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REPORTER

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NSPE Code of Ethics for Engineers Engineers' Creed

As a Professional Engineer, I dedicate my professional knowledge and skill to the advancement and betterment of human welfare. I pledge:

To give the utmost of performance;

To participate in none but honest enterprise;

To live and work according to the laws of man and the highest standards of professional conduct;

To place service before profit, the honor and standing of the profession before personal advantage, and the public welfare above all other considerations.

In humility and with need for Divine Guidance, I make this pledge.

Adopted by National Society of Professional Engineers, June 1954

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Cover Photo: Once Upon A Nation turned its attention to restoring Franklin Square. The group procured a concept plan from noted designer Ralph Applebaum, preliminary plans were presented by Synterra and Urban Engineers, and Philadelphia-based consulting engineering firm Pennoni Associates was selected as prime consultant for landscape architecture and civil, structural, mechanical, and electrical engineering. The goal: revitalize the square and bring it back to the original glory intended by William Penn.

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President's Message

Harvey D. Hnatiuk, P.E., F.NSPE

What Can We as PEs Do?

My year as PSPE President has gone by all too quickly. I traveled to each of the five regions of our state and participated in meetings in four of the five regions. I saw many old friends and made some new ones while meeting so many fellow professional engineers who share the belief that what we do as PSPE is critically important not only to the sustainability of our profession but also to its growth as well as to the health, safety and welfare of the citizens of the Commonwealth of Pennsylvania.

The year concluded with a great Engineers Conference in Reading, which attested that the camaraderie and spirit of PSPE is alive and well!

I enjoyed this year very much and learned a great deal. Our executive committee, board, committee chairs and committee members – working with our partners at Wanner Associates – put in a lot of hours to make this year truly memorable in so many ways.

The theme for this past year has been “Engagement and Initiative.” We began the year with the goal of engaging more members in PSPE’s activities and initiating new plans

and direction. Following last year’s conference in King of Prussia, a planning retreat was held in Carlisle as the first step in the development of a new strategic plan. The strategic issues that were identified in Carlisle were presented to our entire membership through an electronic survey. Nearly 20% of the members for whom good e-mail addresses were available provided responses...a response that indicates that the members of this great organization truly care about and want to make it better. Nearly half of the responses included comments that were carefully reviewed.

The results of the retreat and the survey were used to compose a new Strategic Plan, which was approved by our Board of Directors at our September 2007 meeting in Altoona. The Altoona meeting included a Friday night reception at the Railroaders Museum, at which Representative Richard Geist (79th District) discussed the need for improved infrastructure in our state and asked us for our help in creating awareness of this issue. A few weeks ago, many PSPE members participated in an Engineers Legislative Day at the Capitol in Harrisburg where we along with members of

ASCE and other organizations met with representatives, senators and key staffers to discuss our concerns about the need to upgrade our highways, bridges, rail systems, and other infrastructure. We also discussed the need to continue funding mathematics and science education programs for middle and secondary schools and engineering laboratory upgrades at the universities in the Commonwealth.

Throughout the year, PSPE’s committees ramped up activities and involved more and more members from our five regions to address the objectives, implement the strategies and work on the priorities identified in the strategic plan. Collectively, we accomplished a lot of what set out to do.

I have appreciated this opportunity to serve PSPE as its President and I thank you for your support and efforts throughout the years.

Let’s resolve to continue to work together to further energize PSPE by continuing our involvement and engaging more and more PEs in the good work that we do. ■

Congress Introduces Withholding Tax Relief Act of 2007

Congress has introduced legislation that would repeal the three percent withholding tax on federal contracts for services. The Withholding Tax Relief Act of 2007 (H.R. 1023 and S. 777) would repeal provisions of the Tax Increase Prevention and Reconciliation Act of 2005 that requires federal, state, and local governmental entities to withhold as tax three percent of payments due to vendors providing goods and services to such entities, beginning in 2011. Currently, all payments for engineering services contracts are paid completely to the engineering firm. The Withholding Tax Relief Act of 2007 would repeal the future withholding tax and would guarantee that payments for all federal contracts for engineering services would continue to be paid completely to the engineering firm.

For more information about this bill and to contact your elected officials about supporting this important legislation, visit NSPE’s Legislative Action Center.



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On Capitol Hill

John D. Wanner, CAE

Building Code Draws Attention

In the past month, both the Senate and House labor committees have held public hearings on the Uniform Construction Code (UCC). The Senate hearing focused particularly on the idea of repealing the law entirely. While that is not likely to occur, there are plenty of complaints. Both committees are flooded with bills to alter various requirements of the UCC. Problems with issuing permits and inspection delays along with the associated costs were highlighted by more than one group providing testimony. Inconsistent enforcement at the local level was repeatedly cited as well. Our lobbyists anticipate that the Department of Labor and Industry may end up with a greater role in some areas. The timetable for change is still to be determined, but changes to the UCC are almost a certainty according to Capitol insiders.

PSPE supports amendment to UCC bill

Every session since its enactment, numerous bills have been introduced to make changes to the Uniform Construction Code. Pennsylvania's state wide building code law is basically a reference to the International Building Code, but with each new amendment, the uniform code becomes less uniform. Senate Bill 437 would eliminate a provision of the code from applying to Pennsylvania residences in as far as requiring anchor bolts for concrete and masonry walls is concerned.

The bill as passed by the senate also contained a section which architects and engineers found objectionable. This new section read as follows:

"When ACI 318, ACI 332, ACI 530/ASCE 5/TMS 402 or provisions of section R404 are used to design concrete or masonry foundation walls, project drawings, typical details and specifications are not required to bear the seal of an architect or engineer responsible for design."

Objections led to the deletion of the above paragraph from Senate Bill 437 by the House Labor Relations committee. The bill has yet to pass the House, but PSPE will be monitoring it and be on the guard for this or any other anti-design professional provisions.

Engineers Day on Hill Draws Seventy Plus

Engineers Lobby Day (May 8) in Harrisburg drew more than seventy engineers plus a class of 3rd graders who joined in the activities as part of a class trip. The PSPE and ASCE jointly sponsored event focused its lobbying on funding issues for transportation, engineering schools and math and science programs. Participants were provided background on the issues over breakfast and then moved onto the Capitol for appointments with Legislators and legislative staff.

While the outcome of the funding issues may not be known for sometime, the event was a success. The attendance was more than previous efforts which had been discontinued a few years ago due to a lack of strong participation. PSPE President Harve Hnatiuk spoke during the orientation session to congratulate the participating engineers for taking an active role in our democratic process. Given the positive turnout and feedback, future lobby days appear likely.

House Skips Lengthy Budget Debate

For years it has been traditional for the Pennsylvania House to spend a couple of days each year voting on hundreds of budget amendments before sending the budget bill to the Senate. The odd thing about the process is that it has little to no bearing on the final Commonwealth budget which is negotiated behind the scenes between legislative leaders and the Administration.

