



DAPE

NEWS

News from Delaware's Licensing Council for Professional Engineers

Spring 2008



PRESIDENT'S MESSAGE

By Guy F. Marcozzi, P.E.

The last few months have been busy for Council, but we do not have a whole lot to show for our efforts yet. Hopefully, by the next issue we will be able to announce some more tangible progress. As members of DAPE, I thought some of you may be interested to see what Council is presently working on. Aside from the normal business of Council – processing applicants, including examinations, and investigating disciplinary cases, the 3 more significant items of recent Council business have included advancing new legislation, renegotiating our contract with the national examination organization NCEES and revisiting our fee schedules for exams.

Our primary goal in proposing new legislation is to provide DAPE with authority over unlicensed practice. When reviewing the breadth of complaints or incidents of improper design, we believe that the greatest threat to the health and welfare of the public is not from licensed engineers, who have at least some technical training and level of competency, but rather from unlicensed practitioners. Current law does not vest DAPE with any authority over such problems, so when a case comes in we can investigate it, but our only recourse is to turn our findings over to the Delaware Attorney General's office to prosecute it. Because of the overwhelming caseload at the AG office, and the fact that such offenses are not prioritized as highly as other offenses, these cases have not been prosecuted. Examples of unlicensed practice may include contractors, engineers licensed in other states (frequently practicing outside their discipline) and other non-engineering professionals doing engineering work, which is often questionable at best. We have numerous examples of such unlicensed practice where the public is put at risk and there is no recourse for us to stop it.

While we are preparing the new legislation, Council made the decision to use this opportunity to clean up our existing law. We want to better define "responsible charge," because this definition is often at the heart of investigating plan stamping allegations. Being against plan stamping seems simple enough until you have to bear the burden of proof, so a tighter definition will help in prosecutions. We have also found that convening an entire Council for hearings, often taking a full work day, is placing a tough burden on Council members individually and because some cannot make this commitment, we have had problems convening a quorum in a prompt manner. As a result, we are proposing to revise the law to allow hearings to be convened with a committee of council members. Again, on the surface this seems reasonable, but Council had to work out a number of details to assure that this process will be fair to all involved and would not go outside the intent of the original law.

We now have the unanimous support of Council for the proposed law change. The bill SB234 has been introduced in the Senate as of this writing. We urge you to contact your local legislators and express your support for this bill.

With regard to NCEES contract negotiations, some background on exams is offered for your consideration. Professional registration in Delaware is very different from all other states because we are the only Board that is self-regulated - that is, the majority of our board is elected by the membership. We have strived to be good stewards of the faith that the Delaware Legislature has placed in us. Foremost of our obligation is to protect the public. We believe the public is best served by having a large pool of qualified professionals, so we actively guard against protectionism and do not want to create unnecessary bureaucratic requirements for registration, while being rigorous in assuring qualification standards are met.

As such we want to keep our fees reasonable, particularly those for exams. Presently, we have a relatively low examination and registration fees compared to other states. We are able to do this in part because we administer our own exams with a largely volunteer workforce made up of our membership. To all those that volunteer, please accept our thanks.

Should an exam be breached for whatever reason, there is the potential for significant financial damages, as this is a national exam and the exam integrity must be protected. NCEES offers a service through a for-profit subsidiary to administer these exams. In return they will indemnify our Board should there be an exam breach. However, the use of this outside service will significantly increase our costs and therefore the exam fees. These issues are some of our key discussion points in our NCEES contract negotiation. We are looking to continue our own administration of the exams, but want to protect DAPE from potential damages should such a breach occur. We also would like to maintain the sovereignty of DAPE in regulating engineering in Delaware, including maintaining control of exam results.

Exam fees will be going up shortly because our cost for the exams from NCCEES is going up. As such, we view this time as appropriate to revisit our fees for the exams. While we want to keep exams fees low to encourage licensure, we do not necessarily want to subsidize the exam fees from other revenue streams of Council, such as biennial dues. How you look at this issue, in part depends on how you account for the costs. Suffice it to say, this topic has lead to lively discussion at Council. We will strive to keep you apprised, but welcome your opinion on this topic.

