

THE PELS NEWS

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

April 2012 Newsletter Thirtieth Edition

THE PRESIDENT'S MESSAGE By Sherman Smith, P.E., P.S.

Old Survey Monuments (and Old Surveyors)

I have a lot of hobbies. This time of year, riding my Harley is a favorite weekend activity, and I've even been known to engage in some amateur astronomy on clear nights. One hobby that my wife doesn't understand at all is looking for old survey monuments. Information about their locations can come in a variety of ways from old maps to government sources and lists. Sometimes their locations are shown or described pretty well and other times they aren't. It is pretty satisfying when all or part of an old monument can be located and it is always fun to check its accuracy.



Of course, any old survey monument was set by an old surveyor. While researching and looking, I try to imagine the challenges these early surveyors faced and how it was often necessary to cut trees and brush, cross streams, avoid wild animals and snakes, all the while being bitten by the ever-present mosquitos, ticks, chiggers and flies. And while I usually am able to drive to within a few hundred feet of a monument, the early surveyor was rarely that fortunate and often had to instead traverse several miles of rugged terrain.

It never ceases to amaze me too, how accurate the majority of these early professionals were in both setting and describing the monuments. Of course, I'm most often using GPS equipment to verify their locations while my predecessors likely had only a chain, compass, and maybe an early theodolite or transit.

So what's the point? I think the point is that the monuments serve as a symbol and reminder of these early professional's skill and diligence, and provide a clear lesson for us to follow. My ability to find the early surveyor's monument many years later is only because that professional, whose name we may never know, took the proper amount of care to find the location, set the monument and describe its position – if he hadn't, there would be nothing to find and/or no way to find it.

For us today, the lesson is that whether we like it or not we all leave "monuments", both literally and figuratively. In the field, our monuments will be judged much like those that I look for today – how well were they set and how well were their locations documented. The other monuments we leave will not be quite so tangible but will instead be determined largely by how we conduct ourselves as professionals and can either be ones we would be pleased for someone to look for later or not.

I hope we all choose to leave monuments that can be proud of and are easy to find. If you want to go look for some, just let me know – I'll come get you on my Harley! ~ Sherman D. Smith

PUBLIC HEARING SET FOR MAY 8th ON DRAFT RULE AMENDMENTS

A public hearing has been set for May 8th at 9:00 a.m. at the Board's office for draft rule amendments approved by the Board at its November, 2011 meeting. The primary purpose of the rule amendments is to incorporate new disciplinary procedural rules consistent with the Attorney General's model rules of procedure. This change is necessary due to amendments to both the Engineer and Surveyor laws in the 2011 Legislative session.

In addition to the procedural rules, there are a number of what the Board considers to be relatively minor amendments for various reasons including:

- An amendment to the definition of the term "Firm" clarifying when a licensee operates in his or her own name, and therefore not needing a Certificate of Authorization:
- An amendment to the criteria for establishing equivalency to the educational requirement to have a degree from an EAC of ABET accredited program, and requiring a credentials evaluation;
- An amendment deleting the requirement for a non-student Engineering Intern applicant to furnish references with his or her application;
- Various amendments to Article 9. primarily to accommodate anticipated future computer based testing;
- An amendment to Article 11. providing available sanctions and penalties in the event of an exam irregularity; and
- An amendment to Article 22. inserting and incorporating what has been a separate document containing the Board's Rules of Professional conduct into the rulebook.

A more complete description of each amendment and the reason for it, as well as a red-line and strike out version of the draft amendments are now on the Board's website at www.pels.arkansas.gov under the "Hot Topics" section. Comments can be submitted either at the meeting or in advance by any convenient method including e-mail at PELSBoard@Arkansas.gov.

