



PHILADEL PHIA SECTION

AMERICAN SOCIETY OF CIVIL ENGINEERS 215 S. 16th Street. Suite 16. Philadelphia. PA 19102

Telephone/Reservations: (215) 985-5703

Web site: http://www.asce-philly.org

National ASCE Central Number 1-800-548-ASCE • Toll Free

The Sidney Robin Memorial Newsletter of the Philadelphia Section ASCE

Our 98th Year

April, 2011

2011 SPRING SOCIAL — ON YOUR MARK, GET SET...

Vol. 83-8

This year's **Spring Social and Awards Dinner** will switch from the sports theme we enjoyed last year to a transportation topic. We will enjoy the collection of the **Simeone Foundation Automotive Museum** in the **Auto Mall** in Southwest Philadelphia as our location this time around on **Friday, May 13** starting at **6:00 PM**. We hope you can join us for an evening of socializing and networking with your colleagues as we welcome our new officers, thank our outgoing officers, and honor our 2011 Award Recipients among 60 of the rarest and significant racing cars ever built.

"The first race was conceived when the second car was built." From the dawn of the automotive era, racing has been used to demonstrate the superiority of one manufacturer over another. It is this "Spirit of Competition" that is celebrated at the Museum. The Museum collection was privately assembled by renowned neurosurgeon Dr. Frederick Simeone over a span of 50 years.

The Museum is located at 6825 Norwitch Drive, just off Essington Avenue. Please visit the website (**www.simeonefoundation.org**) for more information and directions. Details on cost and registration will be provided in the May edition of *THE NEWS*.

MEMBERS IN THE NEWS NEW ARRIVAL FOR FARRELLS

ASCE, Phila. Section Membership Secretary Cathy Farrell and her husband, Tim, also a Section Member, welcomed son Dean Paul into the world on March 3. Dean weighed in at 8 lb 1 oz and 21 inches long. Daddy and Granny (Claire Golata) were there to welcome him into the world. Congratulations to the Farrells and we'll be looking for Dean to become a Section Member in about 2033 or so.

MCATEE CITED BY DREXEL

The Drexel University Construction Management Advisory Council (CMAC) presented **Joseph McAtee** with a Lifetime Achievement Award for his significant accomplishments and his impact on the construction community and built environment in the Philadelphia region. This honor was bestowed upon Joe at the 3rd Annual CMAC Awards Reception on March 14. Joe is the Executive Vice

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APRIL DINNER MEETING

American Society of Civil Engineers, Philadelphia Section

WEDNESDAY, APRIL 13, 2011

NOTE CHANGE IN DATE FROM THAT PREVIOUSLY ADVERTISED!

The Mansion at Villanova Conference Center, 601 County Line Road, Radnor, PA Cocktails 5:30 PM • Dinner 6:30 PM • Meeting 7:30 PM

This meeting will follow the format begun last April. Meeting attendees will assemble in the main room of the Center for dinner and announcements, then break out to other rooms depending on which topic they want to hear.

RESERVATIONS MUST BE SUBMITTED BY FRIDAY, APRIL 8. Please send your check for the number of attendees at \$40 per member or guest, \$20 per ASCE Student Member. Checks should be made payable to "Philadelphia Section ASCE" and sent to ASCE, Engineers' Club of Philadelphia, 215 S. 16th Street, Suite 16, Philadelphia, PA 19102. Reservations can also be made on the Engineers' Club message center, 215-985-5703, or via e-mail at info@asce-philly.org. You may also electronically reserve through our website (www.asce-philly.org) and pay via PayPal. Walk-ins will be subject to acceptance on a space-available basis. THERE IS NO GUARANTEE THAT SPACE WILL BE AVAILABLE IF YOU DO NOT RESERVE A SPACE.

SPECIAL FEATURES: Life Members Night – Newly-inducted Life Members will be featured and honored at this meeting as guests of the Section.

Past Presidents Night – Past Presidents are invited to attend this meeting as guests of the Section in appreciation of their service and assistance.

Villanova University Night – The ASCE Student Chapter, Faculty and Alumni of the Department of Civil and Environmental Engineering of Villanova University will be honored at this meeting. All Faculty, Alumni and Students are cordially invited to attend and participate.

There will be two breakout sessions offered on the topics noted below.

INTEGRAL ABUTMENT BRIDGES FOR PENNSYLVANIA

(sponsored by Structural Engineering Institute)

Elimination of the roadway expansion joints and associated expansion bearings results in minimal maintenance requirements, economical construction, and the long-term serviceability of the structure. This presentation will cover the Integral Abutment joint-less bridges concepts, which have been used for many years throughout the country for their great advantages over conventional abutment systems. The method of analysis and design, code provisions of PennDOT Design Manual 4, AASHTO LRFD Specifications, and related topics will be covered.

As an example of current practice, highlights of the City of Philadelphia Department of Streets' design of the Montgomery Avenue Bridge over Amtrak will be discussed.

Presenters: City of Philadelphia Department of Streets; Christopher J. Menna, P.E., F.ASCE. Engineer of Design; Hisham A. Himmet, Engineering Supervisor

Mr. Menna serves as an assistant to the Chief Bridge Engineer and the director of bridge design. He is responsible for complete PS & E packages for all in-house projects, as well as the management of the Design Section staff and all related operations. He has been a City employee for fourteen years. Prior to coming to the City, Chris had previous jobs with Gannett Fleming, Kaufman Construction Company, and the Pennsylvania Turnpike Commission.

