

PHILADELPHIA SECTION AMERICAN SOCIETY OF CIVIL ENGINEERS

P. O. Box 58186, Philadelphia, PA 19102-8186 Electronic Message Hotline: 1-800-461-4190 (24 hours a day) 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 95th Year

November 2007

ASCE, PHILA. SECTION **MEETING SCHEDULE** 2007-08

Vol. 80-3

The ASCE, Philadelphia Section Meeting program for the 2007-08 season remains "in progress." While TENTATIVE dates have been set, and we offer those for your use in marking your calendar, we are still painstakingly working to line up topics and speakers that will offer interesting and insightful events. Watch this space in future issues of THE NEWS and the Section website for updated information on our meeting program.

All dinner meetings feature a cocktail hour starting at 5:30PM, dinner at 6:30PM, and the meeting presentation following at approximately 7:30PM, unless otherwise noted. As always, you are welcome to attend the meeting presentation without dinner at no cost if you prefer to do so.

Wednesday, January 16, 2008 - Joint meeting with American Society of Highway Engineers, Delaware Valley Section -Radisson Hotel, Valley Forge (cocktails 6:00, dinner 7:00, meeting 8:00) - Topic to be determined

Thursday, February 7, 2008 - Joint meeting with ASCE South Jersey Branch - Location and topic to be determined

Thursday, March 13, 2008 - Joint meeting with Mid-Atlantic Section, Institute of Transportation Engineers and Women's Transportation Seminar - Union League -Topic to be determined

Thursday, April 10, 2008 - Joint meeting with Engineers' Club of Philadelphia - Union League - Topic to be determined

DUES INVOICES IN YOUR HANDS...

Dues invoices for 2008 were recently mailed by ASCE National. If you haven't already done so, please don't forget to pay your ASCE National and Philadelphia Section dues. Your dues are vital to the support of the Section's activities (and, of course, if you don't pay your Section dues, you won't be getting THE NEWS in your mailbox on a regular basis!).

We appreciate your ongoing support.

NOVEMBER DINNER MEETING

American Society of Civil Engineers, Philadelphia Section

THURSDAY, NOVEMBER 8, 2007

The Down Town Club • Public Ledger Building, 6th and Chestnut Streets, Center City Phila. Cocktails 5:30 PM • Dinner 6:30 PM • Meeting 7:30 PM

SUBJECT: Engineering the Political Landscape SPEAKER: Dr. Richardson Dilworth, Drexel University

RESERVATIONS MUST BE SUBMITTED BY FRIDAY, NOVEMBER 2, 2007. 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, PO Box 58186, Philadelphia, PA 19102-8186. Reservations can also be made on the Electronic Message Center, (800) 461-4190, or via e-mail at info@asce-philly.org. 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.

As Civil Engineers, we are faced with infrastructure issues and problems as a routine part of our duties. Urban infrastructure dates back to the early part of the 20th century, as cities were growing and populations were being attracted both from foreign countries and rural areas. Consequently, the cities had to build roads, transportation systems, bridges, sewers, water works, gas, electricity and related networks to provide services to this growing population. Dr. Dilworth will present an explanation of metropolitan fragmentation — the process by which suburban communities remain as is or break off and form separate political entities — and how this has important and deleterious consequences for a range of urban issues, including the weakening of public finance and school integration. This will show that the roots of the urban crisis can be found in the interplay among technology, politics, and public works in American cities. He will offer a possible scenario in which Philadelphia could pursue annexation as a means to grow once again, much like Phoenix, Houston and Las Vegas.

Dr. Dilworth is an Associate Professor of Political Science at Drexel University. He is the author of The Urban Origins of Suburban Autonomy (Harvard University Press, 2005), which was the winner of the Best Book Award from the Urban Politics Section of the American Political Science Association; and editor of Social Capital in the City: Community and Civic Life in Philadelphia Continued on Page 8

DECEMBER DINNER MEETING

American Society of Civil Engineers, Philadelphia Section, Project Management Institute, and Society of American Military Engineers, Philadelphia Post

WEDNESDAY, DECEMBER 12, 2007

Philadelphia Airport Hilton • 4500 Island Avenue (south of Penrose Avenue), Philadelphia Cocktails 5:30 PM • Dinner 6:30 PM • Meeting 7:30 PM

The meeting topic has not been finalized as of presstime. Please check the SAME Philadelphia Post Website (noted below) for more information.

