

# **News** from Delaware's Licensing Council for Professional Engineers

Winter 2009



# PRESIDENT'S MESSAGE By Frank A. Newton

Last week at the annual appreciation ceremony for DAPE Council and Committee members, I

had the pleasure of presenting the 2009 Distinguished Service Award to Jack Billingsley, P.E. Jack has served the Delaware Association of Professional Engineers for many years and in many capacities including being instrumental in drafting an passing the legislation that created DAPE in its form as a private entity regulating the licensing of Professional Engineers. He has served the citizens of the State of Delaware and the profession of engineering in an exemplary manner. I cannot find a committee or office he has not served on during his time with DAPE. He continues to serve on the Government Affairs and Bylaws Committee, even though his term on Council expired in August, 2008.

DAPE is served by volunteers, both on Council and on its committees. These volunteers deserve a great deal of appreciation for their dedicated work. The committee volunteers are the ones that do the real pick and shovel work on the Council and make life for the Council much more efficient. I don't believe there is any higher calling than to serve the public as a volunteer.

DAPE's legislative agenda for this session of the General Assembly is quite modest. We principally want to change our law to define more accurately the role of experience in licensing engineers that have received their education from non-ABET accredited programs. The Law Enforcement/Ethics Committee is working on a definition of "standard of care" to help in evaluating a lack of care in the practice of engineering. Last session's successful agenda was very important in that

DAPE was provided the authority to pursue unlicensed practice. Immediate Past President Guy Marcozzi and the Council deserve a great deal of credit for ushering this through the legislative process.

NCEES is hosting the biennial conference for Presidents and Executive Directors of each of the member boards. Our Executive Director Peggy Abshagen and I will be attending this informative gathering in Atlanta next month to keep current with national issues.

NCEES has awarded an appointment for me to serve on the national Finance Committee. I'm personally looking forward to both the NCEES events and will keep you posted.

# <u>MESSAGE FROM THE EXECUTIVE</u> <u>DIRECTOR</u> By Peggy Abshagen

**Change** seems to be **the** buzzword these days. Not always welcomed, but typically needed. And there are changes coming to DAPE.

With the revision of our law on July 3, 2008, PE examinees are now limited to four attempts at the Principles & Practice of Engineering examination, before remedial education or experience is required. Specifically, the law states:

"Applicants with four failures of the (PE) examination may only apply to retake the examination after completing the following;"

Presenting three new references and submitting documentation that demonstrates the applicant has acquired additional engineering education or experience to have better prepared the applicant to pass the examination.

Why was this **change** necessary? Most importantly to protect the integrity of the exam – exam security. Prior to this law revision, many applicants have been exposed to the exam questions multiple times. This does not help enhance exam security. This does not fairly gauge the minimum competence of an engineer. The NCEES Model Rules provide three opportunities for a candidate to take the PE exam before further reapplication or other remedies are necessary.

How does this affect the examinee pool? Effective with the October, 2008 exam administration, 39% of Delaware's failed candidates are now required to meet additional education and experience requirements prior to further exam attempts. We'll see how this statistic plays out in future exam administrations.

**Change** #2: Speaking of exams, for the first time in more than 30 years, our exams will not be administered at the University of Delaware. I am a believer of fate, and we had for many years considered an alternate exam site, but time and facility limitations kept us at the University. Well, now we have identified a new exam location and we are looking forward to the use of the Conectiv Conference Center facility in 2009. With the assistance of DAPE member Glenn Davis, P.E., we were able to procure this site for 2009. Thank you, Glenn!

We are working on other **changes** as well, and will keep you posted on their status!

Engineering Practice Problems
That Just Bug Me

By Robert A. Chagnon, P.E., SECB

As a long standing active member of DAPE's Law Enforcement and Ethics Committee (LE&E), I've come to recognize a handful of engineering practice issues that never seem to go away. Here are just a few that the Committee has to constantly deal with.

Before I begin, let me clarify what I refer to as "the LE&E Committee". It is currently made up of fifteen (15) Delaware PE's (volunteers) that quite regularly show up for its monthly work sessions that begin at

4:00 in the afternoon and often go on until 8:00 or so, depending on how much discussion is needed to reach some accord on critical cases. Its make-up currently includes five civil engineering/surveying experts, two structural engineers, metallurgist, a environmentalist, a life safety/fire code expert, two geotechnical engineers, an electrical engineer, and a chemical engineer, give or take a few other disciplines. It is charged with reviewing and investigating all of the complaints that come in involving potential violation to our laws governing over the practice of engineering. Its recommendations must comply with the legal advice provided by the Deputy Attorney General representative that is present for every work session before they are forwarded to the DAPE Council for further action.

