



News from Delaware's Licensing Council for Professional Engineers

Spring 2010



PRESIDENT'S MESSAGE

By Frank A. Newton

It is again the season for the Zone meetings of NCEES in preparation for the annual meeting to be held in Denver in August of this year. The Northeast Zone held a combined meeting with the Southern Zone this past month. Combined meetings are unusual but do serve a purpose in sharing information and thoughts on motions that will come before the annual meeting.

One of the motions that will be presented for consideration at the annual meeting is a recommendation from the Computer-Based Testing Task Force (CBT) that will recommend moving the Fundamentals of Engineering (FE) exam to a computer-based format within the next two to three years. Many of the problems of going to a computer-based test can and are being resolved for the FE exam that makes such a move within the realm of possibility. There remain many problems to be resolved before the PE exam is seriously considered for computer-based testing.

Another important motion will be considered from the seemingly perpetual Engineering Education Task Force regarding additional educational requirements for Professional Engineers. This subject has evolved from an initial suggested requirement for an additional 30 hours of education beyond the bachelor's degree to qualify for a PE to a suggestion that a Masters Degree or equivalent would be required. The Task Force is going to present a motion that

proposes two alternatives to the Masters requirement. One describes the qualifying additional educational requirements and the other provides for a structured rigorous mentoring program during the six years of experience prior to sitting for the exam. These requirements would be included in the 'Model Law' in 2020. So this is not going to be effective for some time yet and would be contingent upon adoption of the model law by the various jurisdictions.

NCEES is working toward encouraging more uniformity in the licensing process among the many jurisdictions. They feel that a more consistent licensing process would encourage more people to become licensed. Surveys have indicated that many students are confused with the licensing requirements of the various jurisdictions. I believe this is a worthwhile endeavor that would encourage more licensing and would as a result better protect the public.

The NCEES Enforcement Exchange is a database maintained for Licensing Boards to review for the possibility that a candidate for licensure in its jurisdiction has not been disciplined in another jurisdiction. This database has not been fully utilized by all Boards and NCEES is encouraging better use of this facility. Certainly knowing a candidate has no record of discipline offers more protection of the health, safety and welfare of the public when considering comity in their jurisdiction.

MESSAGE FROM THE EXECUTIVE
DIRECTOR
By Peggy Abshagen

7,771 is the number of licenses we are renewing at the moment. This consists of 6,811 PE licenses and 960 Certificates of Authorization.

After sending our first email notification for PE renewal, within 4 hours 394 licenses were renewed; after one month 2,458 licenses were renewed. What this means to us is now we will need to mail out 4,353 renewal notices. This requires \$1915.32 in postage, plus the cost of paper, copying and the staff time. Electronic renewal is very easy and the most efficient manner in which to renew your license. You can renew at your convenience; download your new wallet card; and automatically updating our database, eliminating the associated costs to mail a paper renewal and save a tree or two. Visit our website at www.dape.org – Professional Engineers – License Renewal. It couldn't be easier.

If your firm has submitted its Certificate of Authorization renewal application, until all engineers listed on the application have renewed, we are unable to renew the Certificate.

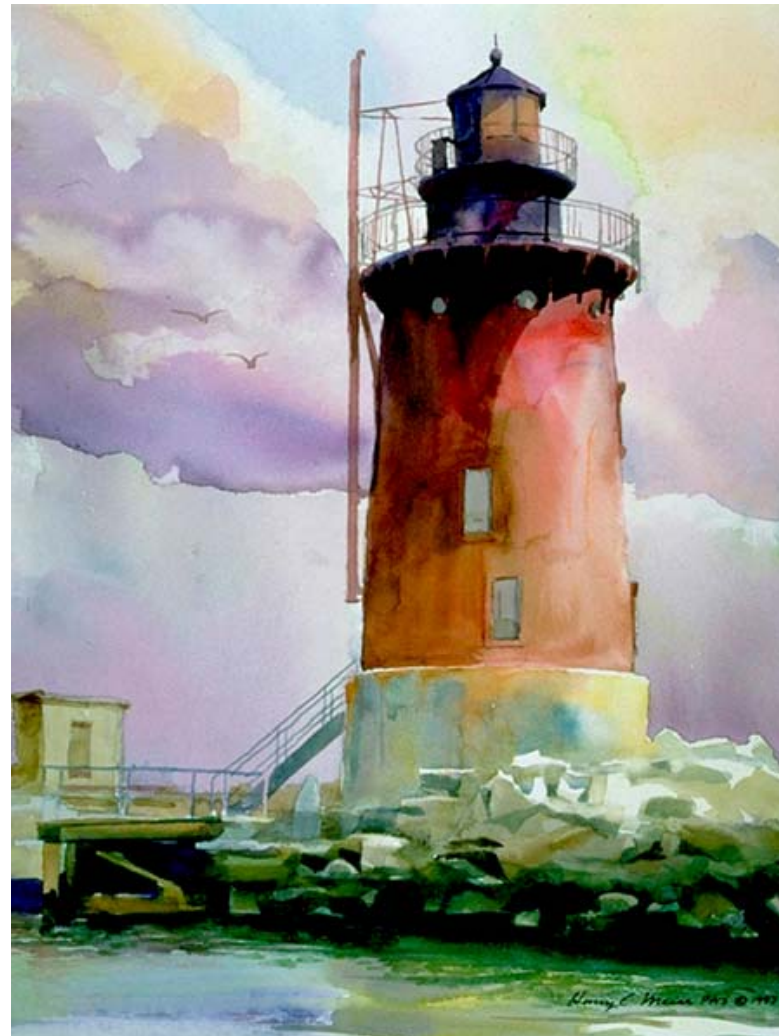
All licenses do expire on **June 30, 2010**. We are working diligently on renewing all those that can be renewed. Incomplete applications, unsigned checks, unidentified checks, duplicate payments, etc. will be resolved just as soon as feasible. Please keep in mind we are unable to provide receipts. Payment receipts are provided upon electronic payment. Cancelled checks also serve as receipts. Thanks for your patience!

