

ALABAMA BOARD OF LICENSURE
FOR PROFESSIONAL ENGINEERS
AND LAND SURVEYORS

FIRST QUARTER
2018 EDITION

2018 BELS MEETINGS

- BELS Meets approximately every two months beginning at 8 a.m. in the boardroom at our office located at 100 North Union, Suite 382.
- **2018 MEETING DATES:**
January 30
March 27
May 22
July 31
September 18
November 14
- **AGENDA ITEMS:**
 agenda items, applications, all reference forms, verification forms from licensed supervisors and/or associates (licensed individuals who work with you and observe your work on a daily basis), transcripts and verification of licensure form(s) must be received in the Board office by the above dates. Applications and any information pertaining to your application that is received or completed after the agenda deadline date are added to the next Board meeting agenda.
- **DEADLINES**
Agenda items for the March 27 meeting need to be received no later than March 8. They can be sent to Rick. Huett@bels.alabama.gov.
- Past agendas and meeting minutes can be found at www.bels.alabama.gov, under the board meeting link at the bottom of the page.

BELS BULLETIN



Pictured are scenes from the December brainstorming session. (At top): Members of ACEC, Senator Clyde Chambliss, BELS Director Rick Huett and Chair Liz Hyde listen to discussion. (Center): Representatives of ASPLS weigh in on the Land Surveying education discussion. (Bottom) Hyde and Marc Barter go through a draft version of the 2017 bill.

Following two years of town hall meetings, presentations and public hearings, a bill was crafted and filed midway through the 2017 Alabama Legislative Session, but failed to reach the floor.

This year - with Sen. Clyde Chambliss taking point, representatives from BELS, ASCE, ACEC and ASPLS gathered at the State House in December to discuss changes regarding QBS compliance, education requirements for surveyors and the nominating process.



- Despite the snow and cold temperatures, the annual Future City Competition went off without a hitch in January at the U.S. Space and Rocket Center in Huntsville.
- Middle Schools, like the one from Opp, Alabama (Pictured left) designed cities to answer a simple question: What would a city of the future look like?
- The winners of the competition, national in scale, are awarded a weeklong visit to Space Camp in Huntsville.

Learning outside the physical classroom

By Griffin Pritchard |

BELS Public Information Specialist

Learning from a book, in some fields, doesn't compare to the knowledge gained from hands-on experiences. The courses that comprise a STEM (Science, Technology, Engineering and Math) course of study fall in the hands-on category. This outside-the-box way of thinking can be seen in middle schools, high schools and colleges.

Have you ever seen a concrete canoe float?

We'll get to that a little later.

According to an article found on the ISTE Professional Learning website (paraphrasing): "research shows, that when students see a real-life application for their work, allowing them to get hands-on and have them collaborate in teams, turning STEM avoiders into STEM lovers.

Add a dash of competitive spirit and it's now a surefire recipe for student engagement."

When it comes to competitions, the type ranges from pad, pencil and calculator arithmetic (MathCounts and Trig Star) forays to abstract, outside-the-box competitions using a mixture of toothpicks, Lego's and aluminum foil

(Future City, Imagine Cup and Bridge Design Contest).

The annual Future City competition held in Huntsville, is an annual competition putting middle-school minds to the test by asking one central question: "What would a city 200 years in the future look like?"

"The kids get so much out of this," said Fort Payne Middle School teacher Jamie McClung.

"They get to apply all the subjects. They are learning math, English, the arts, science; they get to put them all together.

"And the challenge is coming up with something new and showing us what they've learned. This is wonderful to teach with – the kids are engaged. I can open the door after school or on Sundays and the kids are there. They know they are doing something that will make the world a better place. I don't have to worry about trying to make the Pythagorean Theorem fun because they are learning it while making these models."

This year the event featured nearly 20 teams, braving the snow and rapidly decreasing temperatures in Huntsville, Alabama, descending on the U.S. Space and Rocket Center.

