gurdeep Singh, Andrew Wheeler
- Charles Cogburn: Paul Hatfield, Charles Lattin, Kyle Niemann, Gavin Smith, Katie Whitbeck
- Jonathan Cole: Jared Helms, Hugh Law, Benjamin Nuss, Taylor Smith, Bryan White
- Kalen Coleman: Robert Helvey, Mary Pinnick, Ayodeji Odeniyi, Micah Spurgeon

**PRINCIPLES & PRACTICE OF ENGINEERING**

- Jason Bennett: Christopher Dailey, John Fuchs, Johnathon Mormon, James Pool, John Teeter
- Andrew Braham: David Davison, Evan Gray, Byron Newton, Chase Ransom, Joseph Tierney
- Matthew Breckenridge: Jeff Dilday, John Hart, David Nord, Brian Rohman, Jay Tooke
- Michael Busick: Russell Dotson, Tambra Herman, John O’Leary, Erik Schneider, Preetha Veeraraghavan
- Robert Cardwell: Julian Fairley, Adrian Kaufman, Stephen Owen, Quinn Schratt, Ryan Watson
- David Clement: Darryl Fendley, Joshua Kriger, Nathan Payne, Erik Seabolt, Jonathan White
- Daniel Courtney: Andrew Finnegan, Zachary Moore, Diego Pena, Philip Tanner, David Wood

Computer Based Testing (CBT) webinar explains updates


On January 30, 2013, NCEES presented a video based webinar at the above website link, to update its member licensing boards on preparations to implement computer-based testing for the FE and FS exams in January 2014. Watch the video to learn about exam registration, testing windows, exam length, and how NCEES will supply reference materials to examinees. To learn more about CBT visit [http://cbt.ncees.org/](http://cbt.ncees.org/) Webinar Q&A:

- **Examinees will be able to register to take the FE and FS exams year-round, but does the registration window for non-CBT exams (PE, SE, PS) still close just like it always has?** The paper-and-pencil exams will follow the same approval windows and registration deadlines that they always have. Only the CBT exams (FE and FS in 2014) will change.

- **Why will the FE and FS exams not be offered over four months out of the year after the switch to CBT?** Testing windows will be open for two months, closed for month, and the pattern will continue in that fashion throughout the year. The closed periods will allow NCEES and the boards time to evaluate what’s happening with the exams and identify any issues that emerge. In the future, NCEES may decide that the closed periods are no longer necessary.

- **If an examinee can take the exam three times in 12 months, does the examinee’s timeline start at registration or examination?** Because boards have varying waiting periods between registration and approval deadlines and exam dates, examinees’ timelines will include only their examination dates.

- **Examinees at Pearson VUE testing centers will be required to use a palm scanner as an identification method. How does the palm vein scanner work as a security tool?** Along with the usual forms of ID that examinees must currently present, Pearson VUE also uses scanners that map the veins in an examinee’s palm. This tool is especially useful because it eliminates the ability for examinees to employ proxy test takers after breaks. It will also identify examinees whose palm scans do not match their scans from previous testing experiences.
Patty Mamola, P.E., has been installed as the first female president of NCEES since its founding in 1920. She accepted the office at the conclusion of the organization's 92nd annual meeting, held August 21–24 in San Antonio, Texas. Having completed a one-year term as president-elect, she will now serve as president for the 2013–14 term. A resident of Reno, Nevada, Mamola has been a member of the Nevada State Board of Engineers and Land Surveyors since 2006. She is a past board chair as well as a former NCEES Western Zone vice president. Licensed as a professional engineer in Nevada since 1993, Mamola has focused her career on transportation, construction management, and analytical problem solving. She is one of the founding principals of the professional engineering firm Bowling Mamola Group.

Mamola is a graduate of South Dakota School of Mines and Technology, where she earned a bachelor’s degree in civil engineering. She is an active member of the American Society of Civil Engineers, the American Council of Engineering Companies, and the American Public Works Association.

In her speech accepting the office of NCEES president, Mamola outlined three key focus areas for the year ahead: promoting the professions of engineering and surveying, encouraging diversity, and improving professional mobility for U.S. professional engineers and surveyors domestically and internationally. She said, “When you limit the idea of who can be an engineer or surveyor or what they do, you limit what can be achieved. We must challenge those perceptions to accelerate advances in engineering and surveying.”