Mr. Himmet serves as a primary Design Section Assistant and is involved in all Design Section Activities. He has been a City employee since graduating college in 2001.

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PRESIDENT'S MESSAGE

Greetings and Happy Spring Everyone! I am happy to see the grass growing once again and glad to be putting the snow shovels away. It is time to once again get out and smell the blooming flowers and hot asphalt (a little Civil Engineering humor ©).

As we approach the end of my presidency, I would like to take this opportunity to thank all of the volunteers who contributed to the ASCE, Phila. Section's success this year and all the members who supported the Section activities and meetings with their attendance and participation. I have had the honor to lead this

year's Team and the pleasure to work with many outstanding individuals who have given their time and talents to improve our section. In particular, I would like to thank:

- Ann Tomalavage for joining me as a representative at regional and national meetings, for orchestrating our monthly Section meetings, and for the company by riding shotgun to our downtown meetings
 - AnnMarie Vigilante for helping with all correspondence and records
 - Jeremy Colello for our email blasts and handling meeting registrations
 - Joe Platt and Guy DiMartino for keeping us out of debt and assisting with registrations
 - Jeremy Chrzan for keeping our website updated so that it is useful and informative
- Cathy Farrell for leading our new member outreach and social events, in addition to overseeing the fun trivia at our monthly meetings
- Jennifer Walsh for planning another smashing Spring Social and chairing our 100th Anniversary Celebration
- Keith Yamatani for overseeing our Technical Groups and Institutes
- Eve D'Onofrio, M. Ali Khan, Ara Mouradian, Dennis MacBride, and Bill Thomsen for continuing to increase the breadth and frequency of technical meetings and PDHs offered by our Technical Groups and Institutes
 - Soheila Rahbari for assisting with PDH certification to also meet New Jersey requirements
 - Jeff Bade for chairing our successful scholarship program
- Chris Menna for sharing his Past Presidents' wisdom and encouragement and providing the section with excellent representation on the regional level
 - Mike Wagner for leading and growing the Younger Member Forum
- **Bob Wright** I have had the pleasure to work with Bob since joining the Board in 2003. Bob serves on or chairs several committees, produces our great monthly newsletter, provides continuity to the Board, and he is an invaluable resource to our Section.

Thank you again to everyone who contributed to the Section's success this year, whether in a small or large way. I truly appreciate your time, ideas, and energy.

Let's Go Sixers and Flyers!

Sincerely, Thomas W. Brady, P.E. President, ASCE, Philadelphia Section

YOUNGER MEMBER FORUM NEWS

Scott Ceipitz, Forum Editor Michael Wagner, Forum President 2010–11 Urban Engineers Inc. 530 Walnut Street, 14th Floor Philadelphia, PA 19106 (215) 922-8080 mgwagner@urbanengineers.com

YMF BOARD ELECTIONS

If you are interested in joining the YMF Board for the 2011-2012 year please contact **Mike Wagner** (**mgwagner**@**urbanengineers.com**) by **April 30**. To see a list of positions and descriptions please visit the Philly YMF website (**www.ymfphilly.org**). The YMF will host an election Happy Hour in May where elected positions will be voted on and tallied; further details will follow.

ASCE MID-ATLANTIC STUDENT CONFERENCE - APRIL 15-17

Drexel University will be hosting this years Mid-Atlantic Student Conference. There will be a Networking Social on April 15 at the Field House Bar in Center City to kick off the festivities and activities. The Student Chapter is additionally looking for volunteers and judges for the Steel

Bridge and **Concrete Can**oe competitions, which will be held on **April 17** at **Cooper River Park** in Pennsauken. Please visit the YMF website for the event flyer and details on volunteering.

PHILLIES VS. METS – AUGUST 23

Come celebrate the 2011 season with our neighboring YMF chapters by watching the Phillies take on the Mets. The ticket price of \$27 includes a tailgate and discount from regularly priced tickets. Please see the event flyer on the YMF website for more details.

Also, for a compiled list of some additional engineering events happening in the area, please visit the event calendar (www.engrclub.org/events/calendar.cfm) on the Engineers' Club of Philadelphia's website.

SEPTA CONTROL CENTER TOURS

On March 24 and 29, tours of the SEPTA Control Center in Center City were conducted. This was previously done in December and the high demand warranted additional tours being scheduled. We are pleased to report that the tours went over well and once again proved to be popular. A Happy Hour at Finn McCool's Ale House in Center City followed the March 24 tour.

ASCE, PHILADELPHIA SECTION OFFICERS AND BOARD OF DIRECTION – 2010-11 SEASON

PRESIDENT

Thomas W. Brady, Louis Berger Group

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Soheila Rahbari, RGE LLC ('09-'11) Theodore Thomson, Pennoni Associates ('10-'12) Jennifer K. Walsh, McMahon Associates Inc. ('10-'12) Keith Yamatani, Kleinfelder ('09-'11)

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President - Thomas W. Brady, P.E.

Manager, Transportation Engineering The Louis Berger Group, Inc. 350 Eagleview Blvd., Suite 250 Exton, PA 19341 (610) 280-4018 tbrady@louisberger.com

Secretary - AnnMarie L. Vigilante, P.E.