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THE DIRECTOR'S CORNER

by Steve Haralson, PE **More Board History**

Sherman's article about early surveyors/monuments and the one that follows later on Board history (and thanks to Joe Clements for his research and assistance on that article) got me a little nostalgic too. I seem to recall mentioning that for quite a while I have been reading and making notes on the nearly 400 meeting minutes since the Board was formed in 1925 and that we have kept for years in a couple of notebooks. What follows are just a few of the things that I found of interest and hope you do too:

- Ernest Black and Nathan Veatch, founding partners of Black & Veatch were PE 38 and 39 respectively and both licensed in 1925;
- The 1931 Roster reported that Arkansas was one of 19 members of the Council of State Boards of Engineering examiners and all Arkansas licensees with at least 10 years of experience could be registered with the Council and then licensed by any of the other member states;
- At a meeting in 1932 and during the depression the annual license renewal fee was lowered from \$5 to \$2 and it remained at that amount until 1936 when raised back to \$5:
- At a meeting in 1935, two Architects attended and asked that the Engineer licensing law be amended to including licensing Architects. There is no record of action at this or other meeting on their request and the Architect's Board was formed in 1941:
- Paul Klipsch inventor of the Klipschorn speaker is PE 496 and he was licensed in 1946. One of his references called him "an expert in speakers" and another noted that he had developed several electronic devices in World War II including one for measuring and recording shell velocity;
- In 1950, the first 90 students from the UAF engineering school were approved to take the EIT exam and Professor Wray was paid \$2 for each exam administered in Fayetteville, and \$1.50 for each administered in Little Rock:
- At a 1954 meeting the Board discussed the possibility of bring enforcement actions against companies including Sears, Roebuck & Company that were offering engineering services in the yellow pages;
- In 1962, the Board voted to administer a law proposed by ASPE to license surveyors as long as it was a separate law and Board membership was not expanded to include a Land Surveyor;
- At a meeting in 1967, the Board appointed a separate committee to interview Land Surveyor applications and this continued until that Committee's last meeting in 1993;
- At a meeting in 1974, the Board voted that the picture on the application must be in "coat and tie".
- At a meeting in 1977, two EIT applicants working for a phone company were advised that the Board had "considerable concern" for their future in that they were getting away from "practical engineering".

As you can see from these few entries, a lot can happen in 87 years. Let me know if you have suggestions about what we should be doing for the next 87!

Reminder that electronic correspondence is coming in 2013!

As reported in the last newsletter, the Board in May of 2011 authorized staff to begin the transition to electronic correspondence with applicants and licensees. Full implementation will begin in 2013.

Work on the transition has been ongoing and staff will contact each licensee later in 2012 to remind again of the transition and to stress the importance of the Board having a current e-mail address on file. Licensee can check their e-mail address by looking up their record information on the electronic roster of the Board's website at www.pels.arkansas.gov

Please let Board staff know if you have questions or comments either by phone at (501) 682-2824 or preferably by e-mail to pelsboard@arkansas.gov.



By James Atchley, PE

REPORT ON DISCIPLINARY ACTIONS by the Board since October 2011

2009-27 in the matter of Ray Lindsey/Design Tech Associates

Charged with unlicensed practice of engineering, and offering engineering services in Arkansas without a valid Certificate of Authorization. After a formal hearing on 3/13/2012, the Board assessed a civil penalty of \$1,000.

2009-28 in the matter of Michael Sapp/Environs Architects/Planners

Charged with unlicensed practice of engineering, and offering engineering services in Arkansas without a valid Certificate of Authorization. The Board accepted a Consent Agreement which provided for an admission of violation and a civil penalty of \$2,000.

2010-28 in the matter of Ken Stacks/Stacks Architectural Firm

Charged with unlicensed practice of engineering, and offering engineering services in Arkansas without a valid Certificate of Authorization. After a formal hearing on 11/29/2011, the Board assessed a civil penalty of \$100.

2011-13 in the matter of Patrick Cantrell/PVE, Inc.