**Standard of Care:** It generally is thought to be that level of engineering service that would normally be provided by most all others in the profession that provide similar services under the same locale and under the same or very similar circumstances. It does not appear in our law. Is it intended to be covered by "gross negligence", "incompetence" or "misconduct", all of which are in our law? The problem is that "gross negligence" is extremely difficult to prove and must be backed by numerous similar violations, the evidence of which may be difficult, costly and too time-consuming to obtain. As for "incompetence", an individual may not have done completely what they should have done, but that doesn't prove that they're incompetent. "Misconduct" implies that the individual failed to abide by one or more of our laws that particularly pertain to its "Code of Ethics". But, if "standard of care" is not covered in our law, how could we make that apply?

**Providing Services Not Competent To Perform:** 

Our law states that "the engineer shall undertake to perform engineering only when qualified by education or experience in the areas of professional engineering involved". However, this statement is very subjective. Many PE's out there believe that their educational background in the basic engineering sciences and engineering principles qualifies then to pick up a book and figure out how to do whatever they are in need of doing. Many get by with that if the results of what they've done have been properly interpreted but not if errors and/or omissions are involved. This most frequently occurs when someone other than a structural engineer gets involved with passing judgment on some structural issues. We've had occasions where such has occurred involving mechanical engineers and chemical engineers. However, many such cases have shown that the mechanical engineer involved had extensive background in plant engineering. The same has been found to apply to chemical engineers with backgrounds

in chemical plant design and process equipment design. That gets them off the hook insofar as their involvement with a specific structural issue, but may not qualify them to practice structural engineering as a primary discipline.

The latter statement may even also apply to civil engineers, unless their course of study focused on a structural engineering option. To do so, one would have to have been exposed to the study of structural analysis, steel design, concrete design, timber design, dynamic behavior of structures, foundation design and soil mechanics, and reinforced masonry design. This list comes under the recommendation of NCSEA, the National Council of Structural Engineers Association. Unfortunately, many colleges that issue BS degrees in civil engineering do not offer all of the courses listed, even as electives. If your education and working career has not evolved around all of these subject matters, you should not be practicing structural engineering.

In Responsible Charge: To practice engineering in Delaware, a corporation or partnership must have a Certificate of Authorization (C of A), which must designate an officer of the firm or an employee that is in responsible charge of the engineering activities and engineering decisions of the firm involved. Obviously, the individual involved must be a Delaware PE. There may not appear to be anything wrong with this requirement, but what constitutes an "officer" or "employee". Is it someone that's on board eight hours a day, five days a week or are we talking someone that is simply brought in when needed. By "when needed", I'm referring to when needed to seal, sign and date an engineering product for record. I consider this to be a real loose piece of change in our law. We've had situations where one single engineer, designated as being in responsible charge, had been so identified for two and three different firms.

Expert Testimony: Does an engineer providing expert testimony involving engineering matters in a court of law have to be a PE? Most states say no, as does Delaware. They do so on the premise that the courts need testimony from individuals of scientific, technical, or other specialized knowledge that will assist the jury in understanding the evidence or determining a fact in issue. Therefore, the judge is the one who decides whether or not a proposed witness is qualified by knowledge, skill, experience, training, or education, which is presented in court for his or her assessment. However, having experienced this on several occasions, it's not the judge that decides but the opposing legal team involved. If they accept the individual's credentials, it's a done deal. At times however, the legal team accepts the individual as an

"expert" based on the advance knowledge that the individual's intended testimony (determined through prior depositions) is in error. At times, some of these non-PE experts are sought after because they are smoking guns. They'll say and do whatever it is you want said and done.

Providing expert testimony on engineering matters, in my opinion, constitutes the practice of engineering. But, there should be a distinction made between a non PE expert sought after for his or her specialized expertise, versus one that openly offers his or her services as an on-going business operation. The latter should definitely be a PE in the state that the individual testifies in.

For readers that managed to get this far into my article, thanks for the opportunity for me to get this stuff off my chest.

# The Fact That A Building Permit Was Issued Based On Your Design Is Not Proof That Your Design Was In Code Compliance

Recently, the Delaware Supreme Court brought an end to an eight-year battle over the unoccupied hotel on Airport Road and Interstate 95. It overturned a jury verdict against New Castle County. It ruled that, despite the developer's claims against New Castle County and their having issued a building permit based on their submitted plans; the county has no legal obligation to help developers in complying with the specifics related to its zoning regulations. As previously stated in several past DAPE newsletters, the responsibility of seeing to it your designs meet building code compliances are the individuals in responsible charge of the designs. DO NOT LOOK FOR THE BUILDNG OFFICIALS TO EDUCATE YOU ON WHAT CRITERIA YOUR DESIGNS NEED TO MEET.