Project Manager Langan Engineering & Environmental Services P.O. Box 1569, Doylestown, PA 18901-0219 (215) 491-6500 avigilante@langan.com

PUBLICATIONS COMMITTEE

Editor of *THE NEWS* Robert Wright

Staff WritersJames Markham Joe Syrnick

SEND COPY TO:

ASCE, c/o Engineers' Club of Philadelphia 215 S. 16th Street, Suite 16 Philadelphia, PA 19102

> COPY DEADLINE FOR MAY '11 ISSUE APRIL 15, 2011

MARCH DINNER MEETING

March 10, 2011

The Down Town Club - Center City Philadelphia

The New Barnes Museum on the Parkway

by Robert Wright, Editor

After two meetings in "away" places, our Section returned "home" to Philadelphia for our March gathering. It felt like home as well, as a rainy evening greeted us, just like the last two times we met at the Down Town Club (November and December), but it did not deter a group of roughly 60 of us who either appreciate fine art or need a PDH (or both?) to get an update on a new art museum being completed along the world-famous Benjamin Franklin Parkway.

Section President Tom Brady got things started with his welcome along with an engineering-related blessing of the meal from President-Elect Ann Tomalavage. As dinner was winding down, President Brady returned to the podium and brought Jeff Bade, our Scholarship Committee chair, to the front to cite Pat Callahan of Drexel, one of three Section Scholarship winners recently selected (see the separate article on this for more details). President Brady then noted that this was Temple Night, and two representatives of Temple's Student Chapter – President Chris Eckert and Kevin Talley – presented a short update on what the Chapter is doing.

Treasurer Joe Platt and Assistant Treasurer Guy DiMartino took the podium to announce the winners of the trivia contest conducted during dinner, with the "Slainte" table taking first prize, getting 8 of the 10 tough questions correct, and being suitably rewarded with scratch-off lottery cards, perhaps to continue their luck.

President Brady welcomed Section Director Spencer Finch to the front to introduce the evening's speakers, who would tell us what we wanted to know about the new Barnes Museum. First up was Bill McDowell, Senior Building Project Executive of the Barnes Foundation.

THE MUSEUM

Mr. McDowell opened by explaining that the Museum Building would be seeking LEED platinum certification. He admitted that, as an architect, he would be focusing more on the architectural aspects of the building, and his co-presenter Adam Trojanowski, a mechanical engineer, would speak about building controls, so there might not be too much for the civil engineers in attendance. Despite that, the civil engineers in the crowd remained in their seats to hear more.

Mr. McDowell briefly explained the history of the Barnes collection and location. Renowned architect Paul Cret designed the current Museum building in Merion, which was completed in 1922. Dr. Barnes amassed his fortune from drug patents and purchased over 350 pieces of artwork. To date, these have been crowded into a relatively small building in a mainly residential neighborhood. In the new facility they will be placed in exactly the same conditions and mountings and the rooms will be the same size as those in the current building, and will be close to other cultural institutions along the Parkway.

Part of the existing site, also known as the Merion Campus, is occupied by an arboretum. This will be recreated to a great extent at the new building, also known as the Philadelphia Campus, again in an attempt to have the artwork in as similar surroundings as possible when the pieces are relocated.

Mr. McDowell gave a brief history of the Parkway and its impact as a major urban redevelopment effort when it was built in the 1910's. Its intent was to remove a good deal of tight urban land use and create Philadelphia's version of Paris' Champs de Elysses. The architect of the existing Barnes Museum, Paul Cret, coincidentally was a leader of the Parkway's design (as well as the Rodin Museum, a block from the Barnes site). Many of the envisioned museums and buildings never got off the drawing boards, thus the new Barnes will take its perhaps more appropriate place among other cultural institutions. The 4.5 acre site, between 20th Street and 21st Street, is the former location of the Youth Study Center, roughly 8.5 miles from the Merion Campus. The Foundation has leased the site from the City under a 99-year agreement.

Mr. McDowell explained that New York-based Tod Williams Billie Tsien Architects lead the museum's design team, assisted by Olin (landscape architects) and Ballinger and AltieriSeborWieber (engineers). The architects' concept for the new building was to create a garden in a gallery, which would complement the existing building's nature as a gallery in a garden. To do this, the building will consist of three elements, namely gallery space, a grand court, and a pavilion. Additionally, the new facility will provide increased space for art education programs, conservation and research. Placement of the new center for art education in proximity to other leading cultural institutions will enable the Barnes Foundation to ensure its longterm viability, while providing greater access to the Collection and the Foundation's educational programs. There is no dedicated classroom space or offices in the existing building, so the new building will provide these welcome additions.

The architects are creating a museum experience designed to start when one enters the site, not when one enters the building, thus the landscape and walkway areas will be designed to allow one to begin the visit right from the Parkway sidewalk. The building will be faced with stone to be consistent with adjacent Parkway buildings. Mr. McDowell emphasized that the landscape is carefully based on what is in the arboretum at the Merion Campus and species and plant types have been particularly selected accordingly. Building security, a very sensitive issue considering the value of the artwork, has been achieved through the raising of the museum slightly above grade rather than installing fencing or walls that would change the experience (which, as noted, starts

right at the sidewalk). This also results in views from the building toward the Parkway close to treetop level, which capture its landscape, not views of the roadway and traffic.