Charged with unlicensed practice of engineering, and offering engineering services in Arkansas without a valid Certificate of Authorization. After a formal hearing on 11/8/2011, the Board assessed a civil penalty of \$50.

RESPONSIBLE CHARGE

The engineer and surveyor laws governing practice in Arkansas make reference to the term "responsible charge." What does that term mean to the professional practitioner?

Instruments of practice will be deemed to have been prepared under the responsible charge of a licensee only when all the following conditions have been met and documented:

- a. The client requesting preparation of such plans, plats, specifications, drawings, reports, or other documents makes the request directly to the licensee, or a member or employee of the licensee's firm;
- b. The licensee supervises the preparation of the plans, plats, specifications, drawings, reports, or other documents and has input into their preparation prior to their completion;
- c. The licensee reviews the final plans, plats, specifications, drawings, reports, or other documents; and
- d. The licensee has the authority to, and does, make any necessary and appropriate changes to the final plans, plats, specifications, drawings, reports, or other documents.

The licensee is responsible for meeting all of the preceding requirements whether the work is being performed remotely or locally. The Rules of the Board specifically require that only the licensee in responsible charge of the work may seal/sign/date an instrument of practice.

Any revisions to an instrument of practice containing the seal and signature of a licensee shall be described and dated. If the revisions are not done by the original licensee, the revisions must also be sealed/signed by the licensee in responsible charge of the revisions.



A history of the Arkansas Board of Licensure for Professional Engineers and Professional Surveyors

The "First Five" . . .

As noted in the last newsletter, Act 202 of 1925 that formed the Arkansas Board provided that it would initially consist of five (5) members appointed by the Governor who would receive license certificates upon their appointment. The five men chosen by Governor Thomas Jefferson Terral - James H. Rice, Fred J. Herring, William N. Gladson, James. R. Rhyne, and Roy E. Warden – were from different parts of the state and had an interesting and impressive mix of education and professional backgrounds and credentials.

Mr. Warden, license certificate number 1 and the Board's first president was both an engineer and a lawyer having graduated from Purdue University with a Civil Engineering Degree in 1908 and the Arkansas School of law in 1924. He began working as a rodman with a railroad company in 1902 and progressed to the title of Public Improvement Engineer with Missouri Pacific Railroad when appointed.



Mr. Rhyne held certificate number 2. He was a 1907 graduate of the University of Arkansas and held jobs with the railroad and at the time of his appointment was a consulting engineering in Corning, Arkansas. His letterhead describes that his practice included "Drainage, Levees, Municipal Improvements, Investigations, Reports". Like Mr. Warden, Rhyne was also an attorney and a member of the Arkansas Bar.



Dean Gladson held certificate 3. He had been a professor of Electrical Engineering at the University of Arkansas since 1894 and at the time of appointment was the first Dean of Engineering having been appointed to that position in 1913. Dean Gladson's undergraduate degree was obtained from Iowa State University in 1888 and his PhD. from McLemorsville College.

Certificate No. 4 went to Fred J. Herring. Like Warden, Herring held a degree in Civil Engineering from Purdue University graduating in 1907. He worked for several companies in Illinois and Pennsylvania before coming to Arkansas in 1912. In 1917 he and a colleague formed Herring and Shellhouse a general consulting engineering practice. In 1924 he went to work for the Arkansas Highway Department and was the District Engineer in Jonesboro at the time of his appointment.



James H. Rice received the final certificate. Rice graduated from the University of Arkansas with a degree in Civil Engineering in 1909. At the time of appointment, Rice was Superintendent of Public Works for the City of Little Rock. Prior to that, he had worked for railroad companies and consulting engineers building new lines and roads, and also served a couple of years in the military during World War I reaching the rank of Captain and serving as Assistant Supervising Engineer of Camp Pike (now Camp Robinson) in Arkansas.