This year the House had set aside the week of May 21st for the long and often tedious voting on more than 200 separate amendments. But at the eleventh hour, the House leaders had a change of heart. By agreement, all of the budget amendments were withdrawn but one. The one amendment offered would have altered House Bill 1286 from adopting the Governor's budget proposal to a bill reflecting the previous year's final budget, with overall cost of living increases in the neighborhood of 2.5%. Along largely party lines, the House voted to defeat the one budget amendment, and subsequently passed the Governor's bill.

The end result is that the House saved itself from roughly two days of voting on amendments. It should be pointed out that two of the many amendments not voted were to restore funding to the engineering equipment grant program and funding for Mathcounts grants. However, the passage of the bill by the House by no means indicates that those items will be absent from the final budget which is expected to be passed sometime around the end of June.

"Capitol" continued p. 22

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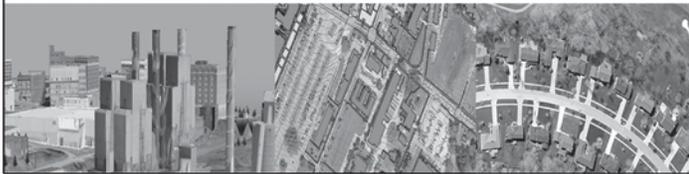
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Risky Business

Rebecca Bowman, Esq., P.E.

Honor Your History

It's time for us to talk about honoring your history, about keeping and disposing. You need a document retention policy and you need to follow it. In a few minutes (paragraphs), I'll talk about the policy, but right now I'm going to talk about diligence.

Generally, having no policy is an act of stupidity. If you have no policy, you have no control. Your company has no ability to manage or predict what you have in your possession, where it is, who has it, or how it's organized. Naturally, if you can't find a necessary document or file, it can't benefit you. However, things are worse than that. Courts are increasingly holding the absence of control against the uncontrolled party. This means that if you supposedly have a document but cannot show it, the court will at least punish you by refusing to let you introduce the document should you find it later. The court may punish you by assuming that the missing document contains evidence that would prove something not in your favor. You don't want to take either of these chances.

There's more. Having a policy is only half the battle. As with most company policies, having a policy and not following it can be worse than not having a policy at all. Beyond the act of stupidity that is not having a policy, having a policy and not enforcing it is considered by the courts to be an intentional bad act. That "court may punish you" in the previous paragraph, turns into "the court will punish you." The court will conclude or direct the jury to conclude that your failure to enforce the policy was an intentional act of either concealment or destruction. Both financial and evidentiary sanctions can be imposed.

All this means that you need to take two steps: establish a policy and establish a way

to monitor and enforce it. I don't mean "enforce" in a police way. I mean "enforce" as in "incorporate routine review processes" to make certain that the policy is happening. For example, if your policy states that documents will be grouped into five categories, your process might include using color-coded folders to identify duration of retention and departmental responsibility for each category. If you set up a labeling template that includes each of the categories as part of your project mobilization process, you have built in another step to assure compliance.

Now that you have a perspective on the importance of the policy and the importance of assuring compliance, let's talk about what the policy should include. NSPE includes links on its website to two highly-useful documents, *Document Retention Guidelines* and the *Model Document Retention Policy*. Your best course of action would be to review both of these documents. However, on the off chance that you can't or won't review these, I'm going to provide you with my thoughts, many of which match up nicely with the Guidelines and Model Policy. As with the Guidelines, I'm not going to address document retention issues in areas affecting all businesses, such as general accounting and human resources. I'm going to focus on document retention for uniquely project-based businesses.

From a legal standpoint, there are timeline criteria; each state has different requirements. It is best to keep the most demanding requirements of any jurisdiction in which you practice, rather than to try to keep separate policies for each jurisdiction; it's too easy to deviate from the policy(s) if there are a bunch of different ones. There are Federal requirements to incorporate, too, if you work

directly for the Federal government or for an entity receiving Federal funding. The statute of repose sets the time beyond which engineers/contractors cannot be held liable for later events. The statute of limitations sets time beyond which no lawsuit can be filed after an event occurs. The IRS can look back seven years. Your contract may require the retention of records for a specified period of time. Be aware that you may not find the retention requirements in a paragraph entitled "Document Retention." You are equally likely (if not more likely) to find requirements in paragraph entitled things like "Auditing" or "Ownership of Work Product." Your insurance carrier may have requirements, too, that either determine your ability to renew your insurance or generate a premium discount. The first step is assessing the external criteria imposed upon your business.

The external criteria form the skeleton of your policy; now you need to flesh it out. Once you have determined the external criteria, determine what to keep, under what circumstances, and for how long.

Documents that are legally binding

Documents that define your legal relationship with your client are the most important. That involves much more than your contract. It includes project bid drawings, general and special specifications; all change order documentation, and any amendments. While most of us love to pitch all of the in-process stuff once we have achieved a contract (and we all have those "no prior promises count" clauses), that's not a good idea. If a dispute arises about the meaning of a provision within the contract documents, drafts and meeting minutes can be used to document the "legislative history."

"Risky" continued p. 21



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PSPE Members Active with Public Officials



PSPE members visited Senator Pileggi during Engineer's Day on the Hill 2007. Shown l - r: PSPE Treasurer John Nawn, P.E. of Newtown Square; Lisa Catania, P.E., F.NSPE (PSPE President 1997-98) of Melmont Park; Sen. Pileggi; and PSPE President Elect, John Bradshaw, P.E., PLS of Mechanicsburg.

Pennsylvania Engineers Visit State Legislators

Members of the ASCE Pennsylvania Sections organized the "Engineers' Legislative Day" to meet with their state legislators regarding transportation and infrastructure issues. Over 70 engineers representing the ASCE, the Pennsylvania Society of Professional Engineers (PSPE), the American Society of Highway Engineers and the American Concrete Paving Association made their way to the Capital in Harrisburg to meet with the offices of 74 key state legislators. The engineers were joined by a group of 3rd graders from the Saint Genevieve School outside of Philadelphia who shadowed the engineers on their visits to legislators.

The day started off with a morning session to educate the attendees on key issues and how to effectively meet with elected officials. Attendees heard from Karen Rae, Deputy Secretary for Local and Area Transportation from the Pennsylvania Department of Transportation on transportation concerns across the state. In addition, they received a legislative briefing from John Wanner, PSPE's Executive Director.

Topics discussed with the legislators included the findings of the 2006 Report Card for Pennsylvania's Infrastructure, the findings of the Governor's Transportation Funding Commission and PSPE's Higher Education Engineering Programs Funding Initiative.

Reference: ASCE weekly legislative e-mail to members, May 11, 2007.



