



ASCE, PHILA. SECTION MEETING SCHEDULE 2007-08

For your use in marking your calendar, the following meeting dates have been TENTATIVELY set for ASCE, Phila. Section meetings in the coming season.

To the extent possible, the ASCE, Phila. Section will continue to follow the second Thursday pattern of meetings that has worked in past seasons. Exceptions will generally be joint meetings with other societies.

Thursday, October 11, 2007

Thursday, November 8, 2007

Wednesday, December 12, 2007

Wednesday, January 16, 2008; Joint meeting with American Society of Highway Engineers, Delaware Valley Section

Thursday, February 14, 2008; Joint meeting with ASCE South Jersey Branch

Thursday, March 13, 2008

Thursday, April 10, 2008

As noted, this is subject to change. Topics and speakers have not yet been finalized. Updates will be provided in each edition of THE NEWS.

ASCE LEGISLATIVE AFFAIRS DAY A SUCCESS !

As reported in THE NEWS in previous editions, the four Pennsylvania Sections of ASCE (Central PA, Lehigh Valley, Pittsburgh and Philadelphia) released the PA Infrastructure Report Card in 2006 and, as a follow-up, scheduled a day with legislators on May 8, 2007. Roughly 80 members of ASCE and other technical societies attended the event, along with 27 third graders from **St. Genevieve's School of Flourtown**. The intent of the visit was the highlighting of the Report Card's findings in face-to-face visits with over 75 lawmakers and a push to recognize the immense needs (over \$1 billion annually) for transportation infrastructure funding as well as continued investment in Engineering education.

The ASCE, Philadelphia Section had 15 members participating and received financial support from several local firms to help charter the bus for the St. Genevieve's students. Additionally, another 10 representatives from our area from PSPE, ASHE and MASITE took part in the event.

Thanks to **Chris Menna** and **Mark Tiger**, who coordinated the event within the Section, for their diligence and patience in this very successful effort.

SECTION PARTICIPATES IN DELAWARE VALLEY SCIENCE FAIR ONCE AGAIN!

For the 14th consecutive year, the ASCE, Philadelphia Section sent judges to the Delaware Valley Science Fair, which was held on April 4, 2007, at its new location, the Valley Forge Convention Center. The Section's judges reviewed numerous projects and came up with two winners in each of the categories of Grades 6-8 and Grades 9-12.

The winning students and their projects were:
Grades 6-8 First Place — Taylor Zaengle, Baldi Middle School, Philadelphia. Taylor's project was titled "*Sand Size — Does It Affect Concrete?*" Taylor is a 7th grader at Baldi.

Grades 6-8 Second Place — Joseph Kiernan, Haddonfield Friends School, Haddonfield, NJ. Joseph is a 6th grader and his effort was "*A Bridge Over Troubled Waters.*"

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THANKS TO OUR SPONSORS — AND SPECIAL THANKS TO SPECIAL SPONSORS

The ASCE, Phila. Section Sponsorship program was an unqualified success once again last season, with 39 local firms participating. As always, the Section extends its collective "thank you" to our sponsors for their commitment and continued support of the Section.

And as success breeds copying, we'll be contacting all of last season's sponsors shortly to get you to "re-up" for 2007-08, so get your checkbooks ready! (And we certainly appreciate it!)

Along with this, we'd like to especially thank some of our sponsors, those who allow their employees to spend time and effort to keep volunteer organizations such as ours running smoothly. These firms include, in no particular order:

- **Pennoni Associates** (where James Markham, President and Jeremy Colello and John Zarsky, Directors, are employed)
- **Michael Baker Jr. Inc.** (Mark Tiger, President Elect)
- **McMahon Associates** (Jennifer Walsh, Secretary)
- **Traffic Planning and Design** (Joseph Platt, Treasurer)
- **Louis Berger Group** (Thomas Brady, Assistant Secretary)
- **Widener University** (Vicki Brown, Director)
- **Malarkey Consulting** (Ann Tomalavage, Director)
- **Urban Engineers** (Carol Martsolf and Brian Stover, Past Presidents)
- **DMJM Harris** (Chris Wright, Membership Secretary)

There are several benefits available to you as a Section Sponsor. For a low annual fee, you too can be a part of this program and have your business card appear in each edition of THE NEWS, among other perks. If your firm is not in this esteemed group, and you would like to become a sponsor, this is the time to consider it.

For information on the program, please contact our Editor, **Bob Wright (215) 922-8081, x1647** or newseditor@asce-philly.org.