The five faced the formidable task of starting an organization that had no office, no employees, no rules and no money. There was likely some help or guidance that could be obtained from some of the Boards formed earlier in other states but, even so, there were no standard examinations and no ABET to accredit institutions. In short, they had to "wing it" much of the time and had to do it quickly.

The five gathered for their initial meeting on June 20, 1925. Warden and Rice were from the Little Rock area, but Gladson, Rhyne & Herring had to travel from a considerable distance since they lived in Fayetteville, Corning & Jonesboro respectively. Only Rhyne's tabulated expenses for that meeting were found and they showed that round trip railroad fare to Little Rock was \$11.08, the hotel room cost \$5.50 and street car fare while in Little Rock was \$0.12.

Their first meeting commenced at 11:00 a.m. and by the time they adjourned a little over 4 hours later they determined which would have 2, 3 or 4 year terms¹, elected officers, employed a secretary/treasurer, selected a bank and appointed 3 committees.

Warden, Gladson & Rhyne continued to serve additional terms. Rhyne served until being replaced in 1937, Warden and Gladson until they were both replaced in 1938. Herring and Rice left the Board after their initial 3 year terms.

Warden retired from Missouri Pacific Railroad in 1949 and died in 1966. Gladson remained as Engineering Dean until 1936. Soon after his appointment, Rhyne became Executive Secretary of the Arkansas Branch of the Association of General Contractors, was President of the National Council from 1928-1929 and served two terms as Highway Director under two different Governors – he died in 1949. Herring continued to work for the Highway Department, becoming the first head of the Statistic and Analyses Division until he retired in 1958. Herring died in 1975. Rice formed Rice-Knot Consulting Engineers and designed and built a variety of projects across the southeastern United States and then finished his career with the Arkansas Highway and Transportation Department as Asphalt Engineer. He died in 1933.

Next time . . . The Early Days – Applicants, Examinations & Licenses

¹ Act 202 provided that 2 members would initially have 2-year terms, 2 would have 3-year terms and 1 would have a 4-year term. The minutes describe that the members determined their terms by "drawing numbered tickets from a hat".

Examinees Passing the October 2011 exams

Fundamentals of Surveying

Principles of Surveying

State Specific Exam

Don M Brady, P.S. Michael S Bright Evan Harris Brandon C Herpin Keaton Johnson John Lane John Moll Adam W Whitlow Tim R Blankenship Michael S Bright Jacob R Carroll Eirc Durkin

Mark Edwards Brad Ferguson Bruce E Ham Roy D Harton

Robert Kersey David Lee Kevin M Owens

Glenn Hrenko

Stephen Sieck

Jason A Waldemer

Fundamentals of Engineering

Jon R Channell
Chris Clement
Christopher Colgan
Andrew L Combs
Anthony S Cook
Sarah E Dalby
Richard A Deschenes, Jr.
Michael J Earls
Clint R Engle
John S Formby
Cory S Galloway
Taylor Gammon

Kristin M Gangluff Loyd E Gibson, III Purna P Gurung Chris B Hall Melissa Hebert David L Hendren Zachary Hinson Michael Howland Jeremy C Hutson Kwangkook Jeong Ryan K Johnson Adam Keeth

Joseph A Kelly
Anna Keogh
Ian Killough
Rebecca L Leonard
Fletcher E Lewis, II
Ethan Lilly
Jacob Loving
Haley Malle
Kimberly A Marti
Jerry T Martin
Jonathan R Matthews
Scott R Matthews

Brian Mattingly
Blake McCallie
Brandon L McKay
Maegan Moon
Mark C Moore
Andrew C Nolen
Bryceson D Nunley
Thomas E Pate, Jr.
Joshua W Pilgrim
Nicholas E Poe
Ricard Requena
Robert J Self

Nadia L C Smith
Samuel G Stewart
Kenneth C Thompson
Cody Ulaga
Andrew R Van Es
Seth Walters
Michael J Wenneker
William A Westlake
Timothy A White
Summer Wilkie
Eric A Wylie