SPEAKER: Hans A. VanWinkle, P.E., Hill International

RESERVATIONS MUST BE SUBMITTED BY FRIDAY, DECEMBER 7, 2007. ALL RESERVATIONS SHOULD BE MADE THROUGH THE SAME PHILADELPHIA POST WEBSITE, www.samephiladelphiapost.org. No reservations will be accepted through the ASCE, Phila. Section's Hotline, Website or Post Office Box. The cost of the meeting and dinner is \$32 per person in advance (\$35 at the door). Walk-ins will be subject to acceptance on a space-available basis.

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PRESIDENT'S MESSAGE

Would you like to keep your license to practice Engineering in Pennsylvania?

If you answered no to this question then I recommend a nice stroll enjoying the autumn weather. If you answered yes to this question — read on.

The Pennsylvania Legislature has already passed legislation that will require continuing education in order to maintain Engineering licenses. The exact details of the requirements have not been finalized, but we anticipate that something like

24 professional development hours (PDH's) will be required every two years. This will become effective with your next license renewal, two years from now.

The members of the ASCE, Philadelphia Section are busy people and this will be yet another demand on their very full schedules.

For this reason, your Board of Directors of the ASCE, Philadelphia Section feels we need to have a convenient, comprehensive, complication-free continuing education program in place to serve our members prior to the end of 2008.

Full details will be shared as they develop, but at this point we know we hope to accomplish the following:

- 1) Get our monthly meetings formally recognized for PDH purposes.
- 2) Get our various technical groups' meetings formally recognized for PDH purposes.
- 3) Provide an opportunity to attend full-day accredited seminars a number of times per year on a number of relevant topics, at convenient locations.

What can you do in the interim?

- 1) Connect (or reconnect) with one of the Section's technical groups. The easiest way to do this is to e-mail **info@asce-philly.org** for more information.
- 2) Do you have teaching experience and the inclination to lead a one-hour lunchtime presentation or a full-day class? If so, we can help channel your talents in a way that will help our members meet their continuing education requirements. Teaching a class actually might earn the instructor more PDH's than a student would earn. Contact info@asce-philly.org for more information.
- 3) Attend the regular ASCE, Philadelphia Section meetings. These will likely be worth a PDH or two sometime during 2008. In the meantime, it is a chance for you to connect with your fellow members and see some excellent presentations.

In short, the Pennsylvania Legislature has created a need for continuing education opportunities for all licensed engineers. Your Philadelphia Section is eager to meet the needs of the membership, and is striving to make continuing education convenient for all of us.

Yours in Learning, James Markham, P.E. President, Philadelphia Section of ASCE

PLEASE CHECK YOUR MAILING ADDRESS

We receive several returned copies of THE NEWS each mailing. The usual reason for the return is insufficient mailing address.

As you renew your ASCE dues, please check your preferred mailing address for correctness. In order to have your mail delivered to you, your address needs to be as complete as possible — if you work in an office building or complex, the street address AND the office/floor/suite number needs to be included.

You can also check your information on ASCE's database at any time through National's website (www.asce.org) in the Member Profile section. You may need to establish a username/password for your account to do this, if you have not previously done so.

Another option remains — our e-mail service which will get THE NEWS to your computer literally "hot off the presses." This option is outlined elsewhere in this edition.

We appreciate your cooperation on this to ensure that THE NEWS and other ASCE mailings find you efficiently and quickly.

MEMBERS IN THE NEWSGUTHRIE JOINS STV INC.

Bob Guthrie joined STV Inc. this past spring. Bob will serve as a Vice President and will be directly responsible for the Philadelphia operations of the firm's highway and bridge group, a part of the firm's national Transportation and Infrastructure Division.

Bob has over 35 years of experience in Engineering, project management, and operational/administrative management. He is a Registered Professional Engineer in five states and a professional planner in New Jersey. In addition to ASCE, he is a member of the American Society of Highway Engineers, the Institute of Transportation Engineers, and the Women's Transportation Seminar.

Good luck, Bob!

The test of our progress is not whether we add more to the abundance of those who have much, it is whether we provide enough for those who have too little.

— F.D. Roosevelt

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Editor of THE NEWS Robert Wright

Staff Writers

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SEND COPY TO:

ASCE THE NEWS

P.O. Box 58186, Philadelphia, PA 19102-8186

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CIVIL ENGINEERING DEMAND: A CYCLICAL PHENOMENON

By Cathy Bazán-Arias, Ph.D., P.E.

This article appeared in the "Insider's View" column on the CENews.com website on September 11 and is reprinted here with permission of CE News. With all of us being as busy as we are these days, we think you might find it insightful, and make you wonder when the "easy" days are coming...

