

DAPE



NEWS

News from Delaware's Licensing Council for Professional Engineers

Summer 2007



PRESIDENT'S MESSAGE

By Guy F. Marcozzi, P.E.

By now all of you have probably heard the contemporary global concern for climate change (possibly natural causes) and global warming (man-made causes). Regardless of how you feel about the contemporary debate over global warming and climate change, there should be broad consensus in our organization that the practice of engineering has a cause and effect relationship with the natural environment. As such, it follows that the engineering profession is in a unique position whereby it could and should provide leadership on this issue

In looking to find areas of broad agreement, it is easy to presume that essentially no one, least of all someone from DAPE, has a goal of knowingly degrading the environment. Our law specifically charges DAPE to "hold paramount safeguarding life, health and property and to promote the public welfare." A healthy environment is clearly in the public interest. However, is it possible or even likely that engineers through their design are adversely impacting the environment? Think about the trade-offs between transportation needs, production and quality of life versus emissions and expenditures of non-replenishable natural resources and production of waste materials. There is not likely to be an easy answer.

Clearly, negative consequences from our work are not intentional. As engineers, we are great at solving problems. We are trained to divide larger issues up into a series of less complex issues and solve them in a sequence. Perhaps, as we solve problems we don't or can't conceptualize the progressively larger ripple

effects of these too numerous to count subdivided solutions. In fact, is anyone really capable of fully seeing the "biggest picture?"

Progress towards sustainability will likely come incrementally, based on our imagination and commitment to invent, test and apply new approaches to traditional problems on individual projects.

I challenge you to think of this global debate on climate change as an opportunity for engineers to provide leadership. Other engineering groups, notably, ASCE, started creating awareness on this issue more than 10 years ago. What can we engineers here in Delaware do about this issue? Ultimately, everyone needs to answer that question for themselves, but perhaps we can raise our individual awareness, in particular in our day to day assignments and decision making.

What is your opinion on this ongoing debate? How can our leadership make a difference? Please provide us feedback on this issue in general and specifically on the following proposal. Similar to ASCE's Code of Ethics, I would like to know what your opinion is about proposing a modification to DAPE's Code of Ethics to include the following provision:

1. The Engineer shall hold paramount safeguarding life, health and property and promoting the public welfare in the performance of his professional duties.

Insert a new subsection B.

"The Engineer shall be committed to improving the environment by adherence to the principles of sustainable development so as to enhance the quality of life of the general public."

Changing our Code of Ethics, will not in itself will not solve anything. As with any solution, there needs to be a first step. My hope is that such a change, or even discussion associated with possibly making such a change, will increase awareness and encourage each of us to think more about long term consequences.

Please let us know how you feel about this issue by forwarding comments to office@dape.org. Look for a summary of comments received and more updates in future issues.

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

On July 7, 2007, DAPE will be celebrating its 35th anniversary. There have been some changes over the years. Do you remember when:

- We were The State Board of Registration for Professional Engineers and Land Surveyors.
- Board members were appointed by the Governor.
- There were 4 Professional Engineers and 3 Land Surveyors on the Board.
- Board members were required to have been engaged in the respective professions for at least 12 years.
- The Board was required to hold at least one regular meeting each year.
- Registration by being recognized as "eminent" in the applicant's profession, plus 20 years of experience and less than 40 years of age.
- Lifetime licenses were granted to those practicing on April 18, 1941.

Some things haven't changed very much:

- The definition of the practice of engineering remains virtually the same.
- Contents of an application for licensure remain the same, although now we require email address information.
- The Attorney General remains the legal adviser of the Board.
- Fees have increased somewhat from \$30 to \$50.
- Written examinations are now required of all applicants vs. oral/written may be required.
- Reciprocity is still granted under standards that are not lower than that required here.

- Board decisions are still appealed to the Superior Court.
- Public works projects still require the services of a Professional Engineer.
- Fines by the Courts have increased from \$100-\$500 to \$500-\$5,000, and imprisonment from 3 to 6 months!

Some things change and some things remain the same, but we believe we are a much better organization for the changes that have been accomplished over the years. And clearly the public is better protected for these changes!

***"SECB" and "JAC"
Just Two More New Acronyms To Deal With
By Robert A. Chagnon, P.E., SECB***

"SECB", since that one is located at the end of this writer's name, I'll deal with it first. It stands for "**Structural Engineering Certification Board**" and signifies that the individual involved is a "certified structural engineer." The certification process has been in place for just over two year now and currently applies to over 1000 structural engineers across the United States. It's a spin off from "NCSEA", the National Council of Structural Engineering Associations and its 2003 mandate for establishing an independent, national autonomous organization to develop a certification program for structural engineering. Subsequently, the SECB was formed to identify those professional engineers that possess the additional education, experience and demonstrated skills that are unique to the practice of structural engineering.