SAVE THE DATE! 137TH ASCE ANNUAL CIVIL ENGINEERING CONFERENCE

The 137th ASCE Annual Civil Engineering Conference is scheduled **November 1-3, 2007** in Orlando, Florida. This year's theme is ***Infrastructure For All Generations: Plan, Design, Build, Manage.*** Get ready for innovative technical sessions, symposiums and roundtables in the backdrop of sunny Florida! Major topics covered will include transportation and rail, the Everglades and shuttle redesign. More information will be available later this summer.

COMING NEXT ISSUE...

- More information on the October meeting and meeting schedule
- Coverage of the Spring Social

Look for this in the October edition of THE NEWS, coming in mid-September.

MEMBERS IN THE NEWS

Perri New Chief Engineer

Dave Perri was appointed to the position of Chief Engineer and Surveyor at the City of Philadelphia Department of Streets in March. Dave takes on the duties most recently held by Section Past President and Editor of THE NEWS **Bob Wright** until Bob left the position to join his current employer, Urban Engineers, last December.

Dave is no stranger to government, having worked for the City since his graduation from Drexel University in 1984 with a Bachelor of Science in Civil Engineering. His first "stop" was as a Civil Engineer in the Materials Testing Laboratory of the Water Department, where he served until 1990. At that point, he took a promotion to "leap" into the Department of Licenses and Inspections (L & I) as a Building Plans Examiner. Dave rose through the ranks at L & I to the positions of Building Permit Supervisor, Permit Services Manager, and Deputy Commissioner. He most recently served as the Chief Code Engineer, the highest-ranking building-code official in the City.

In March, Dave took another brave "leap" to the Department of Streets, to become the Chief Engineer and Surveyor, where he directs all transportation facility design, bridge design and construction, field surveying, and roads records-keeping. As Chief Engineer, he manages the Survey and Design/Engineering Division of the Department, with over 100 employees and an operating budget of over \$6 million.

Dave is a Registered Professional Engineer in Pennsylvania and lives with his family in Northeast Philadelphia.

Menna Wins Friedman Award!

Past Section President **Chris Menna** has been selected as the recipient of the **Edmund Friedman Young Engineer Award for Professional Achievement** for 2007. This prestigious honor is presented by ASCE National. To quote the award citation, the Award is presented "in recognition of professional achievement in service to the advancement of the profession, evidence of technical competence, high character and integrity, and contributions to public service outside your career."

The Selection Committee noted that it was particularly impressed by Chris' work ethic and service to the community in its assessment and recommendations for this honor.

Chris will be invited to attend the ASCE Annual Meeting in Orlando to receive the Award in person. *Congratulations, Chris!*

Markhams' Welcome Addition

Section President **James Markham** and his wife, First Lady **Ann Louise**, welcomed **James Paul III** into the world on Tuesday, April 17. He weighed in at 9 lbs. 8 oz. *Congratulations!*

SCIENCE FAIR

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Grades 9-12 First Place — Matthew Cooper, Lehigh Valley Christian High School, Allentown, PA. Matthew, an 11th grader, presented "*Concrete — Which Beam Can Handle the Stress.*"

Grades 9-12 Second Place — Benjamin Kusiak, also an 11th grade student at Lehigh Valley Christian High School. Benjamin's project was entitled "*Structural Integrity.*"

President **Carol Martsoff** attended the Fair's award ceremony on April 5, 2007 and presented commemorative plaques and checks to the winning students. The First Place winners were invited to attend the Spring Social, but scheduling conflicts prevented their attendance.

Thanks to the students and to all who participated in this event, including Section Judges **Chris Rood** (the Section's coordinator for the Fair), **Ruben David**, **Chris Menna**, **Carol Martsoff**, **Karen Anne Riley**, **Mark Tiger** and **Bob Wright**.

FROM THE (SLIGHTLY) CLUTTERED DESK OF THE EDITOR...

Once again, it's time for me to report from the editor's desk. It seems like I just did this, but the calendar reminds me that it's been 12 months or so since my last one, so it's time to do it again.

The season (and time itself, for that matter) goes by quickly. I can clearly recall getting the pieces of the first edition of THE NEWS for 2006-07 together last September and looking forward to the coming editions for the remainder of the season (as well as teasing our "wizard", Kathy, that our "long sleep" was over and it was time to go to work again). And now summer's back, and we get to go through this all over again. What fun!

This begins my fourth year as Editor of THE NEWS and I still enjoy it. (And for those of you keeping count, I've only got 57 more years to go to equal the tenure of my esteemed predecessor, **Mr. Sidney Robin** — but who's counting!) At times it's a challenge, at times it's a little frustrating, but overall, it's enjoyable, and I wouldn't keep doing it if it weren't.