As a student, I sought the advice of a prominent, knowledgeable mentor regarding what I perceived as a "slump" in Engineering work opportunities. Elio D'Appolonia, Ph.D., P.E., listened carefully and then told me that it was okay for the demand for Engineers to slow down once in a while. He stated that in due course, employers would need to re-supply their technical staff and then these same employers would contribute to a revitalization of the profession. He further said that this renewal wave to attract and retain students and professionals would continue until the supply was seemingly fulfilled and then likely another "slump" would follow. But D'Appolonia was sure of one thing: Engineers would always be needed, so he recommended that I "hang in there."

As a younger Engineer, I was confused about D'Appolonia's comments, likely because my immediate work needs were foremost in my mind. But I remembered his words and continued to study and work in the profession that I enjoy. And now, years later, I have gained some understanding on what he expressed.

In the past month, I have experienced two unprecedented events: growth in enrollment for my traditional and online lectures, and avid contact by recruiters for different opportunities. As I walked into my structural analysis lecture, for a second I thought it was the incorrect classroom: the number of students had doubled from that typical during the last five years. My online class at another university is up by 20 percent compared with the most popular of the last five semester courses offered.

Alongside, a relatively large number of recruiters have tried either to entice me to join other firms or reward me for a referral to colleagues who would consider joining other firms. One recruiter wrote that their client is a "high-end boutique firm" looking for a person to manage and execute regional projects, mentor junior staff, and take the lead on high-profile projects. Relocation and signing bonuses were involved. The recruiter even offered a handsome referral fee should I decide to pass the opportunity but provide a willing candidate. WOW!

I recall the days when it seemed that firms had qualified Engineers lining their offices for almost any position advertised. Several of my graduate colleagues had to consider relocation, part-time employment, or further studies to stay in Civil Engineering. Nowadays, "high-end boutique firms" are after Engineering expertise and students are turning to "the light side of the

Force" by filling-up traditional and virtual Engineering classrooms. From interviewing more experienced colleagues, it seems that this cycle has occurred in Engineering fields for at least the last 40 years.

So it seems that our profession, even as an integral part of society, needs to go through boom and slump cycles. The infusion of strategic efforts from industry, societies, organizations, and academic institutions during slumps allows for refreshed and renewed growth. One of the best examples of the recent "development wave" that I have observed is the effort led by ASCE's Academic Prerequisites for Licensure & Professional Practice (CAP3) and the Civil Engineering Book of Knowledge (BOK). These efforts are supported by other prominent professional organizations such as the NAE, NSPE, and NCEES.

D'Appolonia's statement and advice were sound: Engineering students and professionals who weather the market's demand cycles become coveted assets in due course. The key is to hang in there.

Cathy Bazán-Arias, Ph.D., P.E., works for GAI Consultants, Inc., in Pittsburgh.

NAME THE CARTOON?

Last March we trotted out our long-awaited new feature, an Engineering-related cartoon. With the help of **Karen Anne Riley**, we were able to find **Alma Radocaj**, a local art student, who agreed to take on the large task of production of a comic for THE NEWS. Alma's work was featured in the March and April-May editions last season and the October NEWS this year. She has promised us more of her work this year, so look for this in coming issues.

Also, in March, we offered a contest of sorts to name the feature. We haven't yet identified a prize, but it's still a contest. To date, we have received no suggestions. At the risk of allowing your Editor to handle this (and we know little good can come from that!), we offered a few ideas for inspiration. Here are the ideas once again:

 $E = mc^2$ (Engineers are mutually comical and cerebral)

f = mc/I (funny is mainly comical over intellectual)

 $L_{eng} = 0.5V + 0.33v + a_{thought}$

(Engineers' laughter is half visual, a third verbal and a little thought)

Civil Chuckles

Civil Comics

 $H_{eng} = (g+s)/t$ (Engineering humor is guffaws and snorts over time)

Please be sure to send any ideas you have to us either to the Post Office box or through the website feedback option.



ASCE, PHILA. SECTION PARTICIPATES IN MODJESKI STATE MARKER DEDICATION

On September 15, 2007, ASCE, Phila. Section President James Markham and members Christopher Menna and Michael McAtee attended the dedication of a historic marker which acknowledges Ralph Modjeski, the Chief Engineer and Designer of the Benjamin Franklin Bridge. The event was organized and hosted by the Polish Heritage Society of Philadelphia. Following the ceremony, Chris and Mike attended a luncheon, where certificates of recognition were presented to the group. On behalf of the Section's **History** and Heritage Committee, Chris presented a certificate which commended the Polish Heritage Society for raising the awareness of a famous Engineer and his local achievement to the general public.

Representatives from the Council of Polish Engineers, the Association of Polish Engineers in the USA (Polonia Technica), the Delaware River Port Authority, and the firm of Modjeski and Masters were also on hand. Over 100 people attended the dedication and the luncheon.