In attendance l - r: PADOT Chief Engineer for Highway Administration, M.G. Patel; PADOT Secretary of Transportation, Al Biehler; Christopher Menna, ASCE Philadelphia; John Bradshaw, PSPE President Elect; Pat Kane, ASCE Pittsburgh; Peter Terry, ASCE Lehigh Valley; and John Nawn, PSPE Treasurer. Not shown: PADOT Acting Bureau Chief, Materials and Construction, Tucker Ferguson; PADOT Director of Public Relations, Rich Kirkpatrick.

Engineers Meet with Secretary Biehler

Members of both PSPE and ASCE met with Secretary of Transportation Al Biehler prior to Engineer's Day on the Hill. The ASCE 2006 Infrastructure Report Card was reviewed; while it is recognized that all aspects of the infrastructure are important, emphasis was placed on transportation at this time. Tax options, highways versus transit, and a gas tax in PA were discussed. Secretary Biehler stressed that the message "DOING NOTHING IS NOT ACCEPTABLE" be carried to the legislators on May 8, during Engineer's Day on the Hill.

The Secretary stressed that visiting legislators once is not enough. We must get a commitment and follow-up 3 to 5 times. Persistent constituents push legislators to action. Engineers are the logical source to educate the legislators.

PADOT Director of Public Relations, Rich Kirkpatrick advised the following:

1. Talk about consequences if nothing gets done.
2. Stress economic development.
3. Generate rank and file responses to push legislators.
4. Personal letters work best
5. Rule of thumb – 100 or more notices to a legislator gets their attention.

Reference: Excerpts from notes taken by Christopher Menna.

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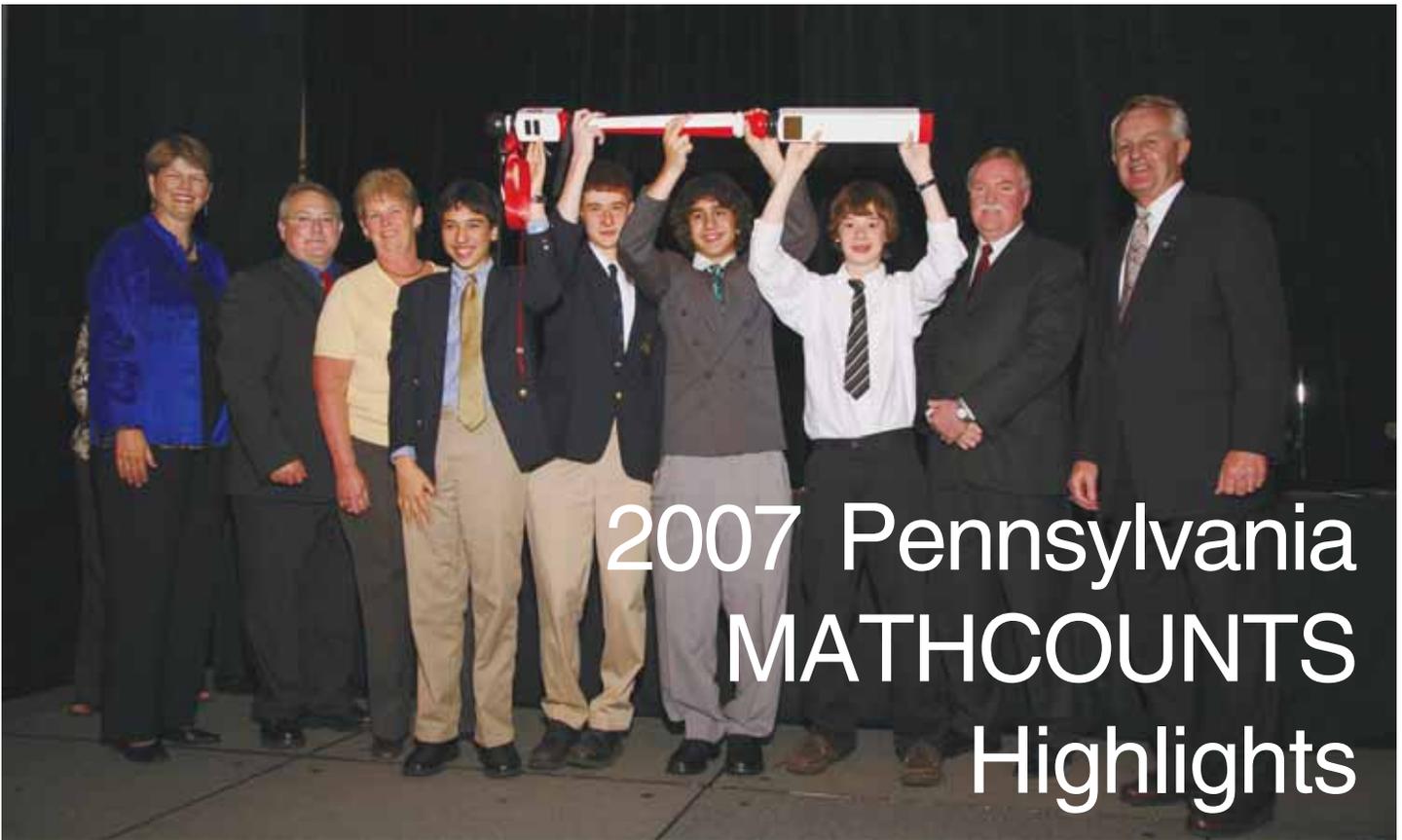
*Paul A. Dugan, P.E.
Millennium Engineering PC*



I had the pleasure of speaking for an hour with my son's 5th grade class recently about careers in engineering. I started by asking how many wanted to be engineers and of course only a few students raised their hands.

During the discussion I showed them "Engineers Can Do Anything" (17 min.) from the Engineering Education Service Center. (I have to say that the video is exceptional.) I handed out big buttons at the end that say "Engineers Rock." The students and I had great fun with this program as it was informative and entertaining.

I asked at the end who thinks they want to be an engineer when they grow up and every hand was raised including the girls. What was especially encouraging is that the teacher told me that usually science guest speakers come in and talk way over the level of a 5th grader and lose the crowd. I hope to do much more of this since I had a blast! No question the credit goes to the creators of this video; I highly recommend this video for any child between 3rd and 12th grade. There is nothing more rewarding than brightening up the day of a child - especially when the topic is about something I love - engineering. ■



2007 Pennsylvania MATHCOUNTS Highlights

Pennsylvania National Performance

Pennsylvania won the Spirit Award at the National MATHCOUNTS Competition. This award is given by judges and officials based on the team's overall attitude and outlook. Photo courtesy of National MATHCOUNTS Foundation.

Ben Kraft (Moravian Academy) placed 2nd in the nation.

Pennsylvania's team placed 4th in the nation.