## **UPDATE:**

# Special License Plate For Delaware PE's



## **Is Anyone Else Interested?**

Still looking for 100 interested participants in order to meet the Division of Motor Vehicle requirement of 200 applications for our special license plates. We have more than 1100 members that reside in Delaware and are eligible to be among this group. Contact the DAPE office today!

(Here's the background info:)

As a Delaware non-profit organization, DAPE can qualify for special registration plates for its members. To do so, DAPE must provide a minimum of 200 applications for such before the Division of Motor Vehicles can consider issuing a special license plate for Delaware Professional Engineers. A one-time fee of \$10.00 is charged for each special plate. That fee is to be paid for by the individual that will be receiving the plate. For "special" license plates, as compared to "vanity plates", yearly license renewal costs are the same as for conventional license renewals. Special plates are limited to passenger vehicles and trucks rated at 3/4-ton capacity or smaller. The vehicle must also have a current Delaware registration.

If interested, please call, e-mail or fax Peggy Abshagen at DAPE and provide her with your name, your PE license number and how to best get back to you with a follow-up application form and \$10.00 fee submittal. We need a minimum of 200 interested applicants to pull this off so please get to Peggy ASAP, if interested. DAPE's phone number is 302/368-6708. Fax number is 302-368-6710 and Peggy's e-mail address is peggy@dape.org.

#### **CLARIFICATION:**

In the previous issue of the DAPE News, a listing of firms that permitted their Certificates of Authorization to become delinquent included a listing for Larson Engineering, Inc. Our records include two firms with identical names. One is located here in Newark, Delaware, and the other in Minnesota. Although the firms were listed by name and Certificate of Authorization number, the local firm which was not delinquent was being confused with the firm that was delinquent. Our apologies. Our records now indicate Larson Engineering, Inc. (DE) and Larson Engineering, Inc. (DE) is in good standing.



<u>THE VALUES OF ON-THE-JOB</u>

<u>TRAINING</u>

By Gregory G. Pawlowski, P.E.

Each newsletter, my colleague Bob Chagnon and I write articles reflecting our specific backgrounds and interests. Bob, being a long

time structural engineer, discusses pole buildings, plan stamping, and plan deficiencies; in short, he polices the existing pool of engineers. My long-standing work in the education field prompts me to focus my writing on how to increase our engineering pool and improve their abilities within industry. This article illustrates the correlation between on-the-job experience and a student's comprehension of engineering principles. We've all heard the truism concerning knowledge gained through osmosis. Although I have no scientific evidence to backup my claim, there definitely seems to be a lost of truth to it as demonstrated by my own students over the years.

Let me begin with my present semester teaching Soils & Foundations. One of my 6 students has consistently scored 90% or better on all tests and quizzes through the semester. Some may state this student simply has a better understanding of the material. Although that may be true, I believe his position as a Civil CAD designer has not only exposed him to the course material, but also given him exposure to important facets of the engineering field. These traits include the necessity to perform neat and detailed work for his employer. This translates into both conscious and subconscious efforts to check and recheck his work for errors. His boss has also probably instilled a sense of order and discipline in his work day leading my student

to be more focused on his duties. And it goes without saying that his number crunching abilities are constantly honed while his spatial relationship perception is on par with most engineers. These last two traits are probably the ones I observe the greatest deficiency in engineer candidates I teach. Having to balance a day filled with full-time work and part-time schooling, his time management skills are far better than those students whose only concern is attending classes.

This last trait hits a personal chord with me. While focusing exclusively on engineering studies my first year of college, I squandered precious time because I felt there was always tomorrow. It should be no surprise that my grades were less than lackluster. Later when I worked in various sub-professional jobs, took evening classes immediately after work 4 days a week, and did my homework sometime in between, my grades pulled up to a 3.25 GPA. The fact is, when I was forced to manage my time, I did just that and learned to focus on the material when needed. Once again my positions as construction inspector, instrument man, and materials technician gave me exposure to valuable engineering principles which I lean on to this day.