Capturing the interest of at least some in the room, Mr. McDowell noted the sustainability aspects of the building. Better lighting will be provided to permit better viewing of the artwork. Natural light will be brought into the galleries through a "light box" through the center spine of the pavilion, supplemented by artificial light. The Merion Campus has several difficult viewing conditions which will be corrected in the new space. Also, treated windows will diffuse sunlight, reducing any possible damage or fading of the artwork.

BUILDING CONTROLS

Mr. Trojanowski, Principal of AltieriSebor-Wieber, took over to speak about the "guts" of the building. Environmental conditions have been designed to preserve the artwork, thus stabilized temperature and humidity levels must be maintained in the gallery spaces. In collection areas, temperatures of 70° F and relative humidity of 50% are desired year round. Since Philadelphia has seasons and non-collection areas will have less stringent heating/cooling and humidity requirements, the systems must be able to accommodate this. The systems tend to be energy intensive, thus efficiency is key, and maintenance of the differences between collection and non-collection areas call for high levels of precision and performance.

Ductwork and piping needed for climate and humidity control are fairly complicated and an extensive particulate filtration system to collect dust adds to the complexity of the mechanical systems design. Mr. Trojanowski outlined the difficulties encountered in making the various ducts and pipes work within the designed space and illustrated how 3-D design plans were developed to allow construction contractors to better view how each of these interrelated. This made construction and coordination among trades somewhat less complicated.

Commercial steam from Trigen Energy was able to be used as the Youth Study Center had a steam service from nearby lines. Mr. Trojanowski noted that the steam is relatively "pure", with no additives or chemicals, and this saves a step as impurities do not need to be removed to satisfy the sensitivity of the systems. To satisfy the City's stormwater regulations, rain runoff and site drainage is collected into a 40,000-gallon tank and is used for irrigation. This is supplemented by a groundwater pumping capability if needed. Energy modeling was used for the building in every way possible, and this strongly supports the application for LEED certification.

Mr. Trojanowski noted that the mechanical systems must be operated for a 9-month period prior to any artwork being moved into the building, to properly condition the environment for the artwork and ensure that systems are operating properly and as designed.

PROJECT MATTERS

by Mark D. Steele, PE, CCE, M.ASCE

This inaugural column is Part 1 of 2 – Six Pieces of the Project Success Puzzle

Common definitions of "project" focus our attention on the task(s) or the endeavor to be completed. And as Engineers and project managers, we tend to be comfortable with that focus. The team, however, is the most important aspect of any project. Although a topic of its own for a later time (either here or in my new blog), a project is, more than anything else, a temporary organization created for a specific purpose, i.e. a social system. I have been thinking of projects as social systems and applying a systems thinking approach to them for over ten years and have been involved in dozens of projects across a range of industries. A systems approach provides a framework for understanding why projects succeed or fail. Through this lens, while looking at the puzzle of what makes a project successful, I identified what I think are the six most important pieces. Projects fail without these pieces:

- 1. Alignment of purpose
- 2. Coordinated effort
- 3. Open, honest, effective communication
- 4. Detailed planning
- 5. Rapid execution
- 6. Learning and adaptation

Each of these could take up a book or a significant paper in and of itself. This and my subsequent column next month will only be able to serve as an introduction to get you thinking about these ideas. This month's column briefly describes some aspects of the first three pieces. The column next month will cover the remaining three pieces.

1. Alignment of Purpose

Alignment of purpose is arguably the single most important piece of the project puzzle. A project divided against itself will fail just as surely as a house divided against itself will fall. Alignment essentially means that each component of the project social system – whether individual or organization, owner or contractor, engineer or vendor, not only has a purpose but shares the same purpose. A project that can fail for the owner and still be successful for the contractor or the engineer will almost always fail. Shared purpose does not have to be soft and "touchy-feely". Shared purpose shows itself in many "real" aspects of the project including:

- Incentives including obvious ones such as shared savings as well as a lack of disincentives such as a pricing scheme that encourages behavior contrary to overall project success
- Contracting strategy and language (at all levels)
- Early involvement of key players
- Participative team selection process
- Innovative project structures and organizational designs

Misalignment also shows itself in many different ways. Think of the traditional design – bid – build style of approach to contracting. Often, this approach violates the principle of alignment in almost every way. The contractor

can succeed by providing lower quality and by getting off the project as quickly as possible to meet the bid estimate. The engineer gets paid a percentage and can actually make more money if the project costs more. Players critical to the success of the project are not brought into the team until such a point in the project that it is too late to make best use of their insights. The owner wants the best quality possible for its budget. And yet, this approach incentivizes each party to act contrary to the interests of the others. While this is an egregious example, many projects contain both subtle, and not so subtle, examples of misalignments in purposes between the parties. To prevent this, the project team must design alignment into its contracting approach, organizational design, and systems. Likewise, it must root out misalignment at every opportunity.

2. Coordinated Effort

Coordinated effort between the team members can ensure minimal overlapping efforts (with resulting cost duplication) while at the same time covering project risks to prevent significant gaps (with resulting delays and overruns). Coordinated efforts rest on the three-legged stool of:

- Risk allocation based upon best ability to manage specific categories of risk
- Well-designed procedures with clearly designated responsibilities
- Balanced and appropriate experience/ expertise between the parties

Project owners sometimes try to push off all project risk onto other parties. The entire project then revolves around those other parties pushing back and trying to divest themselves of their responsibilities. On the other hand, projects in which no one has risk except for the owner tend toward significant budget overruns and delays. The time to design procedures is early in the project, once all the key team members are in place (and in alignment). Well-crafted procedures help to clarify responsibilities and reinforce the overall sharing of project risk and coordination of the work effort. Finally, a project in which the owners or other key stakeholders are ignorant as to the overall necessities of project management or the risks at stake might seem like a bonanza to the contractor but seldom ends well for anyone. While it might seem obvious that "coordinated effort" is essential to project success, the courts are full of projects where this principle was not followed.