Excellent, excellent work.

The 2007 Pennsylvania MATHCOUNTS competition holds more highlights than a fireworks display, making it difficult to capture the experience in print. The following will at least bring you stand out moments from the year.

PSPE members and volunteers reliably hold the framework together; add dedicated coaches, parents and enthusiastic students to the core and *voila!* - the recipe for a resoundingly successful program is complete. Attendees reported that the 2007 state competition - under the leadership of MATHCOUNTS Coordinator William R. Gorman, P.E. - at the Sheraton Harrisburg/Hershey was true to form.

The 2007 MATHCOUNTS program did feature one new addition to the format. Options on Friday evening traditionally included a pool party prior to the practice countdown round. Coaches and parents encouraged MATHCOUNTS organizers to offer an activity in addition to swimming. Knowing that MATHCOUNTS students are already mathematically inclined, several MATHCOUNTS state committee members saw this as a prime audience for an engineering related activity. Messiah College's Department of Engineering agreed. Carl Erikson Jr., Assistant Professor of Engineering and Robert Clancy, P.E., Adjunct Professor coordinated all the details. The professors organized a presentation on engineering in general and entry requirements for engineering colleges, instructed students in building an electronic car kit, and brought in engineering students to help supervise building the kits. Reports state the activity was a great success. Discussions are underway to incorporate a similar engineering activity for 2008.

The correlation between Pennsylvania MATHCOUNTS participants and public officials was highly apparent this year. Bill Bryan, P.E., President of the Pennsylvania Engineering Foundation, (and coincidentally PSPE Engineer of the Year 2007) smoothly facilitated with Senate staff the day of the competition, for Senator Robert P. Casey to make a surprise appearance at the MATHCOUNTS awards ceremony.

Each year the state team advancing to the National competition comes to Harrisburg for one more chance to practice. In conjunction with the student's preparations, PSPE staff arranges appointments for students and their families to meet with their state Senators at the capitol.

The 2007 tour of public officials as fans culminated with Ben Kraft (2nd place individual in the nation!) and his coach Sandy Van Horn, meeting with President Bush in the White House after the national competition.

Top Teams

1 Sandy Run Middle School

(Montgomery)
Coach: Sandy Van Horn; Team: Michelle Eng, Kevin Li, Ben Zauzmer, Andrew Zeng

2 Moravian Academy

(Northampton)
Coaches: Alison Overdorf & Allan Chandler
Team: Michael Boreen, Tara Jain, Ben Kraft, Ajay Singh

3 Valley Forge Middle School

(Chester)
Coach: Allison Long; Team: David Di Ciurcio, Alex Dobner, Kevin Wang, Monica Zheng

4 Wissahickon Middle School

(Montgomery)
Coach: Troy Deckebach; Team: Akshay Chitturi, Linda Gao, Crystal Qin, Anderson Wang

5 Winchester Thurston School

(Allegheny)
Coach: David Hallas; Team: Junu Bae, Hallie Goldstein, Andrew Linzer, Sam Schreiber

6 Germantown Friends School

(Philadelphia)
Coach: Joshua Klur; Team: Eric John, Max Kaplan, Kyle Musto, Emma Schmidt

7 Hershey Middle School

(Dauphin)
Coach: Dave Yingst & Kevin Adams; Team: Caleb Hufford, Ben Lengerich, Felix Nguyen, Daniel Rigberg

8 New Hope - Solebury Middle School

(Bucks)
Coach: Phyllis Smith; Team: Joshua DeMent, Kevin Li, Wesley Michaels, Sam Present

9 Sewickley Academy

(Allegheny)
Coach: Tom Perdziola; Team: Isabel Arjmand, Antonio Juliano, Ray Li, Timothy Macdonald

10 Park Forest Middle School

(Centre)
Coach: Mark Feldman; Team: Pindi Albert, Kostya Borisov, David Liu, Zack Schiffer

Top Individuals

1 Keenan Monks (8)

Heights-Terrace Middle School (Luzerne)
Coach: Ken Monks

2 Matthew Rauen (7)

Pennwood Middle School (Bucks)
Coach: Paul Rauen

3 Ben Kraft (8)

Moravian Academy (Northampton)
Coach: Alison Overdorf & Allan Chandler

4 Ben Zauzmer (8)

Sandy Run Middle School (Montgomery)
Coach: Sandy Van Horn

5 Ajay Gupta (8)

Bala Cynwyd Middle School (Montgomery)
Coach: Anjali Gupta

6 Junu Bae (7)

Winchester Thurston School (Allegheny)
Coach: David Hallas

7 Joshua DeMent (7)

New Hope-Solebury Middle School (Bucks)
Coach: Phyllis Smith

8 Kelly Mao (7)

Garnet Valley Middle School (Delaware)
Coach: John Mao

9 Isabel Arjmand (7)

Sewickley Academy (Allegheny)
Coach: Tom Perdziola

10 Terrance Liu (8)

Great Valley Middle School (Chester)
Coach: Robin Tridico

11 Katherine Hsu (8)

Lower Macungie Middle School (Lehigh)
Coach: Patrick Campbell, Michael Duarte

12 Kostya Borisov (8)

Park Forest Middle School (Centre)
Coach: Mark Feldman

13 David Sherman (8)

Charles H. Boehm Middle School (Bucks)
Coach: Elizabeth Patton

14 Jason Killian (8)

Landisville Middle School (Lancaster)
Coach: Annette Cook

15 Daniel Everett (7)

Rochester Area Middle School (Beaver)
Coach: Scott Culley

16 Anderson Wang (7)

Wissahickon Middle School (Montgomery)
Coach: Troy Deckebach

17 Wai-Tim Chew (8)

Eyer Middle School (Lehigh)
Coach: Julie Hummell

18 Michael Boreen (8)

Moravian Academy (Northampton)
Coach: Alison Overdorf & Allan Chandler

19 Linda Gao (8)

Wissahickon Middle School (Montgomery)
Coach: Troy Deckebach

20 Ben Clark (7)

Manor Middle School (Lancaster)
Coach: Faith Shapiro

2007 Regional Competition Stats

2770 Students
413 Teams

2007 State Competition Stats

165 Students
25 Teams

MATHCOUNTS Photo Gallery



[1] Team members from Sandy Run Middle School met on the Senate floor with Sen. Stewart J. Greenleaf. Shown l - r: Sen. Greenleaf, Sandy Van Horn, Jake Ford, Ben Zauzmer, Michelle Eng, Mandy Eng, Bob Zauzmer. Photo courtesy of Sen. Greenleaf.



[2] L-r: Sen. Robert P. Casey and William J. Bryan, P.E., F.NSPE, President Pennsylvania Engineering Foundation. Photo courtesy of Jessica Fredlund.