Modjeski was principally responsible for the design and construction of the Benjamin Franklin Bridge (called the Delaware River Bridge when it opened, renamed in 1953), as well as other local bridges such as the Tacony-Palmyra Bridge and the arch bridge which carries Henry Avenue over the Wissahickon Creek. The luncheon presentation indicated that Modjeski stands out by far from his master bridge builder counterparts, with over fifty nationally known prized bridges worked on during his lifetime.

The occasion was a resounding success, with good weather, great news coverage, an excellent luncheon, a noteworthy keepsake program, and monies raised for Polish student scholarships.

The historic marker can be viewed opposite the Bridge Plaza at the northwest corner of 6th and Race Streets.

Thanks to Chris and Mike for this report.

YOUNGER MEMBER FORUM NEWS

by Krista Pohl, Forum Editor

Joseph Platt, Forum President 2007-08 Traffic Planning and Design Inc Sanatoga Commons 2500 E. High Street Suite 650 Pottstown, PA 19464 jplatt@trafficpd.com

Annual Critical Issues Seminar – Earlier This Year!

The ASCE Philadelphia Section and the Pennsylvania Society of Professional Engineers (Valley Forge Chapter), along with the YMF, will be hosting the **Critical Issues Seminar** on **Wednesday, November 28, 2007** in Norristown. The topic for this seminar is "The PE as an Expert Witness" and the panel of speakers will cover how to prepare for expert testimony, what not to say and phrases to stay away from, how to keep your cool under pressure, and how to explain technical information to a non-technical audience. If you're planning to attend, please RSVP to **Kristin Norwood** at **knorwood**@ **trafficpd.com** by **November 21, 2007**.

YMF Happenings

On September 12, 2007, 35 younger members and 5 current students attended our **2nd Annual Bowling Night** at Strikes Bowling Lounge in University City. Bowlers noshed on snacks provided by the YMF during happy hour. For the remainder of the evening, the younger members showed off their bowling skills under the strobes and to the beat of rock 'n' roll.

Everyone had a fun time, and this event might even be seen as a **3rd Annual Bowling Night** next year. Thanks to Social co-chairs **Guy DiMartino** and **Cathy Golata** who planned the event.

Member Spotlight Jeremy Chrzan, P.E.

Jeremy was graduated from Drexel University in 2002 with a Bachelors and Masters in Civil Engineering. He is a licensed Professional Engineer (PE) in Pennsylvania and Delaware, as well as a certified Professional Traffic Operations Engineer (PTOE). Since graduation, he has worked in the Transportation Department at Pennoni Associates in Center City, where he heads-up their involvement in the PennDOT Highway Occupancy Permit (HOP) review contract; he's also working with PennDOT Central Office to draft new policies pertaining to HOP's. Jeremy has also been involved in numerous roadway improvement projects in Bensalem Township and conceptual roadway improvement projects throughout the region.

Outside of the Civil Engineering world, Jeremy spends time listening to music, skiing, golfing, and anything that will keep him busy or entertained.

IT'S OFFICIAL — MENNA NOW REGION 2 GOVERNOR

In the ASCE National voting conducted this past summer, our own Past Section President **Christopher Menna** was elected to the position of Region 2 Governor. Chris will be officially appointed to this position at the upcoming ASCE National Annual Conference. He will serve a three-year term ending in 2010.

Region 2 was formed in 2005. It includes all ASCE members in Pennsylvania (formerly District 4), Delaware, Maryland and the District of Columbia metropolitan area. All 10,000 ASCE members in Region 2 are the electorate for Governor positions.

There are six Region 2 Governors. All of the governors are truly At-Large; they represent all the members in the region. Section Member **David Hanly** is currently serving a two-year atlarge governor term ending in October 2008. Dave was appointed to that position by the Region 2 Formation Team (R2FT.)

The other Region 2 Governor elected this summer is **Kim Parker Brown** from the National Capital Section.

The ASCE, Phila. Section thanks Chris for taking on this important role and wishes him the best of luck in the representation of our Region.

DECEMBER DINNER MEETING

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THERE IS NO GUARANTEE THAT SPACE WILL BE AVAILABLE IF YOU DO NOT RESERVE A SPACE.

Maj. Gen. Hans A. Van Winkle, P. E. (USA-Ret.) is President of Hill International, Inc.'s domestic project management operations. He has more than 35 years of experience in Engineering, operations, construction and project management. Prior to joining Hill, he served as the Director of the Construction Industry Institute, a non-profit consortium that is part of the University of Texas at Austin's College of Engineering. Previously, he spent more than 30 years in various positions with the U.S. Army Corps of Engineers, eventually rising to Deputy Commander of the Corps from 2001 to 2003.