3. Open, Honest, and Effective Communication

Open, honest, and effective communication seems like another truism for project management. And yet, how often is communication meant to be open, honest, and effective rather than provoking, hiding, manipulative, risk-transferring, or an exercise in covering one's backside. Communication should build on the following principles:

- Trust among team members
- Well designed formal lines of communication
- Open, informal lines of communication

Each aspect of an effectively built and honestly executed communications plan builds on every other aspect. Distrust only breeds further distrust. But open, honest, and effective communication builds on itself as well and can lead to early

problem detection and resolution and overall more effective implementation of the project with resulting success.

As mentioned in the introduction, each of these six "pieces" of the puzzle could be the topic of significant writing in and of itself. Next month's column will focus on the last three. I hope that, for now, you do not just brush aside these principles as "obvious" and "simple" but take the time to think about your own projects and where these principles are, and are not, being successfully applied.

Mark is an engineer with over 22 years of engineering, construction, project management, and leadership experience and a passion for helping people create effective projects. He can be reached at marksteele88@gmail.com or on his new blog at projectsonpurpose.com. This article is solely the opinion of the author and does not necessarily represent the opinion of any other organization or employer.

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SECTION CONSTITUTION/ BYLAWS UPDATE

As you may be aware, the ASCE, Phila. Section has been working on revising our Constitution and Bylaws for the first time since 1992. Draft documents were provided to National last year, and several revisions and corrections were requested. These have since been addressed by our Section's Board, and the revised documents are being submitted again for consideration by National's Committee on Geographic Units (CGU). CGU will meet on April 11 to vote on the revised documents. Pending their approval, the text of the revisions will be read/summarized at the April 13 Section Dinner Meeting, and a membership vote will be taken at our May 13 Spring Social. In the interim, the draft documents have been posted to our website for your perusal. If you have any questions, please contact Past President Kristen Bowman Kavanagh at info@ asce-philly.com.

ANACE*

PINK CABS REV UP

Mexico City has implemented women-only transit services for railways and bus lines. In September women-only taxis, or pink cabs, began roaming the capital's streets. Pink cabs are seen by some as a way to spare women riders from dealing with lecherous males. Mexico City "taxista" Susana Sanchez originally requested permission to run a pink cab service 12 years ago, but was told it would be discriminatory. City officials have determined that taxis for women would increase both passenger and driver safety, and the city government is training the first cohort of approved drivers in security and women's rights.

Thanks to *The Economist* for this information. *ANACE – Almost Nothing About or Concerning Engineering

THE BRADY PRESIDENCY — THE QUARTERBACK OF OUR SECTION, NOT THE PATRIOTS

When **Thomas W. Brady**, our 98th president, showed up at Citizens Bank Park on an unusually warm Friday last May, he entered the venue of our Spring Social as the ASCE, Philadelphia Section's President Elect and would leave as our President, following some ceremony and swearing in. Little did he, or any of the rest of us, know how much would happen that evening that might set the stage for his term as President.

We were able to use the Park for the Social because the Phillies were out of town. It was a good thing, too, because the weather that day quickly changed from unseasonably warm to teaming rain and a thunderstorm that may have rivaled those that we generally see in the thick of summer, and surely any game would have been postponed. Whether this was an omen for Tom's presidency, we do not know (we at *THE NEWS* tend to be non-superstitious, but, in the same breath, we'll remind you that this year's Social is on **Friday, May 13**). Some may think this was a sign from the heavens or wherever about our incoming President, but, as noted, we will not speculate here.

We do know, however, that the **Phillie Phanatic** was running amok during the Social's cocktail and dinner segments and Tom was among those who got a nice bear hug from the big green thing. We're not sure this will become part of our presidential inauguration ceremony for the future (we hope this isn't disappointing the "in-the-wings" **Ann Tomalavage!**), but we do know that Tom was the first incoming Section President so treated by a team mascot. Again, whether there is a sign, omen, whatever associated with this, we do not know.

As you may be aware, your Editor is not really strong at paying attention, but he has done this better than normal this season because he knew that his charge would be to write this very sendoff at the end of the season. This came at a cost - your Editor, who does not serve in a voting position on the Section Board, yet who continually for whatever reason attends the Board meetings almost religiously, committed a sacrilege of sorts by missing many of those meetings this season. While he will make the lame excuse that work often got in the way, and he has a hard enough time being in one place at one time, let alone two, he will also bet that the Board got a little more actual useful business done without his distracting influence at the table. But it's not about your Editor.

Tom was a welcome change in the Presidency for one big, selfish reason for your Editor in that he only has one last name. Your Editor noted last year in Past President **Kristen Bowman Kavanagh's** send-off that he had gained a good deal of finger strength from having to type "President Bowman Kavanagh" a lot. "President Brady" allowed your Editor's fingers to return to their pre-President Bowman Kavanagh size and

his gloves fit much better this winter. (Of course, getting lids off pickle jars and similar items was a little more difficult with the reduced finger capacity, but...)