The SECB's goals are stated as follows:

- To protect the public by improving the standards and competency of structural engineering practice.
- To enable the public to identify qualified and proven structural engineering practitioners.
- To encourage universities to adopt degree programs with appropriate educational content needed to provide budding structural engineers with the needed knowledge.
- To encourage and serve as a catalyst for uniformity of testing and licensure requirements.

- To encourage and serve as a catalyst for uniformity of continuing education requirements.

Their web site, www.scertboard.org provides a list of those structural engineers that have thus far been certified along with the requirements for certification. A committee has surveyed the structural engineering community, country wide, and established a definition of the minimum related subject matters that interested students need to expose themselves to in order to be adequately qualified for the profession. It has also surveyed the country's colleges and universities and have identified those that provide all of the aforementioned subject matters. Unfortunately, U of D didn't make that list. In addition to meeting SECB's standards for becoming certified, yearly recertification is based on one's continuing involvement with structural engineering related projects as well as providing documentation for proof that he or she has completed a minimum of 15 professional development hours (PDH's) of mandatory continuing education, entirely related to structural engineering subject matters.

"JAC" stands for the **Joint Advisory Committee**, with "joint" referring to the state's regulatory boards for architects and engineers. It's a committee that the Delaware legislature, and more recently, its Sunset Committee, advised the architect's licensing board and DAPE to establish for the purpose of resolving its own jurisdictional practice disputes. That initially occurred back a dozen or more years ago when DAPE sought to add "including buildings for human occupancy" to their definition of the practice of engineering, which the legislature didn't want to have anything to do with since it was obviously a territorial dispute between architects and engineers. DAPE was attempting to make that change to their law in response to the architects having just done such to their definition of the practice of architecture, back then. A Memorandum of Understanding (MOU) was agreed upon by both sides, which was going to arbitrate cases involving the two professions stepping on one another's toes. The architects called for the first meeting under the MOU shortly thereafter but for the purpose of proposing that Delaware adopt an inter-professional MARKET ALLOCATION arrangement, (not legal) similar to what the New Jersey architects and engineers had, that mandates that architects can seal anything and everything and engineers can only seal chicken coops, dog houses and other such projects. Am I being cynical, or what? Our related committee of engineers aborted the meeting and that was that till the Architectural Board's recent Sunset review, where this New Jersey market allocation model was once again put in front of the Sunset Review Committee. As a result, this joint committee of engineers and architects have taken on the name of Joint Advisory Committee (JAC), and have thus far been successful in revising the initial MOU to permit more freedom to address any issue that may impact both professions, and not only the toe stepping

one's. As a member of this committee, its first year of monthly meetings was primarily devoted to better understanding one another's fields of practice, which this writer believes has been very beneficial to both professions. Only time will tell what it can really accomplish, if anything.

(Editorial note: Certification is encouraged, but clearly does not take the place of licensure that is required by law.)

FIRMS WILL NEED TO RENEW LICENSURE AUTHORITY SOON!

More than 750 firms are currently authorized to offer or provide engineering services in the State of Delaware. Those 750 firms will need to renew their Certificate of Authorization as it expired on **June 30, 2007**. Renewal information has been provided to all firms in late April to provide sufficient time for license renewal. Violators of §2821 of the Delaware Code Title 24 Chapter 28 will be prosecuted.

LIFE, LIBERTY, AND THE PURSUIT OF SELF-REGULATION

By Gregory G. Pawlowski, P.E.

On July 4, 2007, everyone knows we celebrated 231 years since America declared its independence from England's governing rule. What most Delaware engineers don't know is that on July 7, 2007, we Professional Engineers celebrated our 35th year of independence from State governance in favor of self-regulation. Much like the political battle fought by our country's forefathers, but without the potential for persecution, our engineering forefathers had an uphill climb to establish Delaware's Professional Engineer's Act. This act enabled us to become the first Professional Engineering Association with the powers, duties, and responsibilities of self-regulation in the nation. And while a few other state associations have obtained some degree of self-regulation, no other has done so to the extent we have. Furthermore, our roots lie with Canada; they are the model for our Professional Engineer's Act. Perhaps a brief history of whom our forefathers were and how Delaware became the First State – twice.