And I say "I" even though this is by no means an "I" effort — many others, such as our "wizard," **Kathy Keiper**, contributors **Jim Markham** (who will become an even more regular part of THE NEWS this year now that he has to produce President's Messages), **Ann Tomalavage**, **Dave Hanly**, and others have helped. I can't even kid about the cartoonist now that we've found **Alma Radocaj** and she's shared her talents with us. (Hopefully, we'll see more of our as-yet-unnamed cartoon — and we're still waiting for feedback on the name! By now you should all realize that you DON'T leave something like this in the hands of the Editor — no good can come from it!)

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ASCE, PHILADELPHIA SECTION OFFICERS AND BOARD OF DIRECTION — 2007-08 SEASON

The ASCE, Phila. Section Officers and Board Members were officially installed at the Spring Social on May 10, 2007. They are as follows:

PRESIDENT

James P. Markham, Pennoni Associates, Inc.

PRESIDENT ELECT

Mark J. Tiger, Michael Baker Jr., Inc.

VICE PRESIDENT

Kristen Bowman Kavanagh,
Flow Science, Inc.

SECRETARY

Jennifer K. Walsh, McMahon Associates, Inc.

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Joseph Platt, Traffic Planning and Design, Inc.

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ASSISTANT TREASURER

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MEMBERSHIP SECRETARY

Christopher W. Wright, DMJM Harris

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Jeremy Colello, Pennoni Associates, Inc. ('06-'08)

Anthony J. Kelly, Perkins Will ('06-'08)
Soheila Rahbari, Schoor DePalma ('07-'09)
Ann M. Tomalavage, Malarkey Consulting, Inc. ('07-'09)

John Zarsky, Pennoni Associates, Inc. ('07-'08)

PAST PRESIDENTS

Carol C. Martsoff, Urban Engineers, Inc.
Christopher J. Menna, Phila. Dept. of Streets
Brian A. Stover, Urban Engineers, Inc.

PRESIDENT, READING BRANCH

Gerald Donnelly, STV, Inc.

We wish these brave and generous folks our collective good luck for the coming season.

President — James P. Markham, P.E.

Manager, Transportation
Pennoni Associates, Inc.
3001 Market Street, 2nd Floor
Philadelphia, PA 19104
(215) 222-3000
Email: jmarkham@pennoni.com

Secretary — Jennifer K. Walsh, P.E.

Project Manager
McMahon Associates Inc.
425 Commerce Dr., Suite 200
Fort Washington, PA 19034
(215) 283-9444
Email: jennifer.walsh@mcmtrans.com

PUBLICATIONS COMMITTEE

Editor of THE NEWS

Robert Wright

Staff Writers

James Markham Joe Syrnick

SEND COPY TO:

ASCE THE NEWS

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

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APRIL JOINT DINNER MEETING

Thursday, April 12, 2007

Union League, Center City Philadelphia

The Comcast Tower

by Robert Wright, Editor

The last main ASCE, Philadelphia Section meeting of the 2006-07 season drew a crowd of over 130 attendees to the Union League to hear about Philadelphia's newest skyscraper and soon-to-be tallest building, the Comcast Tower. **The Engineers' Club** of Philadelphia served as a co-sponsor of the evening's event.

ASCE, Phila. Section **President Carol Martsoff** kicked off the evening with a welcome, bringing Engineers' Club President (and Past Section President) **Ruben David** to the podium to lead the crowd in a blessing of the meal.

President Martsoff returned to the podium for several announcements. As it was **Past Presidents Night**, she recognized those Past Section Presidents in attendance — **Bill Malarkey, Frank Depman, Bob Wright, Darin Gatti, Faruq Siddiqui, Chris Rood, Tom Branigan, Allan Moore, Ruben David** and **Chris Menna**.

Section Younger Member Forum President **John Federico** came to the front to note several upcoming Forum events. President Martsoff welcomed Membership Secretary **Tom Brady** to cite the incoming **Life Members**.

President Martsoff introduced **Dr. Michel Boufadel**, the chair of the Department of Civil and Environmental Engineering at Temple University, the evening's featured college, and **Gaelle Clerge**, the President of the ASCE Student Chapter at Temple, each of whom brought the crowd up to speed on happenings at the University.

Club President David introduced the evening's speakers, both from the firm of Thornton Tomasetti. **John Abruzzo**, Vice President and Project Director, noted that he would stick to running the projector for **Anjana Kadakia**, Principal and Project Manager, who was thrust into the role of main presenter. She began with a series of slides to orient those present on the general site conditions and constraints.