DID YOU KNOW

During this renewal period, did you know that if disciplinary actions have been taken by any other jurisdiction, you are obligated to report these actions to DAPE? You must provide us a copy of the final decision, consent agreement, etc.

Did you know that once your license has been renewed, you are able to download your new wallet card at any time? This may be accomplished at www.dape.org – Professional Engineers – download wallet card!

SO . . . WHAT DOES AN ENGINEER DO
WHEN NOT ENGINEERING????



Retired engineer **Henry C. Meier, P.E.**, license **#1371**, shared with us his beautiful watercolor entitled "Breakwater Light." In 2006 accepted into the prestigious American Watercolor Society, Meier's paintings have been exhibited nationally, featured in art magazines, and reside in many public and private collections in Delaware and New York.

In 2009 Mr. Meier was honored with the "Frank C. Wright Medal of Honor" award for his watercolor painting, "Subdued Gold" at the 81st Grand National Exhibition in New York City.

See more of Meier's work at www.HenryCMeier.com

In recent years, Meier has relocated his studio from Lewes, Delaware, to the Greater Albany area of New York to be near family.

If you would like to share with DAPE some of your interests, send us your photo and details!



**SHOULD DELAWARE
MUNICIPALITIES ADOPT
MANDATORY FIRE SPRINKLER
SYSTEMS FOR ALL NEW SINGLE
FAMILY HOMES?**

By Robert A. Chagnon, P.E.

Introduction: The 2009 edition of the International Residential Building Code, that's currently being considered for adoption by many of Delaware's municipalities, provides the option of requiring fire sprinkler systems for all single-family homes built after January 1, 2011. The cost increase per home has been estimated to range anywhere from \$2,500.00 to \$8,000.00 plus, with the lower estimates coming from the proponents of the requirement that's topped off at the higher end by the opponents of such. Those figures are for homes with city water service with the cost being extended up to \$15,000.00 for homes with private wells. For the fire sprinkler manufacturing industry, the primary force behind it all, it can mean a market share hike anywhere from \$100 million to as much as \$3 billion. Up till now, the fire sprinkler manufacturing industry has been unable to sell their products to the general public.

Background History: This all started back in 2005, when the National Fire Protection Association in the U.S. voted to make it mandatory to have sprinklers installed in all new one and two family dwellings. The firefighter's lobbying strength being what it is, its resulting political persuasion eventually got to the International Code Council in the form of a related building code adoption provision.

Status to Date: Several states have already taken action to either adopt the provision, take exception to it or delay its enactment. For example, the Michigan Building Code Review Committee voted 10-2 against the provision with

the state's director of the Department of Energy, Labor and Economic Growth, making the final decision in the near future. California, Maryland, New Jersey, New Hampshire, Pennsylvania and Iowa are, as of now, the only states that require sprinkler systems to be installed in new homes. A total of fifteen states have thus far moved to block mandates and make sprinklers optional.

The Argument For: The fire sprinkler manufacturing industry can put forth several good arguments in favor of mandatory sprinkler systems. Statistics show that in 2008, someone died in a fire in the U.S. about every 158 minutes and someone was injured every 31 minutes. Four out of five U.S. fire deaths in 2008 occurred in homes. Deaths from fires and burns are the fifth most common cause of unintentional injury deaths in the U.S. and the third leading cause of fatal home injury. The United State's mortality rate from fires ranks seventh among the 25 developed countries from which statistics are available. Direct property loss due to fires is estimated at \$8.6 billion annually. Their distracter's concerns for the potential for freezing pipes, accidental discharge of the sprinkler heads and availability of adequate water supply are easily put to rest. As for the up-front cost, if amortized over a typical 30-year mortgage, they claim that the cost could equate to nothing much more than a cup or two of gourmet coffee per month.