Jack Billingsley, PE, like Thomas Jefferson, is our primary author. He is Canadian by birth and a mechanical engineer who migrated to DuPont after teaching at Norwich University in Vermont for a few years. Billingsley acquired his first Professional Engineering registration in Canada where in his view, "engineers are held in higher esteem than in the United States." Engineers in each Province are self-regulated and also accredited the college engineering programs within their region.

Fact: 80% of the Deans, Professors, and Department Heads in the Canadian engineering colleges that are teaching engineering science and design are registered Professional Engineers.

Besides working at DuPont, Billingsley was a State Legislator from 1968 to 1978. It was during his early tenure that he discussed with other Professional Engineers, from various engineering societies, about the need and benefits of self-regulation. Until this time, professional board members were appointed by governors who didn't want to give up this political power. Billingsley felt the citizens of Delaware and the engineering profession would best be served by its peers.

Fact: Delaware currently has 6237 licensees and 783 registered engineering firms.

These individuals began meeting once a week to draft the bill which would grant the professional engineers of Delaware the powers to operate independently of State Government. As stated earlier, the bill was modeled after the Canadian law. Legislator Billingsley introduced the bill into the house in 1971. One of our non-engineering allies was State Secretary of the Department of Administrative Services Hugh Martin. Martin testified during a house debate that "Our overhead cost is one dollar for each dollar spent; which means that in most cases our professional boards are costing us (Delaware) money . . . since there are more professional engineers, I believe, than any other registered professional group, the impact of this is significant." If the bill was passed, Professional Engineers as a group would have to fully fund its organization which had never been done by any professional association; no governmental intervention or funding. On July 7, 1972, after passing through both the State House and Senate, the bill was signed by Governor Russell Peterson and the Delaware Association of Profession Engineers was born. For the first time, a state was trusting a Professional Engineering organization to regulate themselves in the best interest of the public. It is noteworthy that Martin was the first and only appointee elected to President of Council in 1996.

Fact: Delaware, as with most other states, licenses individuals as Professional Engineers and allows them to practice any area of engineering in which they are competent. Note: "The engineer shall perform services only in areas of his competence." (Code of Ethics - Section 2)

Since its inception, DAPE's Council was set up to represent a good cross section of the engineering disciplines, all three counties, and each field of employment. There are 12 seats consisting of the following: Civil, Mechanical, Electrical, Chemical,

Education, Governmental, Private Consulting, Industry, New Castle, Kent, Sussex, and Other. Initially there were no appointed seats by the Governor. Over the years though, amendments were made to permit one Governor appointee from each county giving a total of 15 council seats. All seats are a 4 year term with 3 to 4 subject to election each year. Additionally DAPE employs a non-elected Executive Director whose primary duties are to act in an administrative and liaison capacity with NCEES, legislators, examinees, as well as various engineering societies.

Fact: All appointees are non-engineers and typically from the legal profession.

Unlike a government staffed board, all primary functions of DAPE are performed by committees consisting of volunteer Professional Engineers who are not all on council. Volunteerism is the backbone of our association. Committees include Executive, Law Enforcement/Ethics, Examination, Finance, Government Affairs, External Affairs, and Facilities as well as Ad-Hoc committees when needed. Each committee has its charges and prepares reports for review by the council each month.

Fact: DAPE operates an annual budget of nearly \$400,000, yet charges one of the lowest biennial renewal rates (\$50) in the country. In 1975 our budget was \$48,000.

Not many of us have taken the time to fully read the Declaration of Independence but we probably should to remind us of our country's roots. The same can be said about DAPE. Each licensed engineer in Delaware is expected to have a copy of the Registration Law book in their possession and should be familiar with its contents. In the last year and a half, new licensees have been given a 40-question law and ethics questionnaire requiring a 90% pass rate before being granted a Delaware license. An analogy can be made of an immigrant taking the test of citizenship. All of you should take the time to read the first page of our Registration Law which contains the preamble stating our independence and be reminded of our roots.

DAPE – committed to safeguarding life, health, and property while promoting the public welfare of all Delawareans for 35 years.

(Editorial Note: Jack Billingsley, in his capacity as a legislator and a Professional Engineer was instrumental in creating DAPE as it now exists. We appreciate his efforts.)

NEW PROFESSIONAL ENGINEERS . . .