[3] L - r: Ken Monks, Sen. Raphael J. Musto, Keenan Monks, and Gina Monks. Photo courtesy of Jennifer Summers.

[4] Team PA I - r: Ben Kraft, Ben Zauzmer, Coach VanHorn, Matt Rauhen, and Keenan Monks at the National MATHCOUNTS competition in Houston TX. Photographer unknown.

[5,6] Business and Professional Women President Jean Byers (left) presents a \$500 savings bond to both the highest scoring female - Isabel Arjmand - and highest scoring male - Keenan Monks.

[7] MATHCOUNTS students work on their TURBO 3000 - learning about electricity, circuits, air power, solar power, friction, motion, simple machines, and physics, under the guidance of Professor Carl Erikson of Messiah College. Photos courtesy of Jessica Fredlund.



[8] During the awards luncheon the top four individuals from Pennsylvania posed with their parents. Front row l - r: Ben Zauzmer, Matt Rauhen, Keenan Monks, Ben Kraft. Second row l - r: Jan Zauzmer, Terri Drabik - O'Reilley (Shell Oil Company), Ken Monks, Gina Monks, Margot Hillman. Third row l - r: Bob Zauzmer, Paul Rauhen, and Steven Kraft. Photo courtesy of David Fleisher, P.E.

[9] First place team - Sandy Run Middle School. Front row l - r: Ben Zauzmer, Andrew Zeng, Michelle Eng, Kevin Li, Sandy Van Horn (coach). Back row l - r: David Stone, P.E., MATHCOUNTS Assistant Coordinator; Michel Sadaka, P.E., PSPE Vice President Southwest Region; William R. Gorman, P.E., MATHCOUNTS Coordinator; David McCullough, P.E., PSPE Vice President Northwest Region; William J. Bryan, P.E., F.NSPE, President Pennsylvania Engineering Foundation. Photo courtesy of David Fleisher, P.E.



[10] Second place team - Moravian Academy. Front row l - r: Allan Chandler (coach), Alison Overdorf (coach), Tara Jain, Ajay Singh, Ben Kraft, and Michael Boreen. Back row l - r: David Stone, P.E.; William R. Gorman, P.E.; William J. Bryan, P.E., F.NSPE. Photo courtesy of David Fleisher, P.E.



[11] Third place team - Valley Forge Middle School: Front row l - r: Kevin Wang, Alex Dobner, David DiCurcio, Monica Zheng, and Allison Long (coach.) Back row l - r: David Stone, P.E.; William R. Gorman, P.E.; William J. Bryan, P.E., F.NSPE. Photo courtesy of David Fleisher, P.E.





7



8



9



10



11

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Loretta and William R. Gorman Jr., P.E.
 Arthur P. Luthy P.E.



History Restored

Franklin Square Fulfills its Destiny

*Diana Mancini, RLA and Corey Fenwick
Pennoni Associates Inc.*

Standing in front of Philadelphia's Franklin Square today, it is hard to remember its condition only a few years ago. As one of the original five squares planned in the city's layout by William Penn over 300 years ago, it was meant to be preserved as an open green space. But unlike the other city squares, Franklin was forgotten. Rittenhouse and Washington Squares have been maintained and enjoyed regularly by the community since their inception. Logan Circle may have changed shape, but its landscape has been kept green and tame. William Penn Square became the site of City Hall, which remains one of the largest municipal buildings in the country. But while the other center city parks were renovated and maintained, Franklin Square had been left to look old, tired and overgrown.

Nestled between the Vine Street Expressway and the entrance to the Benjamin Franklin Bridge, Franklin Square's surroundings have become a lot busier since it was originally established. But as pedestrian foot traffic slowed to the square, so did its upkeep. The grass grew long, the tree branches hung low, the shrubs looked unkempt and imposing, and the park became cover for undesirable elements to occupy at night.

Once Upon A Nation, a non-profit group that works to preserve and promote history in Philadelphia, decided something needed to be done. After leasing the square from the Fairmount Park Commission, procuring a concept plan from noted designer Ralph Applebaum, and preliminary plans by Synterra and Urban Engineers, Once Upon A Nation brought in Philadelphia-based consulting engineering firm Pennoni Associates as the prime consultant for landscape architecture and civil, structural, mechanical, and electrical engineering to help revitalize the square and bring it back to the original glory intended by William Penn.

In addition to replacing the walkways with bright and attractive brick pavers, a large classic carousel and Philadelphia themed mini golf course were brought in as attractions. The square's playground, which had become known more as a place to find used drug paraphernalia than a place to find children playing, was completely rehabbed and divided into two age appropriate playgrounds. But while these additions might appear simple, there were several challenges that Pennoni encountered during the revitalization.

One of the main goals of the design was to retain the park's atmosphere created by large shade trees and open lawn areas. In order to save as many of the existing shade trees as possible, the new paths were carefully regarded to improve drainage and rebuilt in the same location as the previous paths. Much of the new electric and stormwater piping was installed under the paths to limit the disturbance of tree roots. Many new shade trees were added as well, along with ornamental landscaping around the entrances.

Another challenge Pennoni faced in rehabbing the park was protecting the First German Reformed Church's burial ground, whose site is in the square. An on-call archeologist was retained to identify historic artifacts if unearthed. And if watching out for graves was not enough, there was also the issue of an underground New Jersey Transit subway tunnel that traverses the park. By designing improvements, stormwater management, new utilities serving the park's attractions, and an ADA compliant comfort station around the known and expected grave sites, Pennoni was able to limit conflicts.

But what required the most effort in revitalizing the square was the park's central attraction, the marble fountain. Having not run since the 1970s when the park was temporarily rehabbed for the Centennial Celebrations, there was a lot that needed to be done. As the park's focal point, the plan was to restore, not replace, the fountain, which had become overrun with plants and weeds. All of the mechanical systems, filters and piping had to be replaced while the original marble fountain basin and perimeter iron work fencing were cleaned and renewed. In addition, with the assistance of Jon Favreau of Aquarius Waterworks, the fountain's original spray formation was able to be restored to its original grandeur.

While replacing all the original mechanical systems supplying the fountain was difficult, the real design challenge came in dealing with the park's storm water management system. As renovations were going on, the requirements for the system

changed, so Pennoni had to come up with a "Plan B." Excavation in the square was limited by existing trees and archeologically sensitive areas, so putting in a second new stormwater system was not a simple or inexpensive option. The Fairmount Park Commission knew of a large unused sewer pipe located beneath the square. Pennoni re-analyzed the runoff conditions and modeled an outlet structure to provide new code required detention. Drainage patterns had to be adjusted and the design coordinated with city agencies, all in an expedited manner during construction.