The Argument Against: According to the National Fire Incident Reporting System (NFIRS), approximately **80% of U.S. fire fatalities are due to smoke inhalation and not burns.** Fire sprinkler systems DO NOT activate from smoke. They ALL are heat sensitive elements. Homebuilders Association across America contends that mandatory fire sprinkler systems for new homes would price thousands of prospective buyers out of an already unforgiving housing market. The state of Michigan's president and CEO of Habitat for Humanity predicts that if the provision is adopted in Michigan, it will cost Habitat for Humanity an equivalent minimum of 20 low income families a year who will be denied adequate housing. I guess not too many low-income families traditionally drink gourmet coffee. In the Richmond, VA area, slightly over 700 families lose the ability to qualify for a home mortgage with each \$1,000 increase in the price of a new home. Based on the average cost of a sprinkler system installation in that Virginia area,

that equates to more than 4000 Richmond, VA families being unable to purchase an affordable home.

What Comes Next: Will it be mandatory trash compactors for its consolidation benefits, mandatory use of only low V.O.C. paints for better air quality or mandatory use on only compact fluorescent lights? Oops, I guess we're already stuck with that one.

NCEES ENGINEERING AWARD TO UNIVERSITY OF DELAWARE

In a competition sponsored by NCEES, the University of Delaware's Department of Civil and Environmental Engineering received the grand prize for engaging their students in collaborative projects with licensed Professional Engineers.

The 2009 senior design course, coordinated by **Michael Paul, P.E.**, employed with Duffield Associates, with support from a team of practicing professionals who serve as mentors and instructors, selected the expansion and enhancement of a multi-user trail system in the City of Newark. The Pomeroy Trail East Annex Project will connect an existing trail with the University's campus. The project is scheduled for completion in 2011.

The project included a broad array of civil engineering challenges, including drainage and environmental upgrades, wastewater system improvements, re-evaluation of a proposed groundwater remediation program and associated infrastructure improvements.

The competition was judged by a jury of NCEES members and representatives from academic institutions and professional engineering organizations. The project was praised for its excellent integration of real-world experience in an educational setting, great impact on raising social consciousness, and outstanding report and work deliverables.

The grand prize includes a trophy and a \$25,000 prize to the University.

DAPE members and Professional Engineers in addition to Paul who contributed to this project include **Ronnie Carpenter, P.E.** of Carpenter Engineering, **Paul Butler, P.E.** of URS Corporation, and **Philip Horsey, P.E.** and **Ted Januszka, P.E.** of Pennoni Associates.

Congratulations to the 2009 Civil and Environmental Engineering class of the University of Delaware!

Kudos to those DAPE members who contributed their time and interest in developing young engineers!

2010 COUNCIL ELECTION

Four Council seat vacancies will be filled after the 2010 Council election. Ballots will be mailed to the voting membership of DAPE to fill the following seats:

Civil Engineering
Industry Seat
New Castle County
Mechanical Engineering (remainder of term)

Incumbents **Greg Pawlowski** and **Charlie McAllister** have petitioned to serve another term in the Civil and Industry seats, respectively.

Meghan Lester, P.E. has petitioned to serve in the New Castle County seat.

The Nominating Committee chaired by Keith Kooker, P.E. identified **Robert Leitsch, P.E.** to serve in the Mechanical Engineering seat for the remainder of the term to be vacated by current Council member Rick Walsh.

The Council of DAPE is also recommending approval of several housekeeping changes in the bylaws. Membership approval is required. Look for these recommendations in our ballot mailing.

In accordance with the bylaws, ballots will be mailed to those that live or work in Delaware by June 15th for return by July 15th. Your vote does count. Please return your ballot by the deadline!

DAPE MEMBERS RECOGNIZED

Bangalore Lakshman, P.E. (License #4247) and **Meghan Lester, P.E.** (License #13632) have been awarded the Civil Engineer of the Year and the Young Civil Engineer of the Year, respectively, by the American Society of Civil Engineers.

Dudley W.C. Spencer, P.E. (License #1328) has been awarded the Dale A. Smith Memorial Award of the National Blood Foundation for his novel invention of the sterile connecting device, which has made a significant impact on the practice of transfusion medicine.

CONGRATULATIONS!

NCEES EXAM UPDATES

Various changes to the NCEES exams will take place for the October 2010 exam administration.