On the middle school level – some of the more unique learning competitions

include:

- Engineering Encounters Bridge Design Contest. This online competition gives middle and high school students a real-life, engaging introduction to engineering. Each member of the winning two-person team receives a cash scholarship of up to \$5,000, and all finalists get a tablet computer.
- Zero Robotics Tournaments. Middle and high school students write programs to control satellites in space. After several phases of virtual competition, finalists in these Massachusetts Institution of Technology-sponsored tournaments compete in a live championship aboard the International Space

See **CLASSROOM PAGE 3**

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Looking Ahead: Engineering

Automation and open innovation highlight new year's trends

By Griffin Pritchard |

BELS Public Information Specialist

For years the idea of the “future” reflected thoughts of flying cars, moving sidewalks and robots doing their master’s bidding. Don’t laugh too heartily at the latter.

According to eSolutions’ Industry 4.0: “The widespread adoption and recent developments in robotics and plant automation systems continue to impact productivity end-to-end, and impact how engineering can do business across whole product lifecycle.

This trend has realized tremendous improvements in worker productivity and the talent gap in manufacturing.

As another result, there will be significant competition ahead for talented professionals such as instrumentation and controls technicians, automation engineers, and industrial control systems designers.

As an illustration, of all recent engineering job postings, nine percent required skills in instrumentation.”

So, the idea of robotic minions – not that far way.

But, as the industry moves more and more toward an automated work

force, the demand for a more talented workforce almost becomes a pre-requisite. Industrial engineers – the engineers responsible for the creation and optimization of the automated workforce – account for 11 percent of all engineering professionals throughout the United States.

Open Innovation – freeing the imagination, so to speak – will continue to grow and develop as collaborations between manufacturers, designers and suppliers take shape.

Engineering functions will continue to focus on optimizing process and the designers of those processes.

CLASSROOM

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Station. An astronaut will conduct the championship in microgravity with a live broadcast.

“If you take a small part of the challenge,” engineer Sergei Lupashin writes on the Team ISTE website, “like the kickoff – it’s all about trig and geometry.”

Competitions, however, aren’t unique only to the burgeoning teenagers.

High School competitions can be found to. Wetumpka High School, in Alabama, for instance, has become one of the frontrunners in the BEST Robotics competitions. They also joined a host of teams racing a solar car at the Brickyard in Indianapolis.

- The Regeron Science Talent Search is the oldest science and math competition specifically for high school seniors. In this competition, students showcase original research in science and math areas. Three hundred semifinalists are awarded \$2,000, along with \$2,000 to be donated to their high schools to support STEM education. Forty finalists receive an all-expenses-paid

trip to Washington, D.C., for the Regeron Science Talent Institute, where they will explain their research to some of the country’s top scientists. The top 10 finalists are awarded monetary prizes of up to \$250,000 each.

- One of the more well-known STEM competitions, Science Olympiad is a contest in which teams of 15 students compete in 23 events from various scientific fields, such as Anatomy and Physiology, Tower Building, Rocks and Minerals, Forensics, and more. Events can generally be separated into three categories: Study, Build, and Lab. More more information and tips for success, check out CollegeVine’s Ultimate Guide to the Science Olympiad.

Now, back to the concrete canoe – ASCE hosts the annual competition. This year, the event will be in San Diego, California, this summer and will be hosted by San Diego State. According to the website, the first event was held in 1988 at Michigan State University and was won by University of California: Bakersfield.

our CONTACTS

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our MISSION

The Alabama Board of Licensure for Professional Engineers and Land Surveyors was established by legislative action in 1935. Its charter is to protect the public by helping to safeguard life, health, and property, and to promote the public welfare by providing for the licensing and regulation of persons in the practices of engineering and land surveying. This purpose is achieved through the establishment of minimum qualifications for entry into the professions of engineering and land surveying, through the adoption of rules defining and delineating unlawful or unethical conduct, and through swift and effective discipline for those individuals or entities who violate the applicable laws or rules.

ENFORCEMENT ACTIONS

Case No: 2017-18-B

Bobby G. Bailey, PE/PLS

The Board received a complaint alleging Bailey produced a survey that did not comply with the standards of practice for surveying in Alabama.