Going back to the subject at hand, my Soils & Foundation student is by no means an isolated incident. A student working in a sub-professional capacity for industry can be spotted a mile away in my class. So what can the engineering community do to promote my apparent correlation? When opportunities present themselves to hire interns or part-time staff, don't hesitate. We all know most interns are given more mundane tasks and they should expect this. At the same time offer more challenging duties shortly after they quickly master the simple ones. Be patient when they take longer to perform the harder tasks or require much guidance when compared to a seasoned staff engineer. In fact, avoid comparing them to anyone in your office. You may not fully reap the fruits of your labor but someone in our engineering community will. I also don't believe employers realize the impact their work experience has on the students as I do. At the beginning of the semester I inquire as to which students are currently working in the construction or engineering industry. Those that are always love to share their experiences with me and the class. Even bad experiences prove valuable since they illustrate what not to do. The bottom line is that any exposure is far better than no exposure.

## 2009 DISTINGUISHED SERVICE AWARD

For the third year, the President of DAPE has presented to an outstanding member of DAPE, a Distinguished Service Award. This award typically goes to a committee member who has served DAPE and the engineering community well.

On January 14, 2009, the legendary former Council member, **J.G.S.** "**Jack" Billingsley, P.E.** was recognized for his many, many contributions to the engineering profession, at a dinner held in his honor at the Newark Country Club.

Canadian military flight lieutenant, teacher, consulting engineer, State Representative, Engineer of the Year, longest serving Council member, ABET evaluator, NCEES and NSPE committee member, life member of NSPE, Rotarian, these are just some of the many titles held by this year's award recipient.



Billingsley was instrumental in passage of the current engineering law in Delaware which provides for the self-regulation of the engineering profession in Delaware in 1972. We are the only engineering board in the country that is totally self-regulated.

Previous recipients of this award are the esteemed **Eugene B. Snell, P.E.** (the first recipient), followed by the highly-respected **Robert A. Chagnon, P.E.** 

# **CONGRATULATIONS!**

#### **NEW PROFESSIONAL ENGINEERS**

The results are in and Delaware is adding 43 new licensees to its ranks, after their successful passage of the October 24, 2008 Principles & Practice of Engineering examination. Licensure will be approved at the Board's January 14, 2009 meeting. New this year, a certificate presentation ceremony will be held at the 2009 Engineers' Week Banquet. New licensees are:

Akinsola, Abayomi O.	#13370
Al Salhani, Chadi	#15161
Ali, Kasim K.	#12989
Animashaun, Oluwatoyin	#15878
Batman, Paul	#14513
Beeler, Christopher	#15307
Bernardo, Ray	#14467

Bhayde, Sasmit	#15869
Bibaoui, Ramzy	#15095
Booker, Taron	#15820
Carlin, Joseph	#15782
Carlin, Timothy	#15243
Chaudhri, Naveed T.	#13690
Coleman, Thomas	#15826
Das, Prithwi	#15068
Delehanty, Michelle	#15508
Eitelman, Douglas	#15860
Galbraith, Shawn	#14441
Hassett, Timothy	#9437
Hazel, Harrington	#14069
James, Ernest	#15636
LeBoon, Megan	#15817
Leso, Lawrence	#14049
Lichtenstein, Matthew	#15556
Macioce, Robert	#14908
McCullar, Nicole	#14679
McGillian, Joseph	#15615
Michael, Odette	#10827
Mullen, Leate	#15881
Nimako-Boateng, Christian	#15456
Oliver, James	#15219
Patel, Rajendra	#14897
Quader, Md	#15299
Retzlaff, Erik	#15497
Sayed, Hesham	#15606
Scharf, Joseph	#15513
Schlosser, Brian	#15756
Sharp, Gregory	#15222
Sheta, Nasr	#15885
Singh, Elizabeth	#15798
Stynchula, Timothy	#15871
Vacca, Stephen	#15891
Wang, Weiqiao	#15288
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# Congratulations!!!

# **NEW ENGINEER INTERNS**

The October 25, 2008 Fundamentals of Engineering exam produced 144 new Engineer Interns in Delaware:

Adams, Marcus Adebanjo, Abiola Allmond, Jacquelyn Amis, Drew Artes, John Barranger, Randal Baseman, Gregory Becraft, Ryan Bergbauer, Thomas