How is the DAPE Council doing? Please take time to send us your comments regarding your perceptions of how DAPE is functioning. Email us at office@dape.org.

***MESSAGE FROM THE EXECUTIVE
DIRECTOR
By Peggy Abshagen***

2008: a leap year; the year of presidential elections; and the year for renewing your PE license!

In the very near future, we will be contacting the DAPE membership to renew licenses for the period **7/1/2008 – 6/30/2010**. For those that prefer snail mail, renewal notices will be sent. The bulk of our membership will receive notification via email. You will be directed to visit

www.dape.org to both renew your license and download your wallet card. This biennial renewal process has been significantly streamlined through the electronic renewal process. An eternity ago we actually mailed more than 6,000 renewal notices and received 6,000 check payments. We have reduced this mailing to about 8% of licensees, thereby, providing DAPE members the opportunity to complete the renewal process at their convenience (24/7), using credit cards, and updating our roster instantaneously. From our perspective, this has drastically reduced copying, mailing costs, and staff time.

We are growing! Our ranks now number about 6600 and counting. Add to this more than 850 Certificate of Authorization holders, and you appreciate the need for an efficient renewal system.

So, you say, what is the staff doing with all the free time now? We are processing more applications than ever both for examination and comity/reciprocity. We meticulously plan exam administrations down to who sits where. We are carefully tracking publications and records to insure that all individuals and/or firms that are offering or providing engineering services in the state are appropriately licensed. We are participating in licensure presentations with high school students, juniors and seniors at the University, students at Delaware Technical & Community College, employees of DelDOT, and other organizations upon request. And a few dozen other tasks at any given time.

Please renew your license promptly. Unlicensed practice is a serious violation and one that will be prosecuted. Renewal notices will be emailed or mailed to the address of record. Confirm your contact information at www.dape.org – PE Roster. We want to include you among our ranks!

WHAT DOES PLAN STAMPING MEAN TO YOU?

In speaking with numerous licensees, it has been discovered that plan stamping does not have the same meaning to everyone.

So our question to the membership:

What does plan stamping mean to you?

Email your opinion to office@dape.org. We'll enlighten you with the responses!

**YOUR FIRM'S CERTIFICATE OF AUTHORIZATION
EXPIRES ON JUNE 30, 2008!**

Renewal information for the 850+ firms that currently hold Certificates of Authorization have been mailed.

Delaware Code Title 24 Chapter 28 §2821 requires that all engineering corporations, partnerships or sole proprietorships not practicing under the licensee's name are required to obtain a Certificate of Authorization.

Likewise, individuals or firms offering or advertising in Delaware are required to obtain Certificates of Authorization. A firm obtaining a Delaware business license from the Delaware Division of Revenue is offering/advertising engineering services. In 2007 hundreds of enforcement files were opened on firms that were issued a business license in the Professional Services – Engineering category, without having the appropriate Certificate of Authorization. In 2008, this trend is continuing. Some firms were assigned this particular category in error. Others just neglected to comply with the law.

The bottom line is if your firm is providing engineering services, your firm advertises engineering services in Delaware, your firm is bidding on engineering services, your firm has been issued a business license in the engineering category, or your firm uses the term "Engineer, Engineering, or Engineered" in its name, a Certificate of Authorization is legally required.

If a Certificate of Authorization has been issued to your firm, it will expire on **June 30, 2008** and requires renewal. Practicing without a valid Certificate of Authorization is construed as the unlicensed practice of engineering and will be prosecuted to the fullest extent of the law!



**HEY YOU ENGINEERS OUT THERE:
WHERE ARE YOU WHEN YOU'RE
NEEDED?**

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

The task of selling engineering as a career choice really begins down at the elementary school level, if not lower. That's been a proven fact for years. The medical profession does it real well with doctor's kits for toddlers. Of course, all the medical-related TV shows helps a great

deal also. How do we engineer's do it? Unfortunately, we don't or very few of us do.

This past fall season, I had an unusual but delightful experience mentoring a fourth and fifth grade group of youngsters at their first opportunity to participate in the local Lego League competition. Lego League is an international program where schools purchase Lego kits with directions for putting together computer controlled robots that can be programmed to pace through the performance of a variety of given tasks. The teams that do it the best and the fastest win. All of the work involved has to be done strictly by the students. The mentor's job is simply to encourage the students along and perhaps ask some strategic questions that may lead to putting the students onto the right path to success.