New entrance ways and signage were constructed and styled to fit with the rest of the park. "Gateways" were put in at 7th Street, as well as 6th Street to help draw in foot traffic from the nearby National Constitution Center. Picnic tables and park benches for Once Upon a Nation story tellers were set up to provide for more passive recreation, in addition to the other attractions. Sub-consultants included Paul Elia of Elia Architecture and Interiors and Grenald Waldron Associates for lighting design.

Several steps have been taken to ensure that the park does not fall into disrepair again. To guarantee safety, security guards will be in service during the park's operational hours, as well as enhanced lighting to brighten the twilight hours. In addition to any money

brought in to the square by concessions and attractions, there is also a "Franklin for the Fountain" brick campaign in which people donate a "Benjamin" (\$100) and get their name engraved on a brick in the square.

Additional landscaping and an improvement to the already refurbished Police and Firemen's Monument have been talked about for the future, but Once Upon A Nation already sings praises for the square. "The whole design is great. It turned out really well," says Bill Zumsteg, Once Upon A Nation's Director during construction. In its first five months alone, the park had 300,000 visitors. Pennoni Associates and its team are proud to be a part of turning a city eyesore into a must-see city landmark. ■

Pennoni Associates is a multi-disciplined consulting engineering firm with 21 offices throughout the eastern United States. Headquartered in Philadelphia, Pennoni is ranked as a Best Place to Work in both Pennsylvania and New Jersey and offers services in Site Design and Landscape Architecture, Transportation Engineering, Civil/Municipal Engineering, Environmental Engineering, Inspection and Testing, Land Surveying, MEP Engineering, Geotechnical and Structural Engineering. Pennoni Associates is proud to be an ENR Top 500 Firm, ranking #133 for 2007 as well as ranking #91 on the Top 100 Pure Design Firms list.



PSPE New Member Update

Following is a list of members who have joined PSPE to date in 2006. Chapter officers can access member data in realtime with a login and password from NSPE. If your chapter does not yet have a membership chair or officer who has this access, please contact Jennifer Summers, jennifer@wannerassoc.com or 717.441.6051.

Beaver County

Paul A Ellis PE
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Bucks County

James D Barlow
Albert L de Richemond PE
Edward J Godorov PE
Mark Alan Havers PE
Eric Matthew Lysiak EI
Kevin McAuliffe EIT
Brian J Morrison PE
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Christopher W Wright

Central

Kaiser Mohammed EIT
George J Selembo Jr PE

Chester County

James J Brady Jr EI
Ray S Crossan PE
Joseph John Hunt PE
Michael P Noonan PE
Eric Michael Rich
Vincent P Ridley PE

Delaware County

Carlos A Castro PE
Michael C Clinger PE
Guido W DiMartino PE
Wayne A Droesser PE
James M Gade PE
Gerard C Gambs PE
Eileen M Nelson PE

Erie

Harry R Diz PE
John F Novotny PE
Edward F Orris Jr PE
Robert L Rabell PE

Harrisburg

Bryan J Anthony EI
John J Baldassari PE
Larry M Brown PE
Susan M Bruns PE
Matthew D Chicy PE
Wendy L McAbee PE
Kathleen J Rhoten PE
George Whitcomb EIT

Johnstown

David M Cunningham PE
Stanley J Kieta PE
John M Weiland PE

Lehigh Valley

Charlie J Baker
John A Cooke PE
James W Davis PE
Stephanie M Grahl PE
Jeffrey Todd Nason PE
Jennifer R Walls PE

Lincoln

David Wayne Bernhardt PE
Joseph D Brown Sr PE
Steven M Brown PE
Timothy T Koppenhaver EIT
Eric P Sellers PE

Luzerne County

Joseph J Gibbons PE
Lawrence Marchetti PE

Midwestern

Eric J Kirsch PE
Robert L Mueller PE
Jonathan C Snyder PE

Northeast

Marshall E King PE
William W Schneider Jr PE

Philadelphia

Michael Devuono
Garret Thomas Hooper
Scott Kupper PE
Liang Luo
Joseph C McGowan PE
Bariki Mlawa
Joseph Patrick Morrin
Michael Monroe O'Neal PE
Mark Tiger PE
Kevin Bromley Watson EI

Pittsburgh

George J Anderson PE
Timothy S Erney PE
Graham L Ferry PE
Joseph Garlicki
Thomas D Howell PE
Elizabeth Marley John
Emily A Palmer PE
Samuel John Sero PE
Thomas J Tarka PE

Reading

Denise R Alston-Guiden PE
Matthew L Boggs PE
James Musa Eways PE
Thomas C Green PE
Clifford Chukwuemeka Iroanya
Robert I Weir PE

Valley Forge

Chad Edward Camburn PE
Gary M Horninger PE
Brian F Malloy PE
Kristin M Norwood PE
Bruce Jeffery Rhoades PE

Westmoreland

Peter C Buss PE
Steve M Rogers

Chapter not yet assigned

Matthew Z Kensil PE
Syed J Qasim PE
C Richard Roseberry PE

mem · ber · ship (mēm' bər-shĭp)*

Timothy S. Ormiston, P.E.

As our business year comes to a close, I want to reflect upon activities involving PSPE membership. The first, and most important, step was the revitalization of the PSPE Membership Committee. The committee is comprised of the following:

Members: Virginia Dailey, P.E., Jon Drosendahl, P.E., Paul Dugan, P.E., Carl DuPoldt, P.E., David Folk, P.E., Thomas Terry, P.E.; Advisors: John Bradshaw, P.E., Harve Hnatiuk, P.E., Jennifer Summers

The second most important step was to communicate activities to the Board of Directors and the general membership. I am happy that we were able to publish a new article regarding membership in every *PE Reporter* since September. I hope you picked-up on the theme of the definition of "membership" and how our focus items fit into the basic meanings:

- n1. the state of being a member, as of a society or club.
- n2. the status of a member.
- n3. the total number of members belonging to an organization, society, etc.

To go with the Membership article, the Member Question of the Month was started to generate feedback from members at large on certain topics. This was somewhat successful in two tries.

Other important communication efforts included:

- Committee conference calls held in September, November, January, March, and May.
- Conference call held with a few Chapter Presidents in March.
- Committee reports written to the Board of Directors in September, November, January, and May.
- In-person report to the Board of Directors at the Annual Engineering Conference in Reading, PA.

Jennifer Summers, Deputy Executive Director of PSPE, has spent an extensive amount of time this year communicating to NSPE staff and PSPE members, in an effort to correct membership data errors. When NSPE switched their data collection system to a new one, it caused a flurry of errors in member data. As of this writing, NSPE assures us the data is now correct. We will continue to monitor the situation.

Another critical function Jennifer performs is contacting newly

registered Professional Engineers in Pennsylvania. This includes sending two mailings per year, after each testing period, offering promotional materials and 6 months free membership. In the last three years, over 50% of the people taking the free membership have continued as paying members.

