# THE STANDARD



PO Box 304451 | Montgomery, Alabama 36130-4451 | www.bels.alabama.gov



### **BOARD INFORMATION**

- BELS is comprised of nine members. Five professional engineers, two professional land surveyors, and two public members.
- All members are vetted by specific nominating committees. The committees then submit a list of three names to the Governor who makes the appointment.
- Board meeting are held every two months beginning in January and are open to the public.





THE STANDARD is a publication of the Alabama Board of Licensure for Professional Engineers and Land Surveyors. Digital Editions are posted on our website.

Staff Contact Information can be found by using the following link: https://bels.alabama.gov/about/staff/





### **NEED A SPEAKER?**

We cover the following:

PDH / CEU topics include:

- Enforcement Case Studies
- Ethics
- Law and Rules

If interested please email: e.johnson@bels.alabama.gov

# **COMMUNITY NEWS**







### NCEES EXAMS

The NCEES Structural exams are moving to a computer based format by 2024. The following dates are the last scheduled pencil and paper exams.

	Year	Date	
Structural Vertical	2023	Apr 13, Oct 26	
Structural Lateral	2023	Apr 14, Oct 27	

Registration for the April 2023 pencil-and-paper PE Structural exams will close on February 16, 2023, at 3:00 p.m. EST. Registration for the computer-based FE and PE exams is open year-round.

### 2023 Board Calendar—2nd Quarter

January 18, 2023 - BELS Board Meeting
March 7, 2023 - ASCE Winter Meeting
March 28, 2023 - BELS Board Meeting



# NCEES IS LOOKING FOR YOU

NCEES is currently seeking licensed mechanical engineers to participate in a professional activities and knowledge study, or PAKS, for the PE Mechanical exams. The results of this online survey will be used to update the content of the PE exam, which is used throughout the United States.

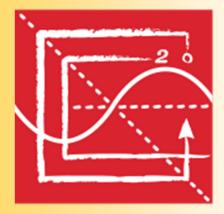
PE Mechanical exams include Heating Ventilation Air Conditioning and Refrigeration (HVAC), Machine Design and Materials (MDM), and Thermal and Fluid Systems (TFS). NCEES is also considering the addition of a Plumbing Engineering exam to the Mechanical suite of exams. If you are a licensed professional engineer, we would appreciate your input by completing the online survey.

NCEES requires a cross section of licensed professional engineers practicing mechanical engineering - including those working in industry, consulting, the public sector, and academia - to complete the online survey in order to update exam content and specifications. The survey will help determine the knowledge and skills required of a licensed mechanical engineer with four to six years of experience to practice in a manner that safeguards the health, safety, and welfare of the public. The survey can be completed in 20-40 minutes.

For access to the online survey, visit <u>www.ncees.org/PEMechanicalPAKS</u>.

The survey will be open until March 15, 2023. Please help us spread the word about this important study by sharing this link with any colleagues who are licensed mechanical engineers.

For more information, contact NCEES Exam Development Engineer Don Colman, P.E., at dcolman@ncees.org.



# NCEES advancing licensure for engineers and surveyors

# **NEW BOARD CHAIR**

This past October, the Board took on a new Chair to facilitate meetings. Mr. Donald Vaughn has an extensive history with both engineering and land surveying. Upon graduating Auburn University in 1971 with a Bachelors Degree in Civil Engineering, Mr. Vaughn worked with the Alabama Highway Department until he retired as Chief Engineer. Mr. Vaughn holds several honors to include being elected to the 2021 Alabama Roadbuilders Hall of Fame, 2013 Engineers Hall of Fame, and the recipient of the 2009 Auburn Outstanding Alumnus. Mr. Vaughn has been married for over 50 years to the former Becki Russell. He has two children and five grand-



children. Mr. Vaughn is an active member of the Episcopal Church of the Ascension in Montgomery. He also is a retired Commander with the U.S. Naval Reserves Civil Engineering Corp.

I spoke recently with Mr. Vaughn about his role as the Board Chair. I am happy to share his thoughts.

# What are some goals you would like to see accomplished by the Board for the upcoming year?

First, let me say what an honor it is to serve on the Alabama Board for the Licensure of Engineers and Land Surveyors. My discipline is civil engineering, but other engineering disciplines and the land surveying profession are represented on the board by competent and highly respected individuals. In 2019 the Board membership was expanded from seven to nine to include two Public Members. These Public Members have complimented the technical representation of the Board. We are also very fortunate to have a competent and dedicated staff that works hard to support our Board.