CONGRATULATIONS to those that successfully passed the April, 2007 Principles & Practice of Engineering examination and were approved for licensure on July 11, 2007:

Antia, Xerxes	Jones, Joseph
Banez, Thomas	Keegan, John
Bash, Timothy	Kerr, Donald
Baust, Marlene	King, Trevor
Connor, Michael	Kline, Nichole
Cowen, Jason	Leisse, Thomas
Crowley, Bradford	McSwain, LaTonya
Daley, John	Moore, Cherie
Ellis, Michael	Moore, Jason
Elmore, Donald	Moss, Joshua
Finan, Sean	Mulrooney, David
Flathers, Christopher	Norton, Elizabeth
Fox, Bradford	Patel, Pravin Kumar
Frasch, Steven	Peacock, Kathryn
Friebel, Damian	Prince, Eric
Friebel, Harry	Ringer, Ronald
Gallagher, Sean	Rosa, Elvin
Halpin, Jason	Schwaiger, Andrew
Herrmann, Drexel	Steketee, Derek
Hofstee, Joseph	Tsoukalas, Petros
Holden, Dean	Vescovi, James
Hughes, Dennis	Weiser, Adam
	Wong, Deric

NEW ENGINEER INTERNS . . .

Of the 260 Fundamentals of Engineering examinees on April, 2007, 149 have now earned the title of Engineer Intern having successfully passed the examination:

Abba, Bachir	Brady, Christopher
Abidi, Syed	Breisch, Michael
Ackerman, Amanda	Bresnahan, Joseph
Alhalawani, Ahmad	Breuer, Michael
Anderson, Ryan	Brien, Kevin
Andino, Zaniah	Brisach, Daniel
Aoyagi, Steven	Brown, Matthew
Auker, Ryan	Buerger, Vincent
Bak, Andrew	Buerkel, Lauren
Baum, Ryan	Busch, Andrew
Beeler, Christopher	Cann, Michael
Bender, Robert	Catalano, Emily
Benzenhoefer, Lisa	Curtis, Joshua
Block, Joseph	Davis, John
Boltz, Travis	Deisley, Elizabeth

DeNicola, Robert	Meier, William
Ennis, Nikki	Meyers, Jonathan
Eriksen, James	Miller, Johanna
Ertle, Ian	Minner, M. Shane
Freeley, Mary	Mohrman, Jared
Finamore, Michael	Mosley, Nathan
Fischer, Timothy	Nadeau, Michael
Fu, Agung	Nayer, Syam
Gorman, Christopher	Needle, Nicole
Gould, John	Palanker, Adam
Grande, Amanda	Panas, Robert
Grella, Paul	Paredes, Rony
Hampson, Robert	Park, Eugene
Hardwick, Stephen	Parzanese, Michael
Harris, Jennifer	Paulus, Arthur
Hawkins, Blake	Pearson, Alaina
Hazbun, Ramsey	Pierce, George
Hinkle, Jonathan	Puddicombe, James
Hostler, Christopher	Puntenney, James
Houghton, Joseph	Rahman, Saifur
Hubbard, Brian	Rakov, Nicholas
Huerta, Daniel	Reed, Christopher
Jones, Jason	Rehm, Sydonia
Kahn, Joseph	Reilly, Genevieve
Kames, Brian	Reyes, Philip
Kaminski, Nathaniel	Rosborough, Matthew
Kavaleuski, Aliaksei	Rosenberg, Jason
Keenan, Bernard	Roth, Daniel
Kiliszek, Alison	Sacra, Michael
Kleinot, David	Salomon, Andrew
Klopp, Benjamin	Schmieder, Kenneth
Komm, Andrew	Siwek, Nikodem
Korycinski, James	Skeirik, Richard
Krause, Jared	Snyder, Keith
Kuzan, Dustin	Spence, Dennis
Lac, Truc	Spencer, Bryan
Lacey, Scott	Sperati, Michael
Langille, Meredith	Staniszewski, Jeffrey
Lee, Allan	Stoddard, Nicole
Leese, Kristin	Sweeney, Patrick
Leshchinsky, Ben	Taheri, Yaser
Levari, Nicole	Taylor, Benjamin
Linnane, John	Thomas, Edmund
Lombardi, Megan	Thomas, Michael
Lotto, Mark	Uathavikul, Vincent
Luke, Matthew	Van Collie, Craig
Maguigan, Kean	Van-Otoo, Edwin
Maier, Timohty	VanEpps, Joshua
Malin, Kyle	Viswakumar, Pravine
Mallik, Oveek	Vora, Neil
Martignetti, Michael	Waters, Kevin
Martin, Kevin	Watts, Williams
Martinez, Erick	Webb, Joseph
McClenathan, Trevor	Williams, Elizabeth
McClure, Antoine	Williams, Zachary
McKenna, Dennis	Wilson, Andrew

Winn, Aaron
Wissler, John
Woerth, Brandon
Wolfe, Matthew

Woods, Kevin
Yoklic, Zachary
Yuhas, Adam

All Engineer Interns are encouraged 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!!!!