President Brady, who we'll call Tom since that's his name and it's easier to type, took the reins from Kristen on that stormy evening, got hugged by the Phanatic, and then went to work. Not surprisingly, despite his being very busy at his "paying" job, managing the transportation side of things at the local office of Louis Berger, he led well. Your Editor has worked with Tom in the past and has seen how dedicated and diligent Tom can be. For several years, we worked together on the Delaware Valley Engineers Week Committee/ Council and Tom often took on difficult tasks and assignments which he managed to complete well. As we all know, the reward for doing this, particularly in volunteer organizations, is that you get the job for life. As he looked to "diversify" among organizations, Tom was careful to not accept the "for life" title (obviously, he learned something from your Editor and made much smarter decisions as a result) and moved on to spend more time on ASCE happenings. Like your Editor, Tom is a Transportation Engineer, so that's a good thing to have in common as well.

A regular feature in *THE NEWS* this season was the "Where's Tom?" photos each month. We get the impression Tom either likes to travel, has to, or both, but in any event, he does get around. He went to the Super Bowl this year, selling programs as a volunteer (his namesake has been to more, hence the title of this piece) and we do have photographic evidence of that. You may not know that he is on a self-described "quest" to visit all the major league baseball stadiums, and to date has just over a dozen under his belt, with Florida and the West Coast cities remaining on his to-visit list. He is a big fan of local sports teams and has the gear and apparel to show for it.

Sticking to the sports theme and that pesky quarterback namesake, one of Tom's claims to fame was related to the Super Bowl, when the Eagles played the Patriots in 2005. We all remember our team unfortunately gave us no reason to go crazy and have a parade, but Tom and his middle daughter Victoria made the front page of the *Daily Local News* because of his slightly more famous namesake. Sometimes we win even when we lose...?

Tom is a local product, having grown up in beautiful downtown Roxborough, but now firmly ensconced in the fringes of Chester County (you know we have to give you one word in this article to make you visit the dictionary!) with his wife, Sharon, and their three daughters. He has the advantage of being close to work but the disadvantage of not being at all close to Section meeting venues, so just about each of his trips to these meetings has been a bit of an adventure for him. We have to wonder about his weather connections, as it rained on the Social, the first three Section meetings of the season, and then, after a weather respite of sorts, more rain for the March meeting. (At least no snow cancellations!)

Tom did inherit one "undone" item from his

predecessor Kristen. As you may recall, Kristen had attempted to get the Section's Constitution and Bylaws updated and focused on this quite closely. She almost got it done — at the end, the Section learned that National would require a few more items to be completed to make things official, so this fell to Tom to oversee and guide through the process as Kristen's term ran out. We're keeping our fingers crossed that Tom can get this done before his term is up.

Tom notes that he will be traveling to Disney World later this summer. At the risk of possibly letting the proverbial cat out of the bag, we may want to ask Tom at the Spring Social, once he hands the gavel to his successor, Ann Tomalavage, the question that usually gets posed to the Super Bowl MVP at the end of the game ("Hey Tom, now that you've survived the Section Presidency, what's next?"), and his answer may be the same one the MVP's always give ("I'm going to Disney World!").

Thus, we wish you good luck, Tom, as you enter the hallowed halls of the place that Past Presidents hang out. And then the gavel gets passed to Ann and she assumes the "hot seat" at the helm of the Section, and we wish Ann good luck and we'll be there to support her. Unless someone on the Spring Social Committee is cooking something up, the likelihood of Ann getting hugged by a mascot as she starts her Presidency is low. And, once again, your Editor will have to pay attention so he can write this column about Ann a year from now.

2011 CRITICAL ISSUES SEMINAR — MARCELLUS SHALE DRILLING

The **Younger Member Forum** will sponsor this year's Seminar on **Tuesday**, **April 19**, from 5:00 pm to 7:30 pm, at the **Field House Sports Bar**, 1150 Filbert Street (Center City).

Gas from the Marcellus Shale drilling presents economic opportunities, job growth, and environmental risks to Pennsylvania, but what other impacts or opportunities does this industry offer and how can we as civil engineers plan for them? This year's panelist-led discussion will attempt to address this and other questions. Our distinguished panelists include **Dr. Joseph Martin** (Drexel University), **Jack Ubinger** (Pennsylvania Environmental Council), **Chad Pindar** (Delaware River Basin Commission), and representatives from the Pennsylvania Department of Transportation (PennDOT) Central Office and the Marcellus Shale Coalition.

Admission is free; hors d'oeuvres will be provided. RSVP's are due by April 15. Visit http://www.ymfphilly.org/events.htm for more information and the event flyer.

I GUESS WE ALL LIKE TO BE RECOGNIZED NOT FOR ONE PIECE OF FIREWORKS, BUT FOR THE LEDGER OF OUR DAILY WORK.

- Neil Armstrong

STRUCTURAL ENGINEERING INSTITUTE

Dinner & Technical Meeting TUESDAY, APRIL 26, 2011

SUBJECT: Innovative Steel Bridge Designs in Pennsylvania

SPEAKER: **Thomas P. Macioce, P.E.,** Chief Bridge Engineer, PennDOT

TIME: 5:30 PM Registration/Social (cash bar); 6:15 PM Dinner; 7:00–8:30 PM Program

LOCATION: Radisson Valley Forge Hotel/ Scanticon Hotel and Conference Center,

1160 1st Avenue, King of Prussia

COST: \$50 ASCE members; \$55 non-members; \$15 students.