My emphasis during my tenure as Board Chair, will be to continue to serve the Engineering and Land Surveying professionals and to protect the public interest. This means maintaining open communications with not only those currently, but with prospective licensees as well. My emphasis will be on insuring licensure requirements are maintained to the highest standard in accordance with the law.

# NEW BOARD CHAIR (cont.)

We will continue to work in cooperation with the Legislature so that the legal requirements of licensure meet the needs of the profession.

Another area of emphasis will be to continue promoting ethics in the engineering and land surveying professions. I have seen a strong dedication to ethics while serving on the Board. Our staff makes presentations at professional association meetings on the subject of Ethics, and I want to see this continued.

The issue of the "Portability of Licensure" across State Lines is an important topic currently under discussion by Licensure Boards and State Legislatures. The Board will continue to be engaged in these discussions, with a goal of serving the needs of the professionals and maintaining a high level of professional competency.

### What is your greatest accomplishment while sitting on the Board?

The Board has addressed several important issues during my time on the Board. The establishment of a Structural Roster Designation, Developing a Policy on what constitutes acceptable Remote Supervision, and Developing a Policy on Engineering in Construction have been a few of the more important issues that we have addressed. The Board will continue to be responsive to address issues that impact the Engineering and Land Surveying Professions.

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# What interesting or significant changes have occurred in your profession since you started as a Professional Engineer?

The engineering and surveying world is continually growing and evolving. I guess one word to sum it up would be "Technology". Technological Advancements that I have personally experienced are numerous, but to pinpoint a few, I would list:

a. Transition from the Slide Rule to Hand Held calculators. This really dates me, but I still remember how exciting it was to get a hand held calculator with a "square root key".

# NEW BOARD CHAIR (cont.)

### b. Continuing Education

While the introduction of Continuing Education was initially met with some resistance, it is now widely accepted throughout the Engineering and Land Surveying Professions. Continuing education helps keep the practicing professional abreast of advances in technology.

c. The use of Drones for construction, maintenance, and land surveying.

We are discovering more uses for drones in engineering and surveying applications every day, thereby increasing productivity, not to mention cost savings.

### d. The internet and CAD

I remember the day a representative from Redstone Arsenal came to my office to talk to me about the federal government's new "Technology Sharing Initiative" and specifically the "World Wide Web". He tried to explain to me how it could benefit my work at ALDOT. It was foreign to me then, and I was skeptical. But consider how the internet has changed the way we conduct our business.

### e. Advances in Surveying Equipment

I acquired the first Electronic Measuring Device (EDM) for route surveying at the Alabama Department of Transportation. It was a huge, cumbersome, yellow HP surveying instrument. It was deployed in one of our best survey parties, and surprisingly, that survey crew became less productive. Upon investigation, it was discovered that the survey crew didn't trust the new technology and actually "chained" behind the EDM measurements to verify its accuracy.

It is a given that technology will continue to advance at an even more rapid pace. The Board will work to insure that Alabama Licensure requirements are continually evaluated and updated, to safeguard the public welfare.



# THE DIRECTOR'S DESK

By now you all should be aware of the adoption of the new rules that were passed in November. Most of the changes were updating the language of the Code to make the Board more efficient in its day-to-day operation. However, one rule change will affect how you as a professional will respond to an audit by the Board.

Rule 330-X-3-.02 (Continuing Professional Competency) Section 14 (b) currently reads as follows:

"Failure to respond within 60 days of audit notification will result in a temporary suspension of the license and the license will remain suspended until such time as the audit requirements are met."

This rule has been approved to be written as follows:

"Licensees should respond to audit inquiries within 30 days of notification. Failure to respond to an audit inquiry, and/or provide requested documentation, will result in a reinstatement fee being applied to the renewal fee on February 1st."

So, what does this mean to you as a professional? In the case you are audited by the Board, it is imperative that you respond to the audit as quickly as possible. We do understand if you must do some research to locate documentation of continuing education. We also understand that during the audit process some training may not be accepted by the Board. This new rule will allow adequate time for you to at the very least respond to an audit inquiry, provide documentation, as well as notify of any upcoming training that you will be attending in order to meet the audit requirements should previous continuing education hours be rejected.

We here at the Board want to work with you to make sure you meet the qualifications of licensing in order to for you provide your clients with a service that will safeguard their health, life, safety, welfare, and property.

If ever we at BELS can help you with accomplishing these goals, please feel free to contact us.