I had forgotten how short an attention span that fourth and fifth graders had. My greatest challenge was officiating their bopping each other bouts that went on all of the time. However, I did get the opportunity to explain some of the engineering principles that were either working in their favor or against them at times. Simple things like friction, momentum, centrifugal force to name a few. I once attempted to explain the relationship of how the number of rotations of their robot's wheels mathematically related to how far the robot will move. I simplified my example by using 3 times the diameter of a wheel with an explanation that 3 was a rounded off equivalent to Pi, which actually was 3.1416. One of the fifth graders corrected me by announcing that Pi was an infinite number and proceeded to rattle off Pi to about 10 or 12 places. I did this twice a week for about two hours at each session and went home totally exhausted. By the way, my team did make it to the local championship but didn't quite make it to the top. But a valiant effort it was and I just can't wait to see how they do next year.

My big disappointment was that I totally struck out in my attempt at getting other engineers, engineering companies and engineering organizations involved in one way or another. I personally contacted a total of 19 combinations of the latter and only succeeded in getting 4 companies (and one of those was mine) involved with contributing to the cost of these Lego kits for a school to absorb. However, that was extremely beneficial for that school and greatly appreciated.

Lego League is not the only show in town aimed at showing how a career in science and engineering can be both fun and rewarding. There's the science component portion of "Odyssey of the Mind" program where Delaware's Sussex Technical High of Georgetown recently took first place in their division in the balsa-wood-and-glue "Tee Structure" event. The Delaware Science Olympiad is another one. Here battery-driven model cars are fashioned out of plastic soda bottles to compete in

various categories. A mother in Hockessin got interested in the Olympiad back when her son was in middle school. He went on to major in physics and later became an electrical engineer. We've all heard of the "Egg Drop" events held at all levels in school and what about the "Concrete Canoe" contest that several of our local colleges participate in. The point I'm trying to make here is that most of these events are put on by non-engineer related groups and mentored by non-engineers. Something's got to be wrong. **Where are you guys when you're needed?**



ENGINEERING SHORTAGE?
By Gregory G. Pawlowski, P.E.

When I originally set out to write this article, my mind was set on the idea that America was on a collision course towards engineering extinction. Why was my mind set? To begin with, as humans we all have a tendency for drawing an opinion based on loose facts and doing whatever it takes to justify our point of view. Fortunately, my engineering training kicks in, and I decided to do a little research of my own on whether there really will be a future or qualified engineers.

Having been in the education field for over ten years, I saw a serious scarcity of students interested in pursuing engineering as a career. Most lacked the necessary math and science skills, and spent a good portion of their time playing catch up. Engineering also seems to have lost its attraction to most high school students, who no longer felt our degree was a ticket to a good job in a secure field. For these reasons, I was convinced a shortage was eminent. To combat this fate, I have been standing on soap boxes at middle and high schools each year, preaching the good word of engineering.

In spite of my efforts to advertise the virtues of our field, I felt my gears were confirmed every time I saw an article that confirmed the shortage was coming. One such article was picked up in *USA Today* and written by two reporters from the *Cincinnati Enquirer*. They referred to the 2006-07 Bureau of Labor Statistics that claimed that the field of civil engineering would grow 9% to 17% by 2014. Then, they quoted the president of ASCE, who asserted that an additional 10% to 15% may be needed to rebuild America's ailing infrastructure. To add insult to injury, I also learned from another article that some engineering firms are going so far as to entice college students with full scholarships in exchange for assurance

the graduates will work for their sponsors after graduation.

Before I was ready to conclude that the sky was falling down, I wondered, is there another side to this story?

The same *USA Today* story mentions that a representative from the Bureau of Labor Statistics, above, pointed out that engineers have continuously cried about a shortage – for 30 years! Obviously, we have managed to survive the deficit fairly well. Others also believe the same. *Electronics Design, Strategy News* published an article just over two years ago echoing similar sentiment. The author affirms no one really knows how many engineers we will need in the future based on an uncertain demand. Without a crystal ball, how can the type and quantity of engineers required to advance our society be determined?