Looking forward to our future activities, beginning in the fall:

- The next Committee conference call is scheduled for Wednesday, September 12, 2007.
- Focus points to start the 2007-2008 season include:
 - o Increased activity for membership services at the Chapter level.
 - o Conduct regularly scheduled conference calls with Chapter Membership Chairs.
 - o Increased activity on PEPP link to membership efforts.
 - o Actively engage Young Engineers in membership efforts, including adding a young engineer to the Membership Committee.

Should you, or someone you know, become interested in participating in the committee efforts, or if you have new ideas to share, please contact me via e-mail at: tsormiston@zoominternet.net.

I would like to leave you with this thought of promoting engineering that surfaced during several of the committee conference calls this year: Tell your personal story of engineering. Use examples of everyday life experiences to describe the benefits, the importance, of engineering. Share personal examples of the benefits of membership in PSPE / NSPE; be passionate! When talking to that member who has not been active for years, tell them of the most recent positive thing that you experienced with the Chapter. You may get the response "Yes, but...!", but there may be a nugget of information they take away from the conversation and become interested in later. There will be those that in no way are interested in what you have to say. Wish them a great day and thank them for listening. However, there are others who want to hear your ideas. Tell your story... we have a great product to share.

** Reference from Dictionary.com Unabridged (v 1.0.1). Based on the Random House Unabridged Dictionary, © Random House, Inc. 2006*

Member Question of the Month...

Q

What was the most important communication regarding PSPE membership that you received this year?

A

Send your reply to pspeinfo@pspe.org with the subject: Member Answer of the Month.



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"Risky" continued from p. 7

I completely agree with the Guidelines that you should keep a hardcopy. Do you have any data on a 6" floppy? Can you get at it? Soon, the questions will be the same for 3" floppies. It's fine to keep electronic copies, too, but don't rely on them exclusively. I recently lost the latest version of several files when a disk slipped out of a bundle in my arms into a puddle and was run over by a taxi.

Process documentation

Process documents do not specifically alter your legal relationship with your client. They document how you accomplished your work. Internal quality review documentation, draft and preliminary reports, project meeting minutes, checklists, and field reports are all examples of documents that show or prove how you did what you did. Each of these can sometimes be critical if you later become involved in an issue. The most important thing is establishing your policy in this area is consistency. Whatever you decide you will do, you should always do. If you deviate from your policy, document why. For example, let's say that it is your policy that a log is maintained documenting the internal quality review, that the log is to be kept, and that individual review sheets are destroyed at project completion. Let's say that you enter into a contract with a client that includes a requirement that you keep the individual review sheets. Document on the file cover why this contract file includes documentation that other files do not. Your documentation can be something as simple as taping a copy of the contract page with the requirement to the front of the file cover.

I disagree with the Guidelines about calculations and design notes: I think that they should be kept. Things change. I'll give an example. Power plant weld examination standards have changed over time. Documentation of the process you used could protect you if problems later develop and someone tries to impose evolved standards that weren't available or in use when you were performing.

Correspondence

There are many types of correspondence: phone memos, letters, e-mails, minutes, and memos to file. They must all be dealt with. I don't have a set rule. Use common sense. If transmittal is logged, there's probably no reason to keep a simple transmittal letter. I always print out my FAX logs at the end of the month. On the other hand, if a letter warns of a potential delay that later materializes, such a letter could be critical to a damage claim or protection from liquidated damages.

Meta-data

Whoever your company lawyer is, make sure that he or she is staying on top of the court rulings about meta-data in your jurisdiction. (Those choice-of-law provisions in your contract could become really important.) Some jurisdictions have determined that hidden electronic data can be used by opposing counsel. Some jurisdictions have determined that hidden is hidden and should stay hidden. Why do you care? Let's say that you have been internally discussing some contract provisions using "track changes." Of course, you turn off track changes when you generate the final document. A problem later develops and the attorney for the other side un-hides the track changes and finds internal notes about "what we can get away with here." As my son says, "My bad." As I say, "My potential liability."

Overall, the most important thing I want you to take away from this month's column is this message: "Pick something (reasonable) and stick with it." Consistency is your best protection in terms of document retention. Otherwise, you have a Risky Business. ■

The "Risky Business" column offers articles covering liability from both the legal and engineering perspective. Mrs. Bowman's articles share general information and should not be relied upon as professional legal advice of either a general or specific nature. Rebecca Bowman is a civil engineer-attorney in solo private practice in McMurray, Pennsylvania for more than 25 years. Her practice is a certified woman-owned business. Her B.S. in Civil Engineering is from the University of North Dakota.

Courts are increasingly holding the absence of control against the uncontrolled party. This means that if you supposedly have a document but cannot show it, the court will at least punish you by refusing to let you introduce the document should you find it later. The court may punish you by assuming that the missing document contains evidence that would prove something not in your favor. You don't want to take either of these chances.

"Capitol" continued from p. 5

Home Improvement Contractor Bill on the Move

A bill that stalled in the final days of session last year is again working its way through the legislature. Senate Bill 100 (Senate Bill 1000 of last session) establishes a statewide registration for home improvement contractors. For years Pennsylvania has attempted to get a handle on home improvement scams, but no legislation has been enacted. That is despite the fact that complaints of this nature are at the top of the Attorney General's complaint list.

Senate Bill 100 requires basic registration for all construction contractors that perform work on homes. If the registration is revoked for any of the violations listed in the bill, the contractor can no longer work in Pennsylvania. The bill features an arbitration procedure for disputes between homeowners and contractors. The bill also preempts local contractor registration ordinances unless the ordinance requires a written test as part of the licensure requirement. Senate Bill 100 has passed through two Senate committees and is poised for a vote by the full Senate in the coming weeks. A similar bill, House Bill 507, is on the move in the House.

Legislative Activity

HB 507 RE: Home Improvement Consumer Protection Act (by Rep. Keith McCall, et al)

Provides that no person may hold himself out as a contractor nor would a person perform any home improvement without first registering with the Bureau of Consumer Protection. The bureau would maintain a toll-free telephone number from which a caller can obtain information as to whether a

contractor is registered with the bureau. The bill provides for procedures for registration as a contractor. Each application for a certificate for a home improvement contractor or renewal of that certificate would include a fee of \$50. The bill also provides for home improvement contracts, stating that no contract would be valid or enforceable unless it contains required information. The bill creates that Home Improvement Guaranty Fund, from which an owner may be compensated for an actual loss that results from an act or omission or a violation of this act by a registered contractor. *Reported as amended from House Consumer Affairs Committee, read first time, and Laid on the table, 5/22/2007*

Removed from the table, 5/24/2007

HB 1096 RE: Uniform Construction Code Advisory Council (by Rep. Ron Buxton, et al)

Amends the PA Construction Code Act to create the Uniform Construction Code Advisory Council which would be charged with gathering information from municipal officers, building code officials, construction code officials, licensed design professionals, builders and property owners concerning issues with the Uniform Construction Code and evaluating this information in order to give recommendations to the Governor, Labor and Industry Committees in the Senate and House and the Code Development Councils of the International Code Council. The composition of the Council and meeting requirements are further provided for in the legislation.