WOMEN MENTORS NEED APPLY

By Gregory G. Pawlowski, P.E.

It is 9:15 a.m., April 21, 2007. I've just completed my traditional head count of women sitting for the FE exam that I am proctoring. In this session, there are 46 women out of a total 259 examinees: 18% of the exam population—assuming I round up.

The number of women sitting for both the FE and PE exams has left me curious ever since I began proctoring several years ago. I ask myself, why are there still so few women pursuing engineering as a career? Most of you will be thinking the answer is a no-brainer: simply, engineering is a predominantly male profession. The trick is that we are in the twenty-first century, and lines of traditional sexist occupations should no longer exist. There is also a qualifying assumption that an equal proportion of women taking the exams are also entering the engineering field as a whole.

I am particularly dismayed by this discrepancy because I do see females taking engineering courses in college. Since 1996, I have been teaching continuously at Delaware Technical & Community College as an adjunct; I even did a six-year full-time stint. My instruction began in math and then moved onto civil engineering and construction management. Throughout my years teaching, one of my personal goals has been to push my female students to continue pursuing engineering as a profession. Many of my top students were women. Two in particular not only excelled in my more difficult design courses, they also voluntarily acted as TA's and assisted the male students.

It would give me great pleasure to report to you that they have all gone on to pursue a baccalaureate degree; unfortunately they have not. Both are employed at consulting firms as CAD technicians, and only one has expressed the desire to continue her education.

One of my other duties has been to judge the New Castle County Science Fair, held each year at Delaware Tech. Sixth graders up through high school seniors enter the competition, and the majority of the participants are female. Once again the paradox appears: If so many females are interested in science, why are there not more women entering and/or completing an engineering program?

Perhaps the discrepancy stems from the lack of mentors or encouragement from adult figures.

Heather Dorsey is here proctoring the exam with me. I questioned her why she pursued civil engineering. Heather stated she was always good in math and science. But more importantly, she has an uncle who is also an engineer. In other words, an unofficial mentor played a key part in her career decision. I will also mention that her firm has been supportive by allowing her to work part-time from home over the last four years while she tends to a young daughter. I fully expect Heather will offer encouragement to her daughter when it comes time to inherit the engineering crown.

Meghan Lester is also proctoring today. Her grandfather was a union carpenter who worked primarily on heavy highway projects. Fascinated by concrete core samples her grandfather brought home from work and his carpentry skills, Meghan soon saw her interest in civil engineering was sparked. This anecdote shows that mentors do not necessarily have to be someone directly within the engineering community.

Although I have no hard, statistical evidence to show a relationship between mentors and women who pursue engineering, I have drawn a conclusion. Maybe you have too. So, with this in mind, my no-brainer solution is perhaps all employed engineers – male and female – ought to become unofficial mentors.

Even though this article focuses on women in engineering, there is an overwhelming need for engineers, period – men included. The Delaware Engineering Society is just one of many societies that sponsor programs like Math Counts, a means for promoting math with the hopeful pursuit of engineering. Your involvement in events such as Math Counts is one way to reach the minds of future engineers.

While we're on the subject, Delaware Tech is always in great need of engineers to judge the science fair, cited earlier. I strongly urge each Professional Engineer to help develop the next generation of problem solvers of our world.

LAW ENFORCEMENT ACTIVITY

Over the past couple of months, DAPE has aggressively sought those firms that are not in compliance with §2821 of the law that states:

"An engineering corporation or partnership must have a certificate of authorization in order to practice, or offer to practice, engineering as defined in this chapter."

On average we open about 50 law enforcement files per year. The majority of these cases are administrative issues; the remaining cases are complaints. By July, 2007, we have opened 109 files. This is attributable to making inquiries of those firms that have been issued business licenses by the Delaware Division of Revenue and have not obtained the required Certificate of Authorization from DAPE. Routinely, we include reminders for the engineering community on exactly who is required to obtain a C/A. If your firm is incorporated, or a limited liability corporation, or a professional corporation, or is operating under a name other than the licensee's full name, the firm is required obtain a Certificate of Authorization.

Thus far, we have assisted 33 firms to come into compliance with the law. We will continue this vigilance until we are satisfied Delawareans are thoroughly protected.

Make certain your firm and those firms that you are working with are in compliance with the law! Check the DAPE website (www.dape.org) and the roster of Certificate of Authorization holders.

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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.

Change of Address Notice

(Please print all information)

License Number: _____

Name: _____

Old Address: _____

New Address: _____

Date: _____

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

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