Gen. Van Winkle earned his B.S. in Engineering from the U.S. Military Academy at West Point, and his M.P.P. in Public Policy from the University of California at Berkeley. He is a Registered Professional Engineer in Virginia, and he is a member of the National Academy of Construction.

Sometimes when I reflect back on all the beer I drink I feel ashamed. Then I look into the glass and think about the workers in the brewery and all of their hopes and dreams. If I didn't drink this beer, they might be out of work and their dreams would be shattered. Then I say to myself, "It is better that I drink this beer and let their dreams come true than be selfish and worry about my liver." — Jack Handy

TECHNICAL GROUPS/CHAIRS

Information on the ASCE, Philadelphia Section's Technical Groups is given below. Vice President **Kristen Bowman Kavanagh** will coordinate 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 Group Chair.

CONSTRUCTION

Dennis MacBride SEPTA 1234 Market Street, 12th Floor Philadelphia, PA 19107 (215) 580-3404

DELAWARE VALLEY GEOINSTITUTE

Michael S. Carnivale, III Pennoni Associates Inc. 515 Grove Street, Suite 2C Haddon Heights, NJ 08035-1756 (856) 547-0505 ext. 3416

ENGINEERING MANAGEMENT

William J. Mulloy US Army Corps of Engineers Philadelphia District Wanamaker Building, 7th Floor 100 Penn Square East Philadelphia, PA 19107 (215) 656-6583

ENVIRONMENTAL AND WATER RESOURCES

Jeremy Colello Pennoni Associates, Inc. 3001 Market Street, 2nd Floor Philadelphia, PA 19104 (215) 222-3000

STRUCTURAL

Dr. Mohiuddin Ali Khan JMT Inc. 1300 Rt. 73 South, Suite 313 Mt. Laurel, NJ 08054 (856) 778-5517

TRANSPORTATION AND URBAN DEVELOPMENT

William T. Thomsen Urban Engineers, Inc. 530 Walnut Street, 14th Floor Philadelphia, PA 19106 (215) 922-8080

The Engineering Management and Construction Technical Groups are currently looking for new members to help plan and manage future programs. Please contact the respective Chairman if you are interested.

DVGI NOVEMBER DINNER MEETING ANNOUNCEMENT

The Delaware Valley Geo-Institute will hold its November Dinner Meeting on Tuesday, November 20, 2007 at the Radisson Hotel in Valley Forge. As the guest speaker for this meeting, Mr. Les Simon of URETEK USA will present project case histories. URETEK USA is part of a global organization focused on controlling complex pavement lifting and soil stabilization issues for Departments of Transportation, Departments of Public Works, Bridge, Tunnel and Airport Authorities, nationwide. For additional information, contact Melissa Gillespie at (856) 273-1224 or mgillespie@trcsolutions.com.

ANACE* DISASTER RESPONSE

When the I-35W bridge collapsed in August, we once again heard about the role we as Engineers serve and we have to think why it takes disasters and catastrophes for us to get some publicity. (And, as an aside, a friend asked your Editor, since news reports of things like dam failures and bridge collapses note that the Engineers immediately respond, what do we do between disasters?) In any event, here's a historical tidbit for your edification.

Although the American Red Cross had been established in 1881, it had little experience with any sort of disaster relief and response until the San Francisco earthquake in April 1906. When the earthquake left over 500 dead and 100,000 homeless, President Theodore Roosevelt appealed to the Red Cross to assist with the relief effort. Unfortunately, although it was willing to help, the Red Cross' staff had no disaster experience and had never planned to deal with such a crisis, especially on a large scale. The Red Cross responded nonetheless, in the belief that this could be a valuable learning effort.

In 1905, Congress granted a charter to the American Red Cross that required it to act "in accord with the military authorities as a medium of communication between the people of the United States and their armed forces." Since the Red Cross then has provided communications and other humanitarian services to help members of the military and their families around the world. Living and working in the same difficult situations and dangerous environment as U.S. troops, Red Cross staff have given comfort to soldiers thousands of miles from home by providing emergency messages (for example, deaths and births), comfort kits and blank cards for troops to send home to loved ones.

Based on this experience, the Red Cross began training staff throughout the country how to provide disaster relief, particularly focusing on floods, fires, industrial accidents, tornados and earthquakes, starting in 1908. By 1917 the organization had dealt with enough of these incidents to begin drafting a handbook called "Disasters." The final touches were literally being put in this handbook nearly 90 years ago, on December 6, 1917, when the Mont Blanc, a ship loaded with ammunition and dynamite, mysteriously exploded in Halifax, Nova Scotia, virtually wiping out the central city.