Principles of Engineering

Oscar O Barrios
Allen Beckwith
Andrew Beekman
Richard R Bennett
Andrew B Bolyard
J. Patrick Bourne

Timothy L Brinkley Bradley A Cline Thomas M Daffinrud Paulina M Diaz Riley D Donoho Jacob Fisher Brad N Fureigh Matthew K Gary Brooke N Good Roger L Grimes Stephen A Hogan Andrew W Hoggard Randolph Johnson William R Kraner Dong Y Lee Matthew LeMay John Longinotti Johnny Mason Jason Mowrey Srikanth B Pidugu Zackary E Pollard Christopher A Richards Jeffrey Sawyer Bradford Spain

Jeremy W Stevens Dustin Tackett Bryan Turner Freddie Walker Benjamin Weigand

BOARD VOTES TO" SPLIT" ARKANSAS STATE SPECIFIC SURVEYING EXAMINATION INTO TWO PARTS



At its March meeting, the Board voted that beginning in April 2013, the Arkansas Specific Surveying examination will be divided into two parts. This administrative change comes as a result of a recommendation in early 2011 by an Exams Committee composed of Arkansas surveyors and chaired by Dr. Richard Elgin, P.E., P.S., the Board's exam consultant.

In a February 21, 2011 letter to the Board, Dr. Elgin reported that:

The Exams Committee believes and recommends that the state specific exam be divided into two broad subject areas: Questions that concern our U.S. Public Land Survey System . . . and other subject matter. . . . These two subject areas would be . . . graded separately. The letter went on to state that the recommendation is because the Public Land Survey System is the framework for establishing land titles in Arkansas, a very important subject area, and the public would be better protected by requiring knowledge of it.

The Board's action to adopt the Committee's recommendations also provided that:

- Each part will be administered separately, and each will last one (1) hour;
- The length of the exam will continue to be two (2) hours;
- The Board will set an acceptable score for each part;
- An acceptable score on each part must be achieved to pass the exam;
- An examinee will take both parts, until passing one or both;
- An examinee passing one part will retake only the failed part at subsequent administrations,
- An acceptable score must be achieved on both parts within 5 years;
- The fee for administration will be the same whether an examinee is taking one or both parts.
- The 2-part exam will begin April 2013 and until then the exam will remain in a one test-one grade format.



Fundamentals of Engineering & Fundamentals of Surveying Exams Begin Transition to Computer-based Testing

At the August 2010 NCEES annual meeting, the state licensing boards that make up NCEES voted to begin converting the Fundamentals of Engineering (FE) and Fundamentals of Surveying (FS) exams to a computer-based format. The decision followed a prolonged study by a task force convened to research the issue. The transition will allow greater scheduling flexibility for examinees, more uniformity in testing conditions, and enhanced security for exam content. The NCEES Computer-Based Testing Task Force is developing a comprehensive plan and timetable for conversion of the FE and FS examinations to computer-based testing (CBT). Currently, the plan is for the FE and FS exams to be offered in a paper-and-pencil format for the last time in October 2013. The computer based exams will then begin being offered in early 2014. The PE and PS exams, which engineering and surveying candidates are required to take after completing work experience requirements, will continue to be paper-and-pencil exams for the foreseeable future.

TIMELINE FOR IMPLEMENTATION OF CBT:

- August 2011 to August 2012: The FE and FS content reviews will be completed: The exam item banks will be
 assessed, and item-writing sessions will be held: State licensure boards will review legislative rules and statutes for
 compliance with computer-based testing: New computer-based testing policies will be presented for adoption at the
 2012 NCEES annual meeting
- August 2012 to August 2013: Pools of questions will be developed for the initial administration of the exams in this format.
- October 2013: Paper-and-pencil FE and FS exams will be offered for the last time.
- January 2014: The FE and FS exams will be administered electronically for the first time.

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