Bailey agreed to a consent order that required him to pay a \$1,500 fine to the Board, his Professional Land Surveyor license be suspended for two years (with that suspension stayed) and to provide to the Board, upon request, a list of the surveying jobs performed within a one month period during the stayed suspension period to be reviewed for compliance with the standards of practice. The Consent Order and Final Order would be a public record.

Case No: 2017-25-B

Tetrad Engineering LLC, Uncertificated

The Board initiated a complaint in reference to Tetrad Engineering LLC possibly offering engineering services without obtaining a certificate of authorization for engineering from the Board.

Once notified of the complaint the firm applied for, and was issued, a certificate of authorization.

The firm agreed to a consent order that required it to pay a \$1,000 fine to the Board, and that the Consent Order and Final Order would be a public record.



Thornell joins BELS staff

By BELS Staff

Bruce Thornell, after a lengthy career with the Montgomery Police Department, has joined the BELS' Staff as a special investigator.

He spent 26 years in total with 20 serving in the Robbery/Homicide division. Two of those years, he served as a robbery supervisor. He's also spent time as a K9 officer and worked in multiple parts of town.

"I've done a little bit of everything," said Thornell.

"When you're in patrol, you work everything. You don't specialize. I specialized as a K9 Dog handler.

"Then I specialized in 'Per-

NEED A SPEAKER?

If your university, firm or organization would benefit from a presentation by BELS, we would be happy to join you. We cover a myriad of topics:

- Our identity
- Engineering / surveying ethics
- Continuing education (PDH)
- The investigative process

Please contact Public Information Specialist Griffin Pritchard to make your request. He can be reached via email at: griffin.pritchard@bels.alabama.gov or via phone at 334-242-5568



- Bruce Thornell joins the BELS’ staff after spending 30 years with the Montgomery Police Department.
- During that time, he worked as a K9 officer and as part of the Robbery/Homicide Division.

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sons’ Crimes. ‘Persons’ being anything having to do with your person. “

The attraction to the job was twofold for Thornell.

“One, I get to continue to do investigations and two, I don’t have to tote a gun,” said Thornell.

“The liability that comes with toting a gun ... It got to a point, from what I saw in the country, that it was just best to stay away from it. And I did it for 26 years and they say you’ll always know when it’s time. I knew it. I saw it.”

Thornell joins an investigative staff that received 35 complaints ranging from Standards of Practice violations to acts of unlicensed engineering.

The Board acted upon and closed 23 of them.

“I’m certified to teach continuing education to law enforcement, so once I get to know the product, I have that ability,” said Thornell. “I like to teach things once I get it all absorbed. What I think I can bring here is my expertise as an investigator.”

Christy’s Term expiring

By Griffin Pritchard |
BELS Public Information Specialist

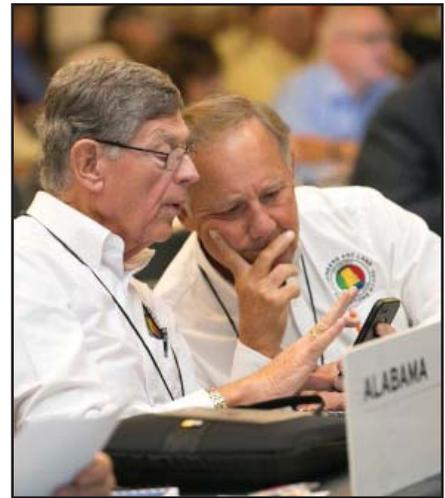
Frazier Christy’s BELS term is set to expire April 22, 2018, however, Christy will continue to serve, until an appointment is made.

In the interim, a nominating committee of ASPLS will meet to consider qualified individuals for the PLS position.

For additional information about the nomination process, contact the ASPLS either by phone (205-824-7700) or via email (aspls@primemanagement.net) Nominations are currently being sought.