So, who is right: the doomsayers or those who say we'll get by?

Let us first remember the adage "Figures don't lie, and liars can't figure." Statistics are numbers which can, and often are, interpreted to serve the author's best interest. Perhaps the reality is that we have fewer engineers with ten-plus years of experience willing to work at recent graduate wages. Many engineers move into managerial positions or change careers altogether. There appears to be a steady flow of students who head toward the engineering career path but change direction either during college or a few years after graduating. Everyone knows the rules of supply and demand will govern the quantity of engineers: high demand translates into higher pay, which results in higher allure for students to enter the engineering career.

After giving both sides their due diligence, I will still continue to do my part in touting the joys of engineering to my students, the schools I visit, and just about any other ear I can grab. Furthermore, my publicizing is consistent with DAPE's goal to encourage and promote licensure. This is a task which begins through its outreach program. Students at Delaware Technical & Community College are urged to continue their education; graduating University of Delaware students are advised to take the FE exam followed by the PE exam once the minimum requirements are met. As you can see, efforts are continuously being made to support the falling sky with quality engineers within all disciplines.

(Greg holds the Civil Engineering Council seat; currently serves as DAPE Treasurer; Co-Chairs the Examining Committee; Serves on the Finance and Ad-Hoc/Facilities Committees; Teaches at Delaware Technical & Community College; and has a full-time engineering job!)

INTERESTED IN SERVING ON COUNCIL?

Of the 15-member Council, 12 members are elected, typically three each year. This year the three Council seats up for election are: **Education, Mechanical Engineering and Sussex County.**

The law requires an elected Council member to be a citizen of the United States, a resident of the State, a member of the Association and to be qualified to represent the constituency of the Council seat.

If you meet this criteria, are interested in serving the engineering profession and the citizens of Delaware, contact the DAPE office for the appropriate documentation, which is required to be submitted by **May 1st** to be included in the 2008 Council election.

Council meets monthly to review the various Committee's recommendations for licensure and enforcement; budget approval; revisions to the bylaws and the law; and other actions necessary to attain the objectives of the Association.

2008 ELECTION BALLOTS ARE COMING!

The 2008 Council election ballots will be mailed by June 15th to the licensees that live or work in Delaware.

In this year's election, you will have the opportunity to vote to fill the following vacancies:

- ❖ Education Seat
- ❖ Mechanical Engineering Seat
- ❖ Sussex County Seat

The term of each of these seats is four years.

Look for your ballot in the mail. Your vote does count. Please return your ballot to the DAPE office by **July 15th**.

OUR THANKS!

Volunteers really are the lifeline of DAPE. They make up our Council, our committees and our proctors. Take any of these out of the equation and we could not function.

As this is exam time, I'd like to acknowledge the tremendous efforts of our proctoring team for the April, 2008 exam administration:

Chief Proctors:

Harry How
Greg Pawlowski
John Traynor
Lonnie Webb

Proctoring Staff:

Dan Barbato
Bill Brockenbrough
Ronnie Carpenter
John Castle
Dave Chandlee
Zac Crouch
Paul Gerard
Phil Girandola
Keith Kooker
Meghan Lester
Charlie McAllister
Ken Monroe
Josh Moss
George Nagase
Dave Reinhold
Arkan Say
Joe Serbu
Mike Siwek
Joe Volk

Thank you all for a job well done! And a very special thanks to **Phil Girandola, Dave Reinhold, Mike Siwek** and **Joe Volk** for proctoring two separate sessions.

If you have not offered your time to proctor in the past, please contact us (office@dape.org). We'd like to include you on our proctoring team.

NCEES NORTHEAST ZONE MEETING

DAPE was well represented at the recent NCEES Northeast Zone meeting held in Boston, MA, on April 3-5, 2008. Board members Carmine Balascio, Pat Canzano, Bob McClure, Frank Newton, Greg Pawlowski, and Executive Director Peggy Abshagen were in attendance.

This regional meeting is a prelude to the Annual Meeting in August, 2008. Committee reports from some 14 national committees and task forces are presented to the group to initiate discussions to address issues concerning motions that will be presented at the Annual meeting for revisions to the Model Rules, Model Law, Exam Policy and Procedures, Finances, Constitution and Bylaws, etc.

