DAPE NEWS

***News* from Delaware's Licensing Council for Professional Engineers Summer 2003**

PRESIDENT'S MESSAGE

By J. Ross Harris, P.E.

Is licensure by Eminence for Academicians a Prudent Consideration?

Up till about a dozen years ago, it was remotely possible for individuals, who had not completed a formal education in engineering, to become registered in the State of Delaware by eminence. The procedure called for the individuals to submit a portfolio and detailed history of at least 20 years of acceptable engineering experience; backed by testimonials of their credibility, references by recognized authorities in their field and etc., all of which eventually proved to be too difficult to assess based on highly subjective submissions and licensing by eminence was ultimately abandoned. A somewhat similar process is presently under consideration by the DAPE Council for the registration of a selective group of engineering educators.

It has been proposed to the DAPE Council that our registration law be modified to specifically address "tenured" faculty in colleges of engineering. The following requirements would be considered as minimum satisfactory evidence that a tenured faculty applicant is qualified for registration as a Professional Engineer.

(a). A graduate from an engineering program that has been approved by the Engineering Accreditation Commission (EAC) of ABET, or from an ABET recognized foreign accreditation agency approved program;

(b). Holds an earned doctoral degree in engineering from a university which had an EAC or ABET accredited undergraduate program in that discipline at the time that individual earned their doctoral degree, providing that doctoral degree required the passing of a PhD qualifying examination from that university;

(c). Eight years or more of experience as a full-time faculty member in the College of Engineering in a university or universities, with an engineering program approved by the EAC of ABET. Two years of that experience must be as a tenured associate professor or as a tenured full professor teaching advanced engineering subjects in a Delaware college, with a tenure policy acceptable to the Council;

(d). Extensive documentation of excellence in engineering research as evaluated by experts within and outside the Delaware University or College. That evaluation of the applicant's research and scholarship to be based on the achieved contribution to the advancement of knowledge in engineering or applied science.

The perceived difference between what Delaware once had with "licensure by eminence" and the above proposal, is that the individuals involved would have been exposed to a much higher degree of engineering education and their backgrounds in engineering and research will have been clearly documented and verified through a university or college's rigid internal evaluation and progression process to tenure. **However, it would still be left up to the**

DAPE Council to evaluate the internal educational processes that were involved to judge whether or not an individual is qualified for registration as a Professional Engineer.

Based on the University of Delaware's criteria, "candidates for Associate Professor are expected to have demonstrated excellence in research and a proven commitment to excellence in teaching and service. Candidates for Professor are expected to have demonstrated excellence overall and have earned a national or international reputation in one's chosen field. This excellence and reputation must be supported by evaluations from experts outside the University."

As would be the case with all complex issues, there are many unanswered questions and problems associated with the above consideration. Some of these are outlined as follows.

Does this only apply to the U of D? At the present time, the above law revision proposal is confined to Delaware based institutions, which at first thought, is the University of Delaware. However, it has been pointed out that several colleges and universities outside of the State have satellite programs within the State, and would subsequently qualify. Drexel University is one that immediately comes to mind. The Attorney General's office has advised the DAPE Council that, should such a law revision be implemented, it can anticipate legal challenges from other out-of-state institutions even if none of their programs are offered in-state.

What are the benefits for registering engineering academicians? Most all colleges and universities with engineering programs encourage their faculty to maintain their engineering skills by taking on private consulting tasks outside of the institution. In some land grant institutions, and perhaps others, the institutions are legally required to share the benefits of their research with private industry. For many engineering faculty members, that means practicing engineering without a license to legally do so, even if what they're doing is considered to be an academic activity. Even those doing certain types of research may fall under this dilemma. Registering many of these individuals would automatically bring them under the purview of our law and make them accountable to our Code of Ethics, not to mention enhancing the health, safety and welfare of the general public. Proponents of the law revision also tend to emphasize that non-registered engineering faculty is much less prone to encouraging their students to become registered.