The Comcast Tower occupies the square block bounded by 17th Street, Kennedy Boulevard, 18th Street and Arch Street, which was most recently the site of a Sheraton Hotel, and for the last several years, a surface parking lot. Ms. Kadakia noted that she often used this parking lot when she came to the site for project meetings and visits. A historic church is located in the northwest corner of the block, and this will remain. The Tower will be biased toward the north edge of the site with a 6-story atrium on the Kennedy Boulevard side which will primarily serve as an entrance to Suburban Station. The Tower will also have a 3-level below-ground parking garage. When it opens, the Tower will add 1.1 million square feet of office space to the Center City market, most of which will be occupied by Comcast employees now located in rented space in other buildings. It is the first Center City skyscraper to be designed and built

using code changes and lessons learned from the World Trade Center destruction.

The Tower's design was begun with slightly different parameters, as Ms. Kadakia explained. At first, it was envisioned to be 70 stories (1200 feet) tall, but it has been scaled back to 58 stories/965 feet. An early design was for a 750-foot building, which was increased by almost 25% additional during design, certainly no easy task. Some complications of this arose later in design.

The building's foundation is a concrete mat with steel reinforcement rods on 6-inch centers. This was all poured in one operation starting at 11AM on a hot August day and finishing early the next morning. Thermocouples were introduced into the mat to account for the heat of hydration due to concerns about this affecting the final strength of the concrete. Ms. Kadakia outlined the core construction. The strength of the concrete in the core is 10 ksi up to 30 stories, 8 ksi through the next 20, and 6 ksi for the last 8. The concrete was formed using a unique movable/self-climbing form system for core walls.

As noted above, when the decision was made to increase the building height from 750 feet to 950 feet, the base supports were already under construction and major modifications would have been needed for the support columns. After some investigation into this, Ms. Kadakia and the design team developed a grouping of exterior Vierendeel trusses which would bear the additional load and not require redesign of the supporting structure. These boxlike trusses will be incorporated into the building's architecture.

Ms. Kadakia explained the Tower's liquid column damper system. This consists of a double-chambered tank holding 300,000 gallons (1,300 tons) of water which will be near the top of the building. This system is designed to counteract extreme wind loadings on the Tower since it is a very slender structure — in design, it was calculated that a 75 mph wind would result in 18 inches of horizontal movement at the top of the Tower. When it is completed, it will be the largest such system in North America and possibly the world. Typically, the reason for damping is related to earthquake considerations, but this system is not one that would be considered for seismic resistance. The damping system is an option to any stiffening of the structure with more steel or more massive members, neither of which was found to be a good solution.

The Tower has a very slight skew in its structure, primarily for architectural reasons, but, as Ms. Kadakia noted, this introduced a complexity into the design that kept members slender and forced the issue for the damper system. She also highlighted the grand staircases and entrances that will be located in the atrium. Several of these will descend to the Suburban Station concourse level, allowing building

employees to have a protected walk between office and train.

The current schedule has the steel structure "topping off" in mid-May, with occupancy in the fall (October).

Ms. Kadakia responded to several questions posed from the audience. Presidents David and Martsoff offered their respective organization's thanks and tokens of appreciation to Ms. Kadakia and Mr. Abruzzo for their insightful presentation.

YMF HAPPENINGS

Reminder: Photos of YMF happenings can be seen on the YMF's web site under "past event photos" (www.ymfphilly.org).

Construction Site Tour

On April 18, the YMF arranged a tour of the Children's Hospital of Philadelphia South Campus Research Project in University City. Approximately 35 people attended the tour and found it to be both fun and interesting. We would like to extend a special thanks to **Turner Construction** for providing us access to the site and a very knowledgeable "guide." Following the tour, about 15 people headed over to the New Deck Tavern for a happy hour with loads of free appetizers and a lot of laughs. Thanks go out to the Social Chairs **Sheri Miller** and **Cathy Golata** for setting up this event.

Community Outreach

On May 20, several YMF members volunteered in conjunction with the **Wissahickon Restoration Volunteers** organization. They removed invasive bamboo that had taken over some of the native established shrubs and trees. Thanks go out to the YMF Community Service Chair, **Steve Gault**, for setting up this event.

Social Events

A full report on the spring/summer events will be included in the YMF Report in the next edition of THE NEWS.