Referred to House Labor Relations Committee, 4/18/2007

House Labor Relations Meeting set for 1:00 p.m., Room G-50, Irvis, 5/29/2007

House Labor Relations Meeting set for 11:00 a.m., Room G-50, Irvis, 5/30/2007

New Bills Introduced

HB 1338 RE: Prototypical School Facility Design Clearinghouse (by Rep. Bev Mackereth, et al)

Amends the Public School Code requiring the Department of Education to establish a prototypical school facility design clearinghouse for access by any school entity. The Department would establish a grading system to review and evaluate plans in the clearinghouse. The Legislative Budget and Finance Committee would conduct a study of the Department of Education's clearinghouse and determine the savings incurred by school entities that have sought access to the clearinghouse. Additionally, the legislation provides for approved reimbursable rental for certain leases and approved reimbursable sinking fund charges on indebtedness.

Referred to House Education Committee, 5/24/2007

2007 House Spring Session Schedule

The following are the remaining scheduled session days for the House in 2007:

June 4, 5, 6, 11, 12, 13, 18, 19, 20, 25, 26, 27, 28, 29, 30

2007 Senate Spring Session Schedule

The following are the remaining scheduled session days for the Senate in 2007:

June 4, 5, 6, 11, 12, 13, 18, 19, 20, 25, 26, 27, 28, 29

Copies of all bills of interest are available from the PSPE office, or they can be accessed via the Internet at <http://www.legis.state.pa.us/WU01/LI/BI/billroom.htm> ■



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Many thanks to the following individuals who contribute to the PSPE Political Action Committee fund. The PAC fund allows PSPE lobbyists to influence bills on behalf of PSPE members. PSPE is very active at the Pennsylvania state capitol. Each session we monitor legislation that could impact PSPE members in their profession. Your contributions are critical as PSPE affects bills such as those found in the article "On Capitol Hill."

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In Memoriam

Phillip Kowalchuk
December 15, 1928 - May 5, 2007

Phillip Kowalchuk, 78, of York, Pa., died at 5:50 a.m. May 5, 2007 in York Hospital. Mr. Kowalchuk retired as vice president and director of engineering for BASCO Associates, York, after 40 years. He was also a consultant for Paragon Engineering Services. He was a member of Bethany United Church of Christ, where he served on church council and taught Sunday school.

He was a member of the American Society of Civil Engineers, served as a director of the National Society of Professional Engineers, past president of the Pennsylvania Society of Professional Engineers and past president of Lincoln Chapter, P.S.P.E. He was a member of the Springettsbury Township Sewer Authority. He served as president of the Springettsbury Lions Club and the White Rose Polka Dancers Association. He was a member of V.F.W. Post 8951, West York, having served in Guam during World War II.

An avid sportsman, he enjoyed fishing and hunting. He was a member of the Daniel Boone Hunting Club in Potter County, Starview Sportsman Association and the Hawk Gunning Club. He was a graduate

of Northampton High School, and earned a bachelor of science degree in civil engineering from Lehigh University.

Born in Bath, Pa. on December 15, 1928, he was a son of the late Phillip Kowalchuk Sr. and Sophia (Korytko) Kowalchuk. Survivors: He leaves his beloved wife of 52 years, Kathleen Miller Kowalchuk; two daughters, Tanya Miller and her husband, Charles, of York and Beth Reifsnnyder and her husband, Jeffrey, of Harleysville; a son, Phillip A. Kowalchuk and his wife, Laurie, of Harleysville; five grandchildren, Bradley Goodyear and his wife, Meghan, Bryan Goodyear, Meredith Reifsnnyder, Megan Kowalchuk and Noah Reifsnnyder; three brothers, John of Roanoke, Va., Michael of Nazareth, Pa., and Charles of Walnutport, Pa. He was preceded in death by a granddaughter, Stephanie Reifsnnyder, five brothers and a sister.

Contributions: Springettsbury Lions Club, c/o Paul Campbell, Treasurer, 613 Chronister St., York, 17406. ■

Reference: *Morning Call*, York, PA; 5/8/2007.

[3] L - r: Ken Monks, Ben Raphael, Musto, Keenan Monks, and Gina Monks. Photo courtesy of Jennifer Summers.

[4] Team PAI - r: Ben Kraft, Ben Zauzmer, Coach VanHorn, Matt Rauen, and Keenan Monks at the National MATHCOUNTS competition in Houston TX. Photographer unknown.

[5,6] Business and Professional Women President Jean Byers (left) present \$500 savings bond to both the highest scoring female - Isabel Arjmand - and highest scoring male - Keenan Monks.

[7] MATHCOUNTS students work on their TURBO 3000 - learning about electricity, circuits, air power, solar power, friction, motion, simple machines physics, under the guidance of Professor Carl Erikson of Messiah College. Photos courtesy of Jessica Fredlund.

[8] During the awards luncheon the top four individuals from Pennsylvania present their awards with their parents. Front row l - r: Ben Zauzmer, Matt Rauen, Keenan Monks, Ben Kraft. Second row l - r: Jan Zauzmer, Terri Drabik - O'Reilley (Shell Oil Company), Ken Monks, Gina Monks, Margot Hillman. Third row l - r: Bob Zauzmer, Paul Rauen, and Steven Kraft. Photo courtesy of David Fleisher, F

[9] First place team - Sandy Run Middle School. Front row l - r: Ben Zauzmer, Andrew Zeng, Michelle Eng, Kevin Li, Sandy Van Horn (coach). Back row David Stone, P.E., MATHCOUNTS Assistant Coordinator; Michel Sadaka, P.E., PSPE Vice President Southwest Region; William R. Gorman, P.E., MATHCOUNTS Coordinator; David McCullough, P.E., PSPE Vice President Northwest Region; William J. Bryan, P.E., F.NSPE, President Pennsylvania Engineering Foundation. Photo courtesy of David Fleisher, P.E.

[10] Second place team - Moravian Academy. Front row l - r: Allan Chandler (coach), Alison Overdorf (coach), Tara Jain, Ajay Singh, Ben Kraft, and Michael



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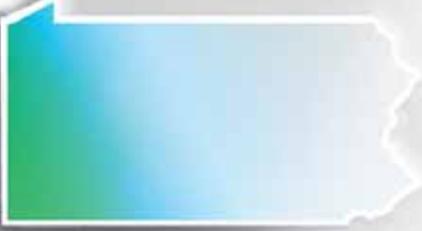
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