The blast resulted in over 1900 people killed immediately and nearly 9000 injured, many permanently. A total of 325 acres, almost all of north-end Halifax, were destroyed. Much of what was not leveled burned to the ground, aided by winter stockpiles of coal in cellars. All 3000 tons of the Mont Blanc were shattered into little pieces that were blasted far and wide. The barrel of one of her cannons landed over 3½ miles away. Part of her anchor shank, weighing over 1100 pounds, flew two miles in the opposite

direction. (This was salvaged from the harbor in 1936 and mounted in a rock cairn as a memorial to the event.) Windows shattered 50 miles away, and the shock wave was even felt in Cape Breton, 270 miles to the northeast.

One direct result of this event was that the Red Cross was successful in convincing cities and states to prepare disaster response plans, as governments became aware that it could happen in their "backyards."

 $*ANACE - Absolutely\ Nothing\ About\ or\ Concerning\ Engineering$

SO WHAT HAVE ENGINEERS DONE GOOD LATELY?

From time to time, we find a need to remind each other that we have done great things that just have not been recognizable as something that Engineers would do (consequently, architects take the credit for it!). Other than our intentional grammatical miscue in the title (hopefully, you can find it!), we offer this bit of information reported by 2007 ASCE Congressional Fellow Stephan Butler which you may have read in National's "This Week in Washington" report. We promise to continue these sorts of reports on an occasional basis for your edification.

With few policy matters on which to report, I find myself in the enviable position of being able to share with you the some of the cultural benefits of being in the nation's capital. Spring and summer in Washington D.C. and its environs are becoming one of the best experiences of the fellowship. From barnstorming in Maryland to weekends in Annapolis, golfing and seeing the cherry blossoms in East Potomac Park to driving on Skyline Drive in the Shenandoah National Park, I have acquired memories that will last a lifetime. Yet during these adventures I often find myself thinking about the public policies and Engineering and infrastructure development that went into creating these experiences that now seem to come so effortlessly. If not for proper public policy and the involvement of Engineers, my memories of East Potomac Park and Skyline Drive would be nothing more than figments of my imagination.

Beginning in the 1880s the U.S. Army Corps of Engineers transformed the Potomac Flats in Washington, D.C., by dredging the river channel and dumping the spoil on the Flats, thus creating new land to the south of the Mall. In 1897 Congress passed Senate Bill No. 3,307, which by dedicating 600 acres of reclaimed land, established the area of the Tidal Basin and former Flats as a public park (a.k.a. West Potomac Park and East Potomac Park) and ordered that it be "forever held and used as a park for the recreation and pleasure of people."

Development of the land began in 1901 under **Engineer Colonel Theodore A. Bingham** who headed the Office of Public Buildings and Grounds. The Washington Engineer District transferred to his control a parcel of land between the Tidal Basin and the Monument

grounds, and Bingham submitted an estimate for its improvement. Bingham included plans for drives, Japanese gardens, nurseries, polo grounds, athletic and military parade fields, and an electric fountain for the Basin in his grand scheme for the area. Bingham believed the park would provide fresh air and places of recreation for residents and serve as an "emerald setting for the beautiful city."

On March 25, 1912 final work began on one of the area's best-known improvements: the cherry trees around the Tidal Basin. A gift from Tokyo to Washington, more than 3,000 flowering cherry trees arrived to replace an earlier shipment of diseased trees. On the afternoon of March 27, the **First Lady, Mrs. William Howard Taft,** and **Viscountess Chinda,** wife of the Japanese Ambassador, planted the first two cherry trees beside the Tidal Basin, where eleven years of care had created a perfect setting.

Skyline Drive is a 105-mile road that runs the entire length of the National Park Service's Shenandoah National Park in the Blue Ridge Mountains of Virginia, generally along the ridge of the mountains. Begun as a Works Progress Administration (WPA) project during the Great Depression, construction of the Skyline Drive was both difficult and dangerous. Huge cuts were made into the sides of knolls and peaks to allow for a road wide enough to handle traffic. The work began in 1931, and the final section was completed and opened in 1939.

While Herbert Hoover is credited with the idea of Skyline Drive, it was F.D.R that would make it a reality. Using Public Works money, Roosevelt created the Civilian Conservation Corps (CCC), which hired young men from the valleys, and put them to work on the mountain, building roads, conduits, buildings, trails and overlooks. It gave poor people a chance to earn a living and a skill they could use when economic conditions would spawn new jobs in industry.