Qualifications can be found on the BELS website under the law and code tab, but are paraphrased below according to BELS Code (330-X-1.13 (2b) “Each Land Surveying member of the Board shall be a citizen of the United States, a resident of Alabama, and must hold an unexpired certificate of professional land surveyor licensure in Alabama that is in active status. The member must have a record of lawful practice of land surveying as a licensed professional land surveyor for at least 12 years and has had been in responsible charge of a land surveying or engineering project for at least five years.”

In terms of the nominating process: (330-X-1.13 (5A-C)): “The Executive Director of the board shall give ASPLS at least 90 days’ notice of an anticipated PLS vacancy on the Board. (B) ASPLS is a separate entity and is not to be considered as a sub-committee of the Board and do not have to meet the requirements of the Open Meetings Act. (C) It will be the responsibility of the Board to verify that the three persons nominated by ASPLS meet the requirements prior to sending to the Governor for appointment.



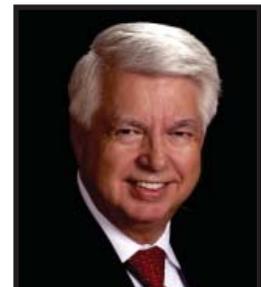
our **LEADERSHIP**



Nathan Johnson, PLS/PE
Vice Chair



Liz Hyde, PE
Chair



Randall Whorton, PE
Secretary

The idea, during the 2016-2017 Fiscal Year, was to stop thinking of BELS as a state agency and more of a business. Once the thought began to take shape, it changed the way outreach had been done.

In years past, BELS outreach was to agency adjacent entities. Essentially, visits were made to other like-board events and professional societies.

But that changed as BELS staff ventured into the general public realm attending the Greater Birmingham Area Homebuilders Expo in Pelham, the League of Municipalities event in Birmingham and the Huntsville Homebuilder's Fall Showcase.

The goal of approaching these different groups and areas was to provide items that would bring both brand recognition and the opportunity to introduce ourselves as a resource capable of providing assistance and ease of access.

Through our efforts - and some newly purchased marketing materials - we were able to reach around 10,000 people.

But that's just the beginning.

OUTREACH EFFORTS



Event	Location	Date	Role
Code Officials Association of North Alabama	Decatur, Alabama	11/14-16/2016	Exhibitor / Presenter
Future City Competition	Huntsville, Alabama	1/14/2017	BELS Bulletin article
University of Alabama: ASCE - Student Chapter	Tuscaloosa, Alabama	1/24/2017	Speaker
Greater Birmingham Area Homebuilders Expo	Pelham, Alabama	3/16-19/2017	Exhibitor
AAPGMI Conference	Auburn, Alabama	4/4-6/2017	Exhibitor / Presenter
Toastmaster's Spring Confernce	Huntsville, Alabama	5/5-7/2017	Attendee
Alabama League of Municipalities	Birmingham, Alabama	5/20-22/2017	Exhibitor
Alabama/Mississippi Engineering Society Annual Meeting	Orange Beach, Alabama	5/26-29/2017	Exhibitor / Presenter
Code Officials Association of Alabama State Meeting	Fairhope, Alabama	5/19-22/2017	Exhibitor / Presenter
Association of Alabama County Commissioners (Engineer Breakout Session)	Orange Beach, Alabama	5/23-24/2017	Presenter
Huntsville Homebuilder's Fall Showcase	Huntsville, Alabama	5/25-27/2017	Exhibitor
North Alabama Fire Marshall's Meeting	Cullman, Alabama	9/22/2017	Presenter

REFERENCE POINT

Surviving in a Litigious Society

Several years ago (more than I want to count), I was putting together a program on liability and limitations on liability and ran across the 1994 Nebraska Supreme Court case of *Lawyers Title v. Hoffman Engineers and Surveyors*, (“Hoffman”). Title company vs surveyor cases always fascinate me for a number of important reasons, a few of which we will touch on, but the primary issues here are surveyor negligence, statutes of limitation and professionalism. We are also going to look at the recent 2016 Nebraska Supreme Court case of *Bixenmann v. Dickinson Land Surveyors*, (“Dickinson”) handed down this past August, on these same issues and consider how the law turns.