Berrodin, Steven Betty, Michelle Blowers, Craig Boddicker, Mathias Boland, Thomas Borsello, Vincent Borthwick, Mark Bowen, Andrew Cannon, LaMont Canzanella, Rino Ciappi, Raquel Clare, Mark Clevenger, Kyle D'Ortone, Steven Daviau, Cory Day, Melissa DeBenedictis, Anthony DeMarco, Alicia Denny, Kyle Desmond, Jill Dilullo, Mark Dougherty, Chelsea Esslinger, Paul Finkle, Sarah Fitzgerald, Amy Fortunato, Bernard France, Brandon Giuliano, Michael Gunavante, Santosh Gust, Kasey Hanna, Jeffrey Harbison, Michael Henry, John Hodose, Stephen Hood, Matthew Ippolito, Thomas Johnson, Matthew Jones, Blair Jovani, Holtisa Karas, Stephanie Karlkvist, Erik Keenan, Patrick King, Martha Klinger, Matthew Lehr, Dentin Levy, David Lilu, Ronit Loberto, Nicholas Lose, John McKeown, Steven McNeill, Corbin McNicoll, Matthew Melvin, Christine Merlie, Thomas Mihok, Amanda Miller, Brynn Miller, Sean

Miner, Thomas Mintel, Thomas Mitchell, Charles Moncrief, David Montone, Francis Morgan, William Morrison, Jordan Murakowski, Maciej Natale, Steven Neary, Matthew Neary, Ryan Nicholson, Shawn Nielsen, Benjamin O'Brien, Andrew O'Neill, Sarah Pafumi, Stephen Parisi, Matthew Park, Anthony Parkhurst, Matthew Patel, Nehal Petfield, Stephen Picariello, Brian Poggi, Melissa Polanin, Gregory Poterjoy, Christopher Puzio, Glenn Reaves Hawkes, Jonathan Reilly, Timothy Rice, Meredith Richards, Mark Richardson, Stuart Rivers, Marie Robinson, Lauren Rocke, Curtis Rockwell, Jeffrey Ross, Chase Roux, David-Michael Sagett, Samantha Sanders, Skip Sayed, Hesham Schiavone, Robert Schoch, Kevin Sedidhhaghighat, Amir Senespleda, Yamilet Seymour, Peter Shurina, Dan Skorupa, Valerie Slavin, Esa Smith, Owen Stephens, Jonathan Sturgis, Michael Svenson, Heather Swartout, Brandon Takahashi, Michael Treisner, Joshua Varghese, Arun

Vay, Kailly

Voorhees, Jacob Walker, Steven Walther, Joseph Wang, Stefany Warren, Kyle Watson, Kyle Wells, Howard Whitty, Jeffray Yoshii, Shigemitsu Young, Graham Zhu, Fan Zipay, Nathan

We encourage all Engineer Interns to pursue careers in the engineering profession and ultimately to seek licensure. Maintain a record of your engineering work history to include a description of your engineering tasks, supervisor, and dates of employment. This is necessary for future validation of your engineering employment when you have obtained the required years of experience for application for the Principles & Practice of Engineering examination.

# Congratulations!!!

# <u>HISTORICAL SNAPSHOTS:</u>

# <u>FIRST FIRM TO BE ISSUED CERTIFICATE OF</u> <u>AUTHORIZATION</u>

Our roster of Certificates of Authorization (C/A) today totals 858 firms who are legally eligible to offer or provide engineering services in the State of Delaware.

The first C/A was issued to The Austin Company of Cleveland, Ohio in 1972. C/A #1 has been placed in an Inactive status.

The oldest active C/A holder is **Whitman, Requardt & Associates** of Baltimore, MD, issued C/A #2 on 11/3/72, followed by C/A #4 issued on 12/4/72 to **Carew Associates, Inc.** of New Castle, Delaware.

Some 3,037 C/A's later, the most recent C/A issued is #3039 to **Stearns & Wheler, Inc.** of Cazenovia, New York on 12/10/2008.

# **GRACIAS, DANKE, MERCI, . . . THANKS!**

Whenever needed, we have volunteers that are happy to assist in our endeavors. It certainly makes our job easier.

Thanks to all those DAPE members that answer the call from us when needed. We sincerely appreciate your time and efforts!

**Jack Billingsley** -- Distinguished Service award

**Bob Chagnon** -- Newsletter articles

**Glenn Davis** -- Procuring new exam site

**Jim Glancey** -- Middletown High School career fair -- Middletown High School career fair John Lin

Greg Pawlowski -- Newsletter articles

Tony Raia -- Middletown High School career fair **Mike Siwek** -- Middletown High School career fair

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Alfred S. DeLuca, P.E., Electrical Eng.	8/31/11
J. Paul Jones, P.E., "Other" Eng.	8/31/09
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Thomas P. McGonigle, Esq.—NCC—Apptd.	10/26/11
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Gregory G. Pawlowski, P.E., Civil Engineering	8/31/10
Vincent Robertson, Esq.—Sussex Co.—Apptd.	9/27/12
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