Attendees are eligible to earn 2 Professional Development Hours (PDH).

The Pennsylvania Department of Transportation has designed, constructed and opened to traffic a long span bridge constructed with HPS70W (High Performance Steel). Pennsylvania has several HPS bridges currently under construction and additional bridges in design. Innovative techniques have been used or are planned, such as optimized welding and corrugated web I-girders. Description of projects, selection of the use of HPS, research conducted in association with these projects and contracting methods will be presented. The specialized subject will provide the members with a wealth of knowledge.

Mr. Macioce serves on several AASHTO Technical Committees that develop the national bridge design specifications for Culverts, Live Loads, Bridge Inspection, Timber, Steel and Concrete Bridges. As Chief Bridge Engineer, he develops the policy for design, maintenance, inspection and management of bridges and structures.

Reservations/questions: contact M. Ali Khan at Mohidin@temple.edu or (609) 332-1136. Please indicate preference: poultry, seafood, vegetarian.

Make check payable to **SEI Philadelphia Chapter** and mail to the Chapter Treasurer, Vijay Gupta, PhD, P.E., A. D. Marble & Co., 375 East Elm Street, Suite 200, Conshohocken, PA 19428.



WHERE'S TOM?

ASCE, Phila. Section President **Tom Brady** has raised a challenge to our members. Each month,

starting with the Summer edition of THE NEWS, we have provided a photo of Tom at a different location. Your mission is to identify the locations of each photo and send your list to us at **info@asce-philly.org**. Any Section member, except Tom, is eligible.

Correct lists will be submitted for a drawing for a special prize to be awarded at the Spring Social. *Good luck!*

APRIL DINNER MEETING

Continued from Page 1

PANEL DISCUSSION ON MARCELLUS SHALE CONSTRUCTABILITY AND DEVELOPMENT

(co-sponsored by Delaware Valley Geotechnical Institute (DVGI) and Environmental and Water Resources Technical Group)

This session presents a review of two case studies where publicly-owned treatment works (POTW's) can consider accepting drilling fluids for comingled and sidestream treatment. The presentation will summarize a brief look at current drilling activity and considers short-term and long-term treatment needs. The Susquehanna River Basin Commission reported a significant reduction in flowback waters because of the particularly dry shale in the north and central portions of Pennsylvania. Although this allows drilling contractors to accomplish nearly 100% recycling of fracking water, it leads to the question of how the production waters expected to return with long-term gas production will be handled. Several treatment options are currently available, but fracking water composition can vary dramatically depending on site specific conditions. Presenters/Subtopics.

Archie Filshill, PhD, President, CETCO Contracting Services; Geotechnical Challenges Associated with Marcellus Shale Exploration

Edward Buchak, Partner, Surface Water Modeling Group, Environmental Resources Management; Estimating Annual Water Requirements for Marcellus Shale Development

Anthony Elberti, P.E., Project Engineer, Gannett Fleming, Inc.; Evaluating the Treatability of Marcellus Shale Drilling Fluids

Dr. Filshill is President of CETCO Contracting Services Company. He joined CETCO in 1995 as Regional Manager of the Environmental Lining Group and became Managing Director of CETCO Europe from 1995 to 2000. He returned to CETCO in 2005 with the acquisition of InterGeo as Manager of CETCO's Contracting Services Company. CETCO's contracting group is focused on Design Build and Value Engineering of Environmental and Civil construction projects. He has a Bachelor's degree in Electrical Engineering from Temple University and Masters and PhD degrees in Civil Engineering from Drexel University. He is a Board Member of DVGI.

Mr. Buchak has Civil Engineering degrees from MIT and the University of Pennsylvania. His experience since 1972 has been in developing and applying hydrodynamic and water quality models to rivers, lakes, reservoirs, estuaries, and coastal waterbodies. He is the developer of CE-QUAL-W2, the Army Corps' hydrodynamic and water quality model for reservoirs, and of GEMSS, a public domain 3-D hydrodynamic and water quality model. He contributes expertise in problem definition, project management, data examination, modeling, and presentations to clients, stakeholders, and the general public. He has worked extensively for the electric utility, manufacturing, mining, oil and gas industries as well as for public agencies.

Mr. Elberti is a Project Engineer with Gannett Fleming in its Valley Forge office. He has over eleven years of experience providing: water and wastewater treatment plant design, process modeling, pilot testing, and master planning. He serves on Gannett Fleming's Membrane, Marcellus Shale and Sustainability work groups. He received his Bachelors Degree from Penn State University in 1999 and his Masters Degree in Civil and Environmental Engineering from Villanova University in 2005.

The Villanova Conference Center is NOT on the University's campus. For directions, please visit www.acc-villanovaconferencecenter.com/directions.cfm.

LEGISLATIVE AFFAIRS DAY IN HARRISBURG

For the fifth consecutive year, the four Pennsylvania Sections of ASCE will participate in a visit to state legislators. Legislative Day 2011 will take place in Harrisburg on Tuesday, May 10. Your participation and voice are needed to let our legislators know how important the infrastructure issue is to our economy and our daily lives. The Pennsylvania sections of the American Council of Engineering Companies (ACEC), the American Public Works Association (APWA), the American Society of Highway Engineers (ASHE), and the Pennsylvania Society of Professional Engineers (PSPE), along with the Engineers' Club of Philadelphia, will be represented.