Penny-wise and pound foolish.

In 1989, Jiffy Lube International, Inc., hired Hoffman to prepare an “as built survey” of a Jiffy Lube facility. Hoffman, in turn, farmed the survey out to Carrell & Associates, Inc., (“Carrell”) who performed the as-built survey for \$600. Yes, even in 1989 dollars this is a ridiculously low fee for an as-built survey of a small commercial property, especially if you compare it to the attorney’s fees of \$12,346.72 to prosecute the case for *Lawyers Title*. The survey was performed for less than one-half of one percent of what the lawyers charged to get an adjudication in the case. Of course, this was only the fees *Lawyers Title* paid. It is highly likely that all the other parties in the case paid similar fees ... but I digress.

The survey was faulty (inaccurate) in that it failed to identify existing encroachments. Although not specifically stated, *Lawyers Title* must have removed the survey exception from the policy because it paid the damages for the encroachments that the survey did not identify. After paying the damages, *Lawyers Title* turned around and sued Hoffman, who turned around and

Jeffrey N. Lucas

J.D., PLS

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sued Carrell, who turned around and sued Lamp, Ryneerson & Associates, Inc. (“Lamp”). It seems that Lamp had surveyed the same property in 1980 and Carrell was attempting to hold Lamp ultimately responsible for the problem.

Without specifically stating the principle, apparently, Carrell was attempting to cast Lamp as the original surveyor that Carrell was simply following. Nevertheless, this point was not successfully made and Carrell’s complaint ended up being a bare conclusion that Lamp was responsible for Carrell’s erroneous survey without sufficient facts to support the argument. “The petition states only that in 1980, Lamp ‘surveyed the property that is the subject of this lawsuit.’”

But we aren’t professionals.

In response to Carrell’s complaint, Lamp pled the Nebraska professional statute of limitations, that Lamp was not in privity of contract with Carrell and therefore owed no duty to Carrell, and as a matter of law Carrell was “obligated to personally perform any survey undertaken by it and to independently satisfy itself of the accuracy of pin placements.”

Under Nebraska law, then as it is today, there is a statute of limitations for profession negligence, which provides in pertinent part, as follows:

“Any action to recover damages based on alleged professional negligence ... shall be commenced within two years next after the alleged act or omission in rendering ... professional services providing the basis for such action; Provided, if the cause of action is not discovered and could not be reasonably

discovered within such two-year period, then the action may be commenced within one year from the date of such discovery or from the date of discovery of facts which would reasonably lead to such discovery, whichever is earlier; and provided further, that in no event may any action be commenced to recover damages for professional negligence ... more than ten years after the date of rendering ... such professional service which provides the basis for the cause of action.”

This is a typical professional negligence statute of limitations. It’s a two-year statute of limitations with a discovery period within which a hidden or otherwise undiscovered negligent act can be prosecuted, and a 10-year statute of repose beyond which time no action may be brought. The long and the short of it is, ten years after performing the professional services, the professional services provider is off the hook.

We are not given the exact dates, but presumably the 10-year period had lapsed before Carrell brought an action against Lamp because the trial court ruled in Lamp’s favor on this issue. Nevertheless, Carrell wasn’t afforded the protection of the statute because the Nebraska Supreme Court refused to consider whether land surveyors are “professionals” within the meaning of the statute. The Legislature has not specifically stated which occupations are governed by § 25-222. ... [W]e recognized that the term “profession” originally contemplated only theology, law, and medicine but that other vocations were later designated as a profession. We have applied the professional period of limitations ... to architects and engineers; to accountants; to medical technicians; and to those giving investment advice. (Citations omitted). ... Defining the class of persons who will receive the benefit

See **REFERENCE PAGE 8**

REFERENCE

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of a shortened statute of limitations may require the court to engage in a form of classification which more properly should be done by the Legislature. On the limited facts articulated by this pleading, we decline to even consider whether surveyors render professional services

The case was sent back to the trial court for further proceedings and that's where we lose the story because there were no further appeals, so we can only speculate as to the ultimate outcome.