Why don't they simply take the exams like the rest of us? Good question. However, the exams we took were nationally normed tests that task force studies determined were a relevant indication of minimum competency qualification in our particular field of specialty. These task force studies are based on what's going on in the real world, not academia. The backers of this law revision are of the opinion that the areas of engineering that engineering academicians are generally involved with is so narrow and so specialized, that the tests we're talking about are simply not relevant to their academic background and experience.

Would such a law revision solve the aforementioned problems? Unfortunately no. Many of the Associate and full Professors in engineering simply would still not qualify for consideration under the proposed law revision requirements for licensure by eminence.

Is TAC of ABET still a reliable standard for judging the quality of an engineering education? It might have been up till year 2000. However, the evaluation criteria has since changed significantly and many engineering programs are rapidly digressing away from what has long been recognized as a traditional engineering education in favor of better preparing students for graduate studies and research as compared to entering the private sector. See "President's Message" in the Spring Edition, 2003.

Does teaching upper-division engineering subjects qualify as engineering experience? Some say yes and some say no. An earlier

attempt at introducing such in our law, so that faculty members can eventually accumulate the years of engineering experience needed to qualify to take the P&PE examination, was rebuffed by the University for fear that having such would eventually lead to all engineering faculty needing to be PE's.

Why don't we simply prosecute un-registered faculty that is practicing engineering? For one, there's nothing simple about prosecuting anyone. We know that it's taking place, but what's involved and by whom is another matter. The DAPE Council has been working closely with representatives from the University of Delaware for quite some time in an attempt to resolve this dilemma, and the effort is ongoing. This proposal is just another approach under consideration.

Are there other alternatives? It has been suggested that we declare engineering programs at Colleges and Universities exempt from our registration laws, similar to what we currently do with private industry. An engineering program doing outside consulting would require a Certificate of Authorization (C of A) along with a registered PE as the responsible engineer in charge. Another would involve a law revision to our definition of the practice of engineering to include "the teaching of upper-division engineering-design subjects," tied to a grace period to allow the hiring of persons who might have applied before the licensing requirement was imposed but who were actually hired after the change became effective. Anyone who was employed prior to the effective date of the amendment would be exempt.

Safeguarding life, health, and property and promoting the public welfare is the Delaware Association of Professional Engineers' primary purpose for its existence. It will continue to work diligently through its Law Enforcement and Ethics Committee and the office of the Attorney General to pursue known violators of our law.

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2003 COUNCIL ELECTION RESULTS

Ballots were mailed to 1,324 voting members of DAPE (residents or those who work in Delaware) by June 15, 2003, to fill the following three Council seat vacancies:

- Electrical Engineering
- Private Consulting
- Kent County

Council member Carmine Balascio, P.E. was appointed as Chief Teller to tally the votes after the July 15th deadline for submission of ballots.

Chief Teller Balascio, assisted by William J. Mather, P.E., Lonnie D. Webb, P.E., John Traynor, P.E., and Colmcille Deascanis, P.E. tallied the votes as follows:

Electrical Engineering Seat:
Robert Cannon, P.E. - 460

Private Consulting Seat:
Guy F. Marcozzi, P.E. - 450

Kent County Seat:
John F. Mayan, P.E. - 455

Congratulations to each of these new Council members!

Each of these Council seat terms will expire 8/31/07.

The proposed revisions to modify **Article IX** to permit Council members to register a vote on a specific issue by written proxy, or participation via telephone and/or video conference; and **Article XVIII** instituting delinquency and reinstatement fees were both approved by the membership.

DAPE Council ratified these election results at its August 6, 2003 meeting.

Council seat vacancies for the 2004 election year will be:

- Education

- ❖ Mechanical Engineering
- ❖ Sussex County

Interested, qualified candidates should contact the DAPE office for further information.

# # #

FORTY-FIVE NEW ENGINEERS ADDED TO THE RANKS!