- October 2010 will be the last administration for the current Structural I and Structural II exams. (A new 16-hour Structural exam will be offered starting with the April 2011 administration.
- The PE Civil and Mechanical Exams will require exam candidates to select in advance their afternoon module, as when exams are ordered a specific module booklet will be ordered for that candidate.
- The FE afternoon exam is offered in seven individual modules. Exam candidates will be required to pre-order the specific exam module prior to the exam.
- The Examinee Management System will be implemented requiring all examinees, once they have received approval, to register with NCEES to obtain an identification number, and register for the October exams. This registration is required to order exams.



THE DELAWARE ENGINEERING ACADEMY?

By Gregory Pawlowski, P.E.

In the last newsletter I wrote about the upcoming Engineer's Week Banquet held at the DuPont County Club. One of the evening's events was the announcement of Delaware's Engineer of the Year. This year the distinguished title went to the University of Delaware's Dean of Engineering, Dr. Michael Chajes, P.E. It was a title well earned and was bestowed by a panel of his peers. During Dr. Chajes' acceptance speech, he spoke of an Engineering Academy he is proposing at the University of Delaware. I would like to inform those who could not attend the banquet of the Engineering Academy.

The purpose of the academy is multifaceted with one of its main goals to promote engineering as an exciting and rewarding career option. To begin with, the building would encourage regional K-12 students to enter the engineering field through outreach programs. This concept falls in line with previous articles I have written on this subject. Students enrolled in an engineering program will have better access to the engineering community through the various dedicated spaces. There will be offices dedicated for Delaware professional societies, and their respective student chapters, to conduct regular meetings. Undergraduate researchers and professional organizations will also have space. Additionally, rooms will be set up for students, who are graduating, to conduct interviews with engineering firms as well as participate with groups holding awards ceremonies, seminars, educational camps, and workshops.

Another key factor of the Academy is that it would be open to students every day of the week and at all hours. Students will be able to study and do homework with fellow students, meet to work on class projects together, and utilize wireless computing labs for research.

From a promotional perspective, the Academy will provide a place to display an engineering wall of fame honoring award recipients from the University of Delaware and the State. It will also be a clearing house for engineering related materials where K-12 students can come and use them for school research. Once again, the concept is to develop a pipeline of students which feed into the engineering programs and then onto the engineering community.

So what are the expected outcomes from such an Academy? One obvious result would be an increased visibility, both locally and regionally, of the accomplishments of University of Delaware faculty, students, alumni, and Delaware engineers in general. And while many states have engineering centers that focus primarily on the societies, the Academy would bridge the gap between our youth and developing engineers with the established engineering community. In Dr. Chajes' acceptance speech he stated "I believe that an Engineering Academy Building would provide Delaware with a unique opportunity to be a leader in the engineering revolution." Several members of DAPE have expressed interest in this building, including myself, and are looking forward to its fulfillment. By now, most of you would be asking yourselves, what it will take to make this happen. The first step Dr. Chajes has taken is to set up a steering committee with the purpose of moving his idea forward. Added support by the engineering community would be a big help in getting his plan to fruition. This would include donor funding for the design and construction of the building. Admittedly this task will not be easy, but through persistence and hard work, it will not be an opportunity Delaware should miss.

LAW ENFORCEMENT ACTIVITY

Case 09/096 – Long, Samuel B. (#1531)

Residential structural report was issued indicating no structural weakness, when in fact calculations supported a contrary opinion. A Consent Agreement was reached stipulating an administrative penalty, as well as completion of an approved Ethics course.

Case Activity: The Committee has opened approximately 70 files this past quarter. The majority of these cases involve firms offering or advertising engineering services without first obtaining a Certificate of Authorization.

We have been successful in getting 22 of these firms into compliance with the law. And we are diligently working with the others to resolve these matters.

Engineering Practice Assessor: Fred Schmitt, P.E., our Engineering Practice Assessor, has continued his visits with various building officials throughout the state to discuss specific engineering concerns, resulting in several new investigative files.

OPEN HOUSE & ETHICS
PRESENTATION INVITATION!

It was just one year ago that our offices were relocated to our beautiful new facility in New Castle, Delaware.

To showcase our office, we are inviting the DAPE membership to stop by, take a look around, and attend a business ethics presentation.

How do your ethics measure up?

We are hosting a 60 minute presentation to review some typical situations in which engineers can find themselves. These are scenarios that may present personal or business situations that could give rise to ethical questions. Carlos Ferreiro, Operations Ethics Compliance Officer from Dupont will be our speaker.

After the formal presentation, we will have a Q&A session where Carlos will answer questions and discuss his experiences in corporate compliance. The Q&A session will be followed by a networking session where you can meet with Council and Committee members and enjoy some refreshments.

We will be providing 1.5 hr PDH certificates of participation for those needing PDH credit hours.

WHERE: 92 Read's Way, Suite 208
New Castle, DE 19720

WHEN: Tuesday, June 29, 2010

TIME: 4:00 p.m.

RSVP: no later than June 21, 2009
office@dape.org

Name: _____

[] PDH credit certificate requested