Two task force reports that received an abundance of interest and discussion were the Computer-Based Testing Task Force and the Bachelor's+30 Task Force.

For about the last decade, NCEES has conducted studies of computer-based testing similar to those that are used by other professions – architects, nurses, accountants, etc. Of course, none of the other professions' exams are quite like the engineering exams. These exams are not open-book exams; and, it has been reported that the costs of the exams has increased and initially discouraged test takers. The current 8-hour format is not feasible for computer-based testing. The format would need to be revised to produce shorter modules and permit greater frequency to take the exams. This, of course, requires a larger data bank of questions

Additional study is required to investigate the financial impact of converting the exam item banks to an appropriate format for computer testing and the security of those items that will be more frequently exposed.

The second Task Force report that produced lengthy discussions was the issue of requiring a Bachelor's degree + 30 credit hours to sit for the Principles and Practice of Engineering exam. This requirement in the Model Law was passed by the Council at the 2006 Annual Meeting. Now the Task Force is working on the details: whether the additional credit hours should be in technical or practice subjects, or a combination of both; whether course providers need pre-approval and the criteria for approving such course providers; whether a clearing house is necessary to assist state boards in determining the acceptability of specific courses; and the date for implementation was extended to 2020, to provide potential candidates sufficient time to accomplish the additional education.

We'll keep you posted on the developments of these other national issues!

2007-2008 COUNCIL MEMBERS



C.C. Balascio, P.E.



J.G.S. Billingsley, P.E.



P.S. Canzano, P.E.



D.G. Clark, P.E.



W.Z. Crouch, P.E.



A.S. DeLuca, P.E.



J.P. Jones, P.E.



K.R. Kooker, P.E.



G.F. Marcozzi, P.E.



C.L. McAllister, P.E.



R.W. McClure, P.E.



T.P. McGonigle, Esq.



F.A. Newton



G.G. Pawlowski, P.E.



V.G. Robertson, Esq.

Council Executive Committee

Guy F. Marcozzi, P.E.

President

Frank A. Newton

Vice President

Vincent G. Robertson, Esq.

Secretary

Gregory G. Pawlowski, P.E.

Treasurer

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Immediate Past President

Council Members

Carmine C. Balascio, P.E., Education	8/31/08
J.G.S. Billingsley, P.E., Mech. Eng.	8/31/08
Pasquale S. Canzano, P.E., DEE, Gov't Empl.	8/31/09
David G. Clark, P.E., Chemical Engineering	8/31/09
W. Zachary Crouch, P.E., Sussex County	8/31/08
Alfred S. DeLuca, P.E., Electrical Eng.	8/31/11
J. Paul Jones, P.E., "Other" Eng.	8/31/09
Keith R. Kooker, P.E., Kent County	8/31/11
Guy F. Marcozzi, P.E., Private Cons.	8/31/11
Charles L. McAllister, P.E., Industry	8/31/10
Robert W. McClure, P.E., New Castle Co	8/31/10
Thomas P. McGonigle, Esq.—NCC—Apptd.	10/26/11
Frank A. Newton, Kent Co.—Apptd.	1/30/10
Gregory G. Pawlowski, P.E., Civil Engineering	8/31/10
Vincent Robertson, Esq.—Sussex Co.—Apptd.	9/27/08

Council Staff:

Peggy Abshagen
Executive Director

Donna Weaver
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office@dape.org

website:
www.dape.org

Moving?

Be sure to notify the Council office.

The Delaware Association of Professional Engineers requests that you notify our office immediately of any change of address. Reporting a change of address is vital to ensure that you receive necessary renewal information and other correspondence important to your continued licensure. If you have changed your address, please complete the following form and mail or fax it to the Council office in order that our records may be updated accordingly.

The Delaware Association of Professional Engineers (DAPE) is the contact agency for licensing, regulations and complaints for the engineering profession.

**DELAWARE ASSOCIATION OF
PROFESSIONAL ENGINEERS
56 W. Main Street, Suite 208
Christiana, DE 19702**

Change of Address Notice

(Please print all information)

License Number: _____

Name: _____

Old Address: _____

New Address: _____

Date: _____