As a result of the April 11, 2003 Principles & Practice of Engineering examination, forty-five (45) new Professional Engineers were approved for licensure at the Council's June 11, 2003 meeting:

Adams, Troy
Adkins, Jared
Altevogt, Charles
Arheghan, Ahunsimhenre
Bose, Prodip
Brooks, Thomas
Burgo, Stephen J.
Caparas, Bernadette
Conn, Christopher
Davis, Vincent
Drobotij, Erin
Galloway, Milton
Hollenbach, Brian C.
Horden, Ira
Hulme, Denis D.
Kernan, Jr., Francis
Kniff, Richard
Kolb, Ralph
Lee, Robert
Martine, Bret
Mauger, Maureen
Mendygral, James E.
Mohammadi, Karim
Monkres II, Ronald
Munz, William
Ours, Stephen
Pang, Ah Kum
Penoza, Steven
Phipps, Valerie J.
Polasko, Wendy
Pradhan, Shashikant
Przybylski, Michael
Rowghani, Kevin
Sands, Ruth
Shaffer, Christopher
Shaffer, Darin
Shah, Mukesh
Skierski, Sean
Stephens, Mark T.
Talathi, Deepak
Tennefoss, Edwin
Webb, Elaine
Wilkens, John
Woulard, Gary
Zigmond, Brian

CONGRATULATIONS!

# # #

109 NEW ENGINEER INTERNS!

Following the successful passing of the April 12, 2003 Fundamentals of Engineering examination, 109 new Engineer Interns are congratulated on achieving this first step in the licensure process:

Antia, Xerxes
Arnold, Carl B.
Attanasio, Geofrey
Baker, Jonathan P.
Ballard, Tucker
Bocchino, Frank
Borden, Jason
Bowman, Shannon
Butow, John
Carey, Bradley
Cavanna, Brian
Chapman, Ian Thomas
Croft, Wendy Ellen
D'Amato, Jeffrey
Das, Dibya
Davis, Stephen
Delaney, Matthew
Doughten, Thomas
Eggers, Matthew
Fall, Papa M.
Fields, Shannon
Finan, Sean
Flowers, Stephanie
Gallagher, Barbara
Gardner, Glenn C.
Geonese, Emily

George, Eldo
Giuliano, Michael V.
Grypa, Timothy
Hassan, Aurangzeb
Henry, Paul Robert
Hoque, Akm Ashraful
Hugue, Diana E.
Humphries, Christopher
Hunt, Jason A.
Ibrahim, Christopher
Islam, Asm Ekramul
Iwano, Craig
Jarina, Maria G.
Johnson, Duane A.
Jordano, James J.
Kaldas, Daniel
Kerber, Stephen
Kimmel, Joseph
Koutsouros, John L.
Kovach, Dennis M.
Kowalski, Nicholas A.
Kronenwetter, Christian
LaBriola, Stephen
LaVoy, Loren
Leeson, Ryan
Mannava, Sudharani
Marzouka, Melissa
McGuire, Patrick
McManns, Daniel
McNamara, Alyssa C.
McNamara, Scott
McQuaid, Sara
McSwain, LaTonya
Meillier, Justin
Miller, Laura
Miller, Michael E.
Miyoshi, Jesse
Moon, King Korea
Mulrooney, David
Murphy, Jr., Kenneth P.
Muttathil, Aans
Nahabedian, Robert William
Nasr, Tony
Nevin, Gillian
O'Brien, Kevin
O'Brien, William
Olsen, Erik J.
O'Neill, Kathleen
Perez, Carlos M.
Picarro, Christina
Pinto, Pedro
Pollard, William
Preston, Jr., Robert F.
Pridgen, Eric
Rajarathnam, Srinivas
Reed, Kirk B.
Rumell, Heather
Ryan, Dylan
Sabol, Edward
Santoro, Elizabeth
Schneider, Lauren
Sharp, Gregory
Shook, Andrea
Simon, Alejandra
Snyder, Dale R.
Springer, Brad S.
Suksawang, Nakin
Sullivan, Kelly
Sutton, Jr., Ronald H.
Talbot, Mark E.
Tallapragada, Soujanya S.
Tayee, Yasser
Termini, Gaetano
Trebisky, Christopher
Tseng, Annie
Vander Roest, Nathan
Vena, James
Wensus, Timothy
Williams, David E.
Williams, Sarah Elizabeth
Winter, Ryan
Yeutter, Lisa
Zajac, Mark

CONGRATULATIONS!