YMF Board Election/Happy Hour

Kildare's Irish Pub Headhouse Square was the platform for the 2007-08 YMF Board Election on May 17. The event was par for the course for the exiting 2006-07 Board as it exceeded expectations, with over 40 people attending. For the first time in several years, some of the elected positions were contested, which is a good sign of another strong Board in the year ahead. The results of the election are below:

2007-08 YMF Board

(*denotes YMF members new to the Board this year)

ELECTED POSITIONS

President: Joe Platt; **Vice President:** Don Gusic; **Secretary:** Jeremy Chrzan; **Treasurer:** Mike Wagner

APPOINTED POSITIONS

Assistant Secretary: Fred Vesci; **Outreach Coordinator/Community Service Chair:** Chris Gray*; **College Contacts Chairs:** Tze-wei Choo, Shivani Mahajan, and Jen Pesch*; **Social**

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(SLIGHTLY) CLUTTERED DESK*Continued from Page 2*

Since last I penned one of these pieces, the desk has moved again, this time about a dozen blocks south and east of where it was last time. (Interestingly enough, I've written four of these columns from three different desks, which means I need to learn how to hold onto a job!?) The view is not as good as the last desk (mainly because there are no windows), and the office is a little smaller (and thus more cluttered), and now I have to learn how the private side works, after over a quarter-century in the public sector. My new co-workers have been very patient as this old dog learns new tricks and unlearns those picked up in civil service. I've heard a lot about how I've gone to the "dark side" of our business, but, as I see it, I think I left a side that could've been characterized that way as well. Time will tell.

In the process of changing desks, I was amazed at how much stuff I've amassed over time. I've never thought of myself as a packrat, but there was a lot to be moved when the time came. During this time, I once again realized how much I dislike moving and how I'd be a lousy nomad. I found that there was just as much "emotional baggage" that, while it wasn't as heavy or bulky, was just as difficult to handle in this move. Hey, Engineers have feelings too!

If you've been in my office, you've seen the many items on my walls, shelves, etc. Just about every one of these items has some meaning to me, which is why I have them close by. One of these is a postcard with an old photo of a Horn and Hardart Automat which I picked up a couple of years ago when the Museum of the City of New York put on a display of Automat history. Once I got past the fact that New York was taking credit for something that was clearly a Philadelphia first (although there were many more of them in the Big Apple), I was happy to visit the exhibit.

What's this got to do with anything?

Well, think back on how you got the "hook" to Engineering — what pushed you into this mystical field of ours? For me, one factor was the Automat, one of the usual stops on a trip with my parents "uptown". I would go through the line and watch with fascination how the little doors would open once you deposited the correct number of nickels, and then how the whole thing would spin around to be reloaded. I would often wonder how it worked. For me, the Automat was one of those "hooks."

I know some of you are scratching your heads and saying "what the heck's an Automat?" at this point, but that's the way it was. Keep in mind the Automat was a modern marvel when it was invented in 1902, when food service was very different (and no one behind a counter asked whether you'd like fries or hot apple pie with your order). It was still useful sixty years after its invention. There's a non-working portion of the first Automat (from 808 Chestnut Street, right here in our town!) at the Smithsonian's American History Museum, if you get a chance and would like to see one in person.

Another "hook" was the space race — boys my age wanted to grow up to be astronauts (space was apparently a "no girls allowed" place until Sally Ride came along). The World's Fair in New York in 1964-65 was another. According to it, we'd all be in flying cars by now, but it did introduce many wonders that have come to reality. (Even though I was there only twice, and it was a long time ago, I can recall much of it very clearly, and Mrs. Editor was kind enough to give me a book on it for Christmas, which revived some memories.)

In 28 years in the Engineering profession and 26 years of involvement with the Section, I've watched both change greatly. One thing has been constant, though, and that's success — the

ASCE, Phila. Section continues to be strong and is serving its membership well. Some of you have heard me say that I'm in it because "it's a good thing." Maybe it's a good thing because we're all in it, just the same. I look forward to seeing it remain prosperous and vibrant. This shouldn't be hard to keep going, with the hard-working Officers and Board that we have. **Let's keep this "good thing" going!**

YMF*Continued from Page 3*

Chairs: Cathy Golata and Guy DiMartino*; **Technical Groups Chair:** Kazi Hassan*; **South Jersey Liaison:** Dave Petrucci; **Professional Development Chairs:** Mustafa Igdelioglu*, Christopher Shaeffer; **Newsletter Editor:** Krista Pohl*; **IT Chair:** Drew Sirianni*.

As you can see, there are many new members of the board, with co-chairs becoming more of a common occurrence. This is evidence that the YMF and its events will continue to