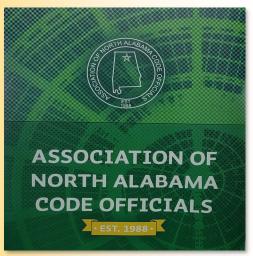
The Staff from BELS attended the Fall Conference of the Alabama Society of Professional Land Surveyors in Guntersville, Alabama. The staff was able to fellowship and help resolve questions and issues of land surveyors throughout Alabama.







Special Investigators Bill Hamil and Everette Johnson attended the Association of North Alabama Code Officials Fall Conference in Dothan, Alabama. This association works with BELS to ensure that licensees are working within the scope of their particular discipline.









The Board of BELS met for their quarterly meeting in November in Montgomery. During the meeting, the Board approved licensees for both engineers and land surveyors. They worked on updated the language in the State Code. The Board also handled disciplinary actions.









Special Investigator Everette Johnson had a great time presenting Ethics in Engineering to Junior and Senior Engineering students at the University of South Alabama. During their discussion, several recent cases involving BELS investigators were discussed as it related to ethics in the profession. Go Jags!



Special Investigator Everette Johnson went to Birmingham to speak with employees at Schoel Engineering both in person and virtually about ethics in the workplace and how it applies to their profession. Within the group was a mix of both engineers and land surveyors. Schoel Engineering has been in business for over 134 years.











BELS conducted formal disciplinary hearing proceedings involving a person performing unlicensed land surveying. They also testified in another hearing concerning a land surveyor who was working in an unethical manner. Both of these cases will be presented along with the judges recommendation to the Board for consideration.

# NOTES FROM ENFORCEMENT

### 4 Ways to Have a Successful Recruiting Class

by Bob Herbert

Right now, we are focused on college football recruiting. Coaches and their staff search far and wide to find the right players for the right positions to make their teams successful. Recruiting day is just as big an event as the national championship game. Success in the recruiting field leads to success on the playing field. So, I know you are asking "What does this have to do with land surveying?"



While sitting in meetings over the last 6 months I became aware of an issue in the land surveying communi-

ty that I need to bring to your attention. Over the last several years there has been a decrease in the number of licensed professional land surveyors (PLS) in Alabama as well as over the United States. As for Alabama, this seems to have leveled out, and recently our licensing numbers have gone up slightly. After painting that picture, I wanted to focus this article on an issue that seems to exacerbate this situation even further: the number of technicians that assist the professional land surveyor community is drastically down as well.

Recently during discussions with different stakeholders in the land surveying community, there seemed to be a consensus that the drastic downturn of employable technicians is a big detriment in getting land surveying projects completed promptly. Most of the public believes that the surveyor does all the work in the field and does not realize that more people are involved in producing an accurate survey. With more technicians out in the field, more projects can be done at one time and reviewed by a single professional land surveyor. This, of course, is a definite force multiplier. There is a belief by many members of the surveying community that this is more of an issue than trying to increase the number of licensees.

Bob Herbert is the Chief Investigator for the Alabama Board in Professional Engineers and Land Surveyors. Bob also sits on the Law Enforcement Committee with NCEES. Bob has over 36 years of investigative experience and has served the Board for over 15 years.

# NOTES FROM ENFORCEMENT

# (cont.)

What can be done to increase the number of technicians? Here are a few ideas that came from the discussions I was present for.

- 1. Members of the profession could go out into the community and educate youth clubs and associations such as FFA, 4-H, and others, about what a PLS does. They could educate these groups on the equipment and the future of where the profession is going. What education and activities throughout their educational years would assist them in a career in surveying?
- 2. Professionals reach out to middle schools as well as high schools in their area to provide information to students during "Career Days" to help educate and bring awareness to the profession. It also brings attention to the potential wages available for this employable profession.
- 3. Conduct outreach efforts to create awareness of the certification course for technicians that are sponsored by the Alabama Society of Professional Land Surveyors (ASPLS).
- 4. An associate degree program in the community college system that would help create a foundation for surveying technicians.

As you can see there is no clear path to reach the future generation of surveying technicians or for that matter future land surveyors. It will certainly take extra effort by the profession to bring information about this great career path to the forefront of the younger generation. The profession will need to work hard to bring in quality "players" to make their team and their profession successful in the field.