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.

# # #

EXAMINATION CORNER

Exam statistics:

October, 2002	Pass:	Fail:
PE	52	66
FE	140	94

April, 2003	Pass:	Fail:
PE	45	55
FE	109	96

# # #

Proctors are Needed!

Just around the corner, another examination administration will be upon us, and this call is placed to recruit proctors for the October 24-25, 2003 exams.

If you've assisted us in the past, or would like to assist in October, please contact our office via fax, e-mail, phone, etc. and we'll provide further details.

In addition to the good company, the satisfaction of contributing to your profession, and a good lunch, once again, we'll be offering a stipend to show our appreciation.

We look forward to hearing from you!

# # #

Council Member Spotlight:

Larry Tarabicos, Esq.
New Castle County Seat

As a member of the law firm of Young Conaway Stargatt & Taylor, **Larry Tarabicos, Esq.** was appointed to serve in the New Castle County seat in 2000 by former Governor Thomas R. Carper.

During his tenure, Larry served as Secretary of the Council, and as Chair of the External Affairs Committee, which presented very successful workshops in all three counties to permitting/building officials earlier this year.

Unfortunately, Larry was unable to accept a reappointment to this Council seat. His knowledge, enthusiasm and contributions will be missed.

We wish him well and extend our sincerest appreciation for his efforts!

# # #

GOVERNOR APPOINTS PAUL E. CRAWFORD, ESQ. TO NEW CASTLE COUNTY SEAT

The Council welcomes an old friend back to DAPE. **Paul E. Crawford, Esq.**, of Connolly, Bove, Lodge & Hutz, was appointed by Governor Minner to serve in the New Castle County seat, upon the expiration of the term served by Larry Tarabicos, Esq.

Crawford previously served on Council during 1994-1999. Council values tremendously the perspective offered by all its members, but particularly those from its public members.

We, once again, look forward to Crawford's contributions to the engineering profession.

Welcome back!

# # #

LAW ENFORCEMENT ACTIVITY

During the past several months, the Law Enforcement/Ethics Committee has investigated numerous cases which resulted in closing at least 20 of these. Cases are closed when there is insufficient evidence to support a complaint; compliance with the law is attained; or Council action (hearing) has resolved the matter.

Seventy-five (75%) of these cases were resolved by firms and/or individuals coming into compliance with the law; i.e., obtaining a Certificate of Authorization or reinstatement of

license, removal of inappropriate business publication listings, etc.

Three cases were closed because of insufficient evidence to support a violation of the law or Code of Ethics. One case resulted in a disciplinary hearing. And one case was closed as the Attorney General's office opted to not prosecute the matter.

The Law Enforcement/Ethics Committee, chaired jointly by Walter L. Frank, P.E., and Robert A. Chagnon, P.E., are tasked with the enforcement of the law and Code of Ethics, and vigorously pursue, investigate and resolve all enforcement matters referred to our office.

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COUNCIL DISCIPLINARY HEARING HELD

A disciplinary hearing was held on June 11, 2003 in the matter of Council of the Delaware Association of Professional Engineers vs. David F. Johns, P.E. (Case No. 02/006).

Johns was alleged to have violated Title 24 Del. C §2823 (a) (2) charging gross negligence and violations of Canons 1.B, 2.A, and 3.A of the Code of Ethics, concerning his deficient performance on numerous on-site wastewater disposal systems projects.

Upon the conclusion of the presentation of evidence, Council approved revocation of Johns' license #8934, effective June 20, 2003.

On August 1, 2003, a preliminary hearing was held in the Superior Court of Kent County to address Johns' motion for a stay of the revocation of his license. The Superior Court's decision reached on August 6, 2003, was to deny the request for stay.

The matter of appealing Council's decision of license revocation is pending in Superior Court.

Status on Engineering Education Accreditation

By Robert A. Chagnon, P.E.