More information on the specific event schedule for the day is being assembled and will be included on our website (www.asce-philly.org). Please hold the date and check the website for more information.

With the prospect of reduced funding for transportation infrastructure, in spite of the growing needs, and no new resources in sight, our voices need to be heard, both as Engineers and state residents. We encourage you to ask your employer to support you in this important event as well.

MEMBERS IN THE NEWS

Continued from Page 1

President of Urban Engineers. Through this award, he joins a select group of recipients whose contributions to the construction industry and to Drexel's CMGT Program are notable.

HONORARY DEGREE FOR VUCHIC

The Conservatoire National des Arts et Métiers (CNAM) (National Conservatory of Arts and Crafts), a doctoral degree-granting institution operated by the French government in Paris, has presented **Dr. Vukan Vuchic** with the title of Honorary Doctorate (Honoris Causa) at a ceremony at CNAM on March 10. This cites Dr. Vuchic's contributions to public urban transportation and high speed rail and is an important event for Franco-American cooperation in the rail industry. Congratulations to Dr. Vuchic, who is enjoying his new status as Emeritus Professor at the University of Pennsylvania, on yet another honor!

TECHNICAL GROUPS/CHAIRS

Information on the ASCE, Philadelphia Section's Technical Groups is given below. Director Keith Yamatani will be coordinating the activities of the Groups. If you have any topics that you think would be of interest to the Groups, please feel free to pass this information along to the appropriate Group Chair.

CONSTRUCTION

Dennis MacBride **SEPTA** 1234 Market Street, 12th Floor Philadelphia, PA 19107-3780 215-580-3404 dmacbride@septa.org

DELAWARE VALLEY GEO-INSTITUTE (DVGI)

Ara G. Mouradian Gannett Fleming, Inc. 1010 Adams Avenue Audubon, PA 19403 610-650-8101 amouradian@gfnet.com

ENGINEERING MANAGEMENT

The Chair position is currently open (see below).

ENVIRONMENTAL AND WATER RESOURCES

Eve D'Onofrio E S Design LLC 128 Regency Dr Norristown, PA 19403-1755 610-630-1660 edonofrio@esdesignllc.com

STRUCTURAL ENGINEERING INSTITUTE (SEI)

Dr. Mohiuddin Ali Khan 1200 Lenox Drive, Suite 101 Trenton, NJ, 08648 609-512-3415 mohidin@temple.edu

TRANSPORTATION AND **URBAN DEVELOPMENT**

William T. Thomsen Urban Engineers, Inc. 530 Walnut Street, 14th Floor Philadelphia, PA 19106 215-922-8080 wtthomsen@urbanengineers.com

We are still looking for a chair for the Engineering Management Group. Please contact President Tom Brady (contact information is given on page 2) for more information on this or if you are interested in this esteemed position.

MARCH MEETING

Continued from Page 3

Questions posed by the audience were ably addressed by the speakers.

President Brady and Director Finch thanked the speakers for an informative session and presented tokens of the Section's appreciation to Messrs. McDowell and Trojanowski.

2011 SECTION AWARDS TO BE PRESENTED AT SPRING SOCIAL

As is our usual custom, this year's ASCE, Phila. Section Awards will be presented at the Annual Spring Social and Dinner Dance on May 13. Information and details on the Social are given elsewhere in THE NEWS.

A total of five Award recipients have been nominated for these honors and approved by the Section Board of Directors. The honorees are:

- Tim Haahs, Tim Haahs Philadelphia Civil Engineer of the Year
- Mike Wagner, Urban Engineers Philadelphia Young Civil Engineer of the Year
- Ara Mouradian, Gannett Fleming Geotechnical Engineer of the Year
- Carl Baumert, Keast & Hood Structural Engineer of the Year
- Thom May, Urban Engineers Environmental/Water Resources Engineer of the Year

We hope you will join us at the Social to honor our Awardees for this year.

In the October edition of THE NEWS, we will present more information on the awardees as well as a detailed report on the Social.

SECTION SCHOLARSHIPS **AWARDED**

As reported in the March edition of THE NEWS, ASCE, Phila. Section Scholarships were awarded to three local students. A total of ten applications were received in response to our call for submissions, giving the judges a tough task to select the most worthy candidates. The judges somehow managed to come through, however, and selected the following:

- Eric Burger, a Junior at Swarthmore College
- Patrick Callahan, a Junior at Drexel University
- Nathan Berry, a Sophomore at Drexel University

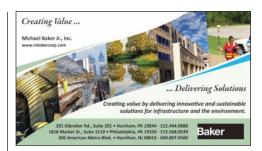
All three received \$1000 and were invited to be the guests of the Section at our March meeting, where they would be recognized accordingly. Mr. Callahan was able to attend and was cited for his efforts.

Thanks to the Scholarship Committee for handling this somewhat difficult task. The Committee is chaired by **Jeff Bade**, with assistance from members Cathy Farrell, Kristen Bowman Kavanagh, Bill Thomsen, Ann Tomalavage, Chris Wright and Bob Wright.

Also, on another scholarship "front," the Delaware Valley Engineers Week/ASCE Undergraduate Scholarship was awarded to Jennifer Harnden, a junior at Widener University, at the Engineers Week Awards and Proclamation Luncheon on February 18.

LAUGH AND THE WORLD LAUGHS WITH YOU: SNORE AND YOU SLEEP ALONE.

- Anthony Burgess





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