The CCC built camps all along the construction path of Skyline Drive, which was then the original route of the Appalachian Trail. Ten CCC camps were constructed between 1933 and 1942. In that time, virtually all of the improvements – buildings, fire trails, hiking trails, overlooks, comfort stations, walls, culverts, and any other sign of modern life – were constructed by the CCC. This also includes the most massive re-forestation project ever undertaken.

The results of the combined efforts of our elected officials and the Engineering community demonstrate what can be achieved when both groups work together to arrive at proper public policy. Such coordinated action has provided use with improved recreational opportunities and access to nature and its beauty. I tip my hat to all of those with the foresight and vision to undertake these projects.

24 hours in a day, 24 beers in a case. Coincidence? I think not.

OCTOBER DINNER MEETING

Thursday, October 11, 2007

Union League, Philadelphia

Key Initiatives at PATCO By Robert Wright, Editor

The first meeting "out of the gate" for the ASCE, Philadelphia Section's 2007-08 season saw over 90 people coming out to hear about what's happening at the Port Authority Transit Company (PATCO). Section President James Markham welcomed the crowd and opened the meeting, with Past Section President Bob Koerner offering a moment of silence for grace.

Peter Brazaitis, President of the ASCE Student Chapter at Drexel University, the evening's featured college, gave a short report on the Chapter's current activities. **Professor Joseph Martin** then asked all Drexel alumni in the room to stand, showing the strength of the school's program over the years.

Joseph Platt, Section Treasurer and President of the Younger Members Forum (YMF), made a few announcements on the YMF's upcoming events.

Don Gusic, Vice President of the YMF, introduced the evening's speaker, **John Matheussen,** Chief Executive Officer of the Delaware River Port Authority (DRPA) and President of PATCO.

PATCO At A Glance

Mr. Matheussen gave some quick facts and figures on PATCO. The line began operation in 1969, taking over the former Bridge Line rapid transit operation between Center City and Camden and coupling it with a new extension from Camden to Lindenwold. Annual ridership is 9.4 million, typically about 34,000 per day. The current focus of efforts is in infrastructure renewal, a program called "PATCO @ Work," which has concentrated on 21st century upgrades. Wood ties have been replaced with concrete ties and station finishes have been rehabilitated to respond to the normal wear-and-tear from nearly 40 years of use.

The line's fare collection system, a modern marvel of automation when PATCO opened, has been reviewed for improvements. Most recently, Mr. Matheussen noted that the PATCO Freedom Card, a "smart card" which has a stored value and automatic reload function similar to EZ Pass, has been tried as a possible replacement for the current magnetic-encoded farecard system. There are still a few "bugs" to be worked out, but this is promising. The Freedom Card will be able to be used for the parking fees at PATCO's New Jersey lots and, hopefully, also usable for SEPTA and New Jersey Transit fares in the future. New fare gates, which are more friendly for accessible-needs riders, are also being obtained.

Plans to Expand

Future expansion of the line, which has been studied and considered almost since PATCO opened, is back on the table. Mr. Matheussen outlined five efforts now underway. Three

PATCO extensions are being reviewed in New Jersey. A route paralleling NJ 42 to Williamstown would serve the four fastest growing townships in South Jersey. Another possible corridor would follow the NJ 55 median or an existing railroad right-of-way to the Glassboro area with a potential future extension to Millville. The cost of each of these options is in the \$1.5-2 billion range in today's dollars, but they would help alleviate the traffic bottleneck on South Jersey's most clogged interchange, the junction of I-76, I-295 and NJ 42 (the third most congested location in the entire state).

On the Pennsylvania side of the Delaware River, Mr. Matheussen explained that the distribution of PATCO riders was critical. Studies are concentrating on two light-rail connectors one would extend from the currently-closed Franklin Square station to the Delaware River waterfront and follow Delaware Avenue/ Columbus Boulevard north to Penn Treaty Park and south to the Navy Yard, while the second would extend the SEPTA subway-surface tunnel under Market Street from its current terminal at City Hall to Columbus Boulevard and then along the waterfront routing described previously. A separate effort is exploring the possible extension of the SEPTA Broad Street Subway directly into the Navy Yard, which would also enhance PATCO connections.

Funding is obviously a key element of any of these expansions. Mr. Matheussen noted that federal funding for "new start" rail projects has been reduced to a 50% share (down from 75-80%), which means that over \$3 billion would need to be found from local sources for these extensions.

Other Plans

Mr. Matheussen commented on PATCO's efforts to enhance transit-oriented design (TOD) around its stations. One area that is being explored is the possible reuse of surface parking lots for development by movement of the parking into structures, which would free some space for other uses. This is always a balancing act of financial return vs. increased ridership, community desires vs. development feasibility, and development intensity vs. community concerns. Some of this is already happening in Collingswood, as the community's land use near its PATCO stop is changing and the town is becoming more gentrified.