### COMPLAINTS RECEIVED

### FY2023 Stats are as of December 2022.

	Professional Engineers	Professional Land Surveyors	Unlicensed Engineering	Unlicensed Surveying	Total
FY2023	3	2	3	0	8
FY2022	16	12	23	2	53
FY2021	11	6	14	2	33
FY2020	8	9	10	2	29
FY2019	15	5	11	0	31

# **ENFORCEMENT NEWS**

### **<u>Curtis Pierce (PLS 16175)</u>** - Case #2022-25

The investigation determined PLS Curtis Pierce provided a sealed survey that contained errors. A Board Technical Advisor (BTA) reviewed the survey information and found Mr. Curtis provided a survey that failed to indicate the date of the field survey; the type of survey; the basis of bearing; differences between record bearing and distances; surveyed bearings and distances were not shown; front property lines were shown as chords whereas the front property lines were shown as curves; the 10' utility easement was not shown, and property corners were not displayed as being found or set.

Mr. Curtis agreed to a consent order that required the following:

- He will pay a \$4,000 fine to the Board.
- He must upload a list of his surveying jobs to the Board months for a period of 2
  years. The projects from the list will be selected at random to be reviewed for
  compliance with the Standards of Practice for Land Surveying in the State of
  Alabama
- He must complete a course on the Standards of Practice for Land Surveying in the State of Alabama.
- The Consent Order and Final Order will be a public record.

### COMPLAINTS RESOLVED

### FY2023 Stats are as of December 2022.

	Professional	Professional	Unlicensed	Unlicensed	Total
	Engineers	Land Surveyors	Engineering	Surveying	
FY2023	1	0	3	0	4
FY2022	14	8	16	3	41
FY2021	8	9	10	1	28
FY2020	11	8	10	2	31
FY2019	20	5	17	2	44

# ENFORCEMENT NEWS (cont.)

### BBD Engineering & Design Firm, LLC (ECA50483) - Case #2022-26

The investigation determined BBD Engineering & Design Firm was contracted to provide engineering services for the erection of a carport for a project in Alabama. The information for the firm was posted on the design plans for the project, yet the firm did not possess a certificate of authorization to provide engineering services in Alabama.

The firm's PE, Kent Bice, originally believed the firm did not need a certificate of authorization as he believed he could just seal the design plans as a sole proprietor. After discussions with the Board's investigator and reviewing the law and code he realized he had misunderstood the requirements and should have obtained a certificate of authorization for his firm to offer the engineering services for the project.

BBD Engineering was issued a certificate of authorization on June 28, 2022.

The firm agreed to a consent order that required the following:

- Will pay a \$1,000 civil penalty to the General Fund.
- Will pay \$60 to Board for cost of investigation.
- The Consent Order and Final Order will be a public record.

### **Kent Bice (PE23437) - Case #2022-27**

The investigation determined Kent Bice and his firm were contracted to provide engineering services for a project located in Alabama. Mr. Bice sealed design plans that contained mistakes and contradicting information that should not have been included on the design plans. Mr. Bice also failed to date the plans.

Mr. Bice apologized for the errors in the design plans and advised this is not typical of how he does business. Mr. Bice agreed to a consent order that required the following:

- He will pay a \$2,500 fine to the Board.
- He will pay \$60 to the Board for cost of investigation.
- The Consent Order and Final Order will be a public record.

# WE NEED YOUR HELP!

BELS is always looking for professional engineers and land surveyors to assist us as technical advisors. An Alabama licensed Professional Engineer or Surveyor who lives in Alabama may be eligible. That person will volunteer to assist the Board when a complaint is filed that concerns the competency of a professional engineer or land surveyor. They will also look for any failure to adhere to the acceptable standards of practice regarding engineering or surveying by providing a report to the Board.

# What is Involved to be a Board Technical Advisor?

The Technical Advisor is initially contacted to determine if they will have time to review the documents. Usually the Board requests a report to be provided within 15-30 days. We understand the amount of time necessary to provide an examination of documents submitted for review and realize the burden it may place on a technical advisor. The Board limits the amount of cases assigned to the Advisor per year and selects the Advisor from a different geographical area from the respondent in the case.

Board Technical Advisors do not get compensated. However, the benefit of not paying for a technical advisor is that it shows in a hearing that the technical advisor is independent of the Board when providing their opinion.

If you are a Board Technical Advisor and you are selected to review a complaint that is under investigation, you will receive professional development hours for your work on that case.

Per our Administrative Code, credit for service to the Board as a volunteer Technical Advisor may be earned on an hourly basis not to exceed 10 PDH per year.

If this interest you, please contact the BELS office to discuss how to apply.



We are increasing our engagement on social media. By using your camera on your phone, scan the below code to have direct access to our Facebook page.



### 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 discipline for those individuals or entities who violate the applicable laws or rules.