Or are we professionals? Fast-forward to 2010. The Bixenmanns own a piece of property that contained a large building that was used for storage. During the summer of 2010, the Bixenmanns entered into negotiations to sell the property. The buyers requested that the property be surveyed and the Bixenmanns agreed so long as the buyers paid for the survey. The buyers hired Dickinson Land Surveyors ("Dickinson") to survey the property.

In completing the survey, Dickinson drove rebar monuments flush and set stakes firmly in the ground next to the monuments, leaving the stakes up about twelve inches. The grass surrounding the stakes was about 1 to 2 inches high, but the stakes "were visible, in plain sight." Lawrence Bixenmann was present when the survey was being conducted and witnessed Dickinson doing some of the work. One evening, sometime subsequent to the survey, Bixenmann was unloading a lawnmower on the property, tripped over one of the stakes and fell, causing serious injury to his hip.

Bixenmann sued Dickinson for negligence and loss of consortium. In an affidavit that accompanied his summary judgment motion, Dickinson averred that marking the property corners as he did was standard practice, that he was familiar with the standard of care for surveyors in the State of Nebraska, and that he complied with the applicable standard when completing his survey of the property.

Bixenmann did not provide expert witness testimony to contradict Dickin-

son's affidavit, and the trial court granted Dickinson's summary judgment motion as a matter of law, in that the "common knowledge" exception to expert witness testimony in a professional negligence action did not apply.

The district court recognized that under the "common knowledge" exception, a party may make a prima facie case of professional negligence even without expert testimony in cases where the evidence and circumstances are such that recognition of the alleged negligence may be presumed to be within the comprehension of laypersons. However, this common knowledge exception is limited to cases of extreme and obvious misconduct. On appeal, Bixenmann contends that Dickinson is not a professional, therefore, Bixenmann was not required to have expert witness testimony, that the "common knowledge" exception to expert witness testimony applied and that summary judgment should not have been granted. The entire case hinged on whether land surveyors are professionals or not.

Starting with this issue, the Nebraska Supreme Court weighed in:

This case initially presents a question of law which we have not previously decided: whether surveyors are professionals for purposes of professional negligence. Whether a particular vocation is a profession is a question of law that is determined independently of the trial court. ... We have held that the requirement of a license to practice one's occupation, although not dispositive, "strongly indicates that an occupation is a profession." However, the requirement of a license alone does not make an occupation a profession, as the preparation and training required to procure that license are also important factors. Although we have held that a college degree indicates such preparation and training, a college degree itself is not required.

After an examination of the licensing law, the examination requirements, Nebraska's apprenticeship path to licensure, Nebraska's four-year degree path to licensure, and continuing educational

requirements, the court concluded:

It is clear, based on these statutory requirements, that registered surveyors have specialized knowledge, complete long and intensive training and preparation, are subject to high standards of achievement and conduct, are committed to continued study, and perform work of which the primary purpose is the rendering of a public service. Thus, we conclude that registered surveyors are professionals for purposes of professional negligence. Because the evidence shows that the owner of Dickinson was a licensed or registered surveyor, we conclude that he is a professional.

Closing thoughts.

Your initial thought might be the same one that I had; well—yes—the Nebraska Supreme Court has previously considered the professional status of surveyors, but the court actually passed on that decision in the Hoffman case. I think it's interesting that the court didn't even address its earlier decision in Hoffman. Be that as it may, it seems clear that Nebraska surveyors will now come under the protection of the professional negligence statute of limitations.

Another truth that is apparent from Hoffman is that if the title company removes the survey exception based on an inaccurate survey and has to pay damages as a result, the surveyor will be sued for having incorrect results. As we have discussed on many occasions that will most likely happen in the event of an ALTA survey where the survey exception is supposed to be removed. If you don't understand the difference between precise measurements and accurate results, you had better take another look at the ALTA standards.

Lastly, your liability could turn on the size stakes you use. Use taller stakes.

NOTE: The views and opinions expressed in this article are those of the author and do not necessarily reflect the official policy or position of the Board.