The current fleet of 121 cars will be rehabilitated for continued service. Mr. Matheussen remarked that two-thirds of this fleet date to the line's opening in 1969. PATCO explored its options and found that the rehabilitation would be more cost-effective than complete replacement with new cars. The rehabilitation program will cost \$280 million

and will call for a complete gutting of the cars, with new systems and interiors in the existing body shell. A new fleet would be at least double this cost, however, any expansion will require additional cars.

In response to questions, Mr. Matheussen stated that ridership has decreased from 40,000 per day in the early 1990's to about 31,000 in 2000 but has started increasing again. The New Jersey extensions are anticipated to remove 10,000 to 12,000 cars from the road daily. The Philadelphia extensions are targeting the development potential of the waterfront and Navy Yard.

President Markham thanked Mr. Matheussen for taking the time for this insightful presentation and offered a token of the Section's appreciation for his efforts.

THANKS TO OUR SPONSORS

The ASCE, Philadelphia Section Sponsorship continues to be a success. Thus far, 25 firms have opted to become sponsors for the coming season. As always, the Section extends its collective "thank you" to our sponsors for their commitment and continued support of the Section.

There are several benefits available to you as a Section Sponsor. If your firm's card is not on our Sponsors' pages, and you would like it to be, please contact our Editor, Bob Wright at (215) 922-8081, x1647 or newseditor@asce-philly.org for more information.

CHECK OUT OUR REVAMPED WEBSITE

Expect some surprises if you haven't been to our website (www.asce-philly.org) lately. And, even if you've visited recently, we invite you to take a peek anyway. It's been totally updated – we'd call it new and improved, but, even though it is, we know how worn out that expression is...

We've added some new features and rearranged others to make it easier to navigate and get to specific topics, areas and segments. Links are provided for more information and direct e-mails to ASCE, Phila. Section Officers and Board members, and we've provided some background and biographical information on our Officers for your knowledge. We are also exploring ways to allow members to register online for meetings and events.

We invite you to peruse the improved website and send us your feedback. Thanks to President-Elect **Mark Tiger,** who chairs our Website Committee and coordinated it with our new webmaster, **Rich Knaster.**

Additionally, if you already haven't done so and are interested, you can contact us through the website to have THE NEWS delivered electronically to you each month. Over 200 members have opted for this so far. This allows you to receive THE NEWS about 7-10 days before it would normally reach you through the mail. You can also choose to receive both the email and hard copy versions if you'd prefer.

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MEMBERS IN THE NEWS

Martsolf on PenTrans Board

Carol Martsolf, P.E. has been appointed to the PenTrans Board of Directors. PenTrans (Pennsylvanians for Transportation Solutions) is an organization that generates public and private support for balanced, multimodal transportation and mobility alternatives that improve our quality of life, so that state and federal lawmakers will allocate sufficient dedicated public transportation funding for Pennsylvania.

A study in the Washington Post says that women have better verbal skills than men. I just want to say to the authors of that study: "Duh."

— Conan O'Brien



CONTINUING EDUCATION COURSES AT GEOSYNTHETIC INSTITUTE (GSI)

GSI will be offering two short courses, as follows:

- #1 Geosynthetics in Waste Containment Liner and Cover Design - December 10, 2007 and February 11, 2008
- #2 Quality Control/Quality Assurance of Geosynthetics Installation - December 11, 2007 and February 12, 2008

The instructors for these courses will be Dr. Robert Koerner, Dr. George Koerner, and Dr. Y. Grace Hsuan of GSI.

Additionally, GSI will conduct an examina-tion for Inspector Certification on December 12, 2007 and February 13, 2008. The courses and exam will be held at GSI's office in Folsom, Delaware County.

For more information, please contact Marilyn Ashley of GSI at (610) 522-8440 or mvashley@verizon.net.



NOVEMBER DINNER MEETING Continued from Page 1

(Temple University Press, 2006). He received a B.S. in economics from New York University in 1993 and a Ph.D. in political science from Johns Hopkins University in 2001. He has taught at Wagner College, the John Jay College of Criminal Justice, Temple University, and the University of Tirana in Albania in addition to Drexel. He lives in South Philadelphia with his wife and daughter, and is the grandson and namesake of a renowned mayor of Philadelphia who served in the 1950's.

COMING NEXT ISSUE...

Information on the January and February meetings. Look for this in the December-January edition of THE NEWS, coming in late December.



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