The "President's Message," in our spring edition, outlined the problems that have developed with the Engineering Accreditation Commission (EAC) of ABET's new Criteria 2000 for accrediting engineering programs. The new criteria is aimed at better preparing engineering graduates for advance study and research careers in lieu of the previous emphasis on preparing graduates for the practice of engineering in the private sector. This is a national problem that is being addressed by the National Council of Examiners for Engineering and Surveying (NCEES). However, engineering licensing boards throughout the country are involved since all rely on ABET accreditation for assessing the quality of one's educational background. Here's a brief summary on what NCEES has been doing about the problem so far.

Established an Education Position Statement: The educational objectives of NCEES are to:

1. Advance quality education that adequately prepares candidates for licensed professional practice. Licensed professional practice includes, but is not limited to all aspects of engineering and surveying regulated by state and territorial licensing boards, or regulated by government agencies.

2. Recognize institutional indicators of quality education which may include:

   A. Program educational objectives and outcomes that include a focus on preparing students for licensed professional practice as described in Section 1
   B. Program educational objectives and outcomes that are assessed in part by nationally validated content examinations

C. Curriculum requirements that equate to the standards for licensure eligibility.

3. Establish program indicators of quality education for licensure eligibility, which include"
   A. Nationally validated assessment methods
   B. Program educational objectives that specifically direct the educational standards towards licensed professional practice
   C. Compliance with prescribed pass rates on nationally validated content examinations.

4. Assist Member Boards in evaluating the indicators and metrics as established for quality education for licensure eligibility.

Participating in Federal Government Activities Relating to Education & Accreditation: A white paper has been submitted by NCEES to the U. S. Congress's House Committee on Education and the Workforce. The U.S. House of Representatives is studying the following questions on accreditation, which include: (1) does the fact that an institution gains accreditation mean that it is a quality institution? (2) Is there more that accreditors can do to ensure that the education provided by a postsecondary institution is in fact quality? (3) Should Congress do more to require specific standards for accreditors and the areas they review?

In response to question (1), NCEES's white paper to Congress points out that almost 47% of accredited programs surveyed indicate that their graduates are not reaching 80% mastery level in basic engineering science skills. According to NCEES, that indicates that the graduates falling in that category will not be prepared to meet the challenges of engineering in the workplace. They go on to state that the dangers of below standard engineering not only impacts our safety in structures such as buildings, bridges and highways, but also impact our economy and our response to terrorism.

ON question (2), " Is Accreditation a Reliable Standard", Congress was made aware that "the current dependence of the engineering licensure system upon accreditation and its divergence from uniform standards in education put the licensure system at risk in two ways. First, we face the results of a continuing erosion of the common core of curriculum, due in part to accreditation's reluctance to be prescriptive in accreditation criteria, coupled with the lack of measurable accreditation standards. Secondly, by continuing to hold accreditation as the education standard for licensure, we face the issue of potentially restricting qualified candidates, albeit graduates of non-accredited programs, from licensure." They conclude by stating "that the public and professional communities have long relied upon a final gatekeeper for judging competence: the licensure examination.

On question (3), NCEES points out that "the accreditation community suggests that a major challenge they face is developing additional evidence of student learning outcomes. NCEES advised that "many of these methodologies (for doing so) are already in place but have been rejected by the academic community. The rejection of assessment frequently rests upon reluctance of an educational system to rely upon one measure for judging such results. While NCEES supports multiple methods, as in their licensure system, they also support the use of assessments as advocated in federal legislation."

The white paper concludes with "Accreditation's impact on the licensure system is important to consider as the reliance upon it affects public health, safety, and welfare, as well as fairness to those wishing to enter the workforce. Specific standards are needed to preserve the reliability and integrity of systems, such as licensure, that are dependent upon accreditation.

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COUNCIL TWO-DAY WORKSHOP TO ADDRESS PROPOSED LAW REVISIONS

Council has scheduled a two-day workshop, which is open to the public, for discussion of proposed law changes.

Workshop is scheduled for October 3-5, 2003, at the Bellmoor Conference Center, Rehoboth, Delaware.

Workshop to begin Saturday morning at 8:00 a.m. through 4:00 p.m., and continues on Sunday 9:00 a.m. through 2:00 p.m.

The goal of the workshop is to organize and finalize proposed legislation for consideration during the 2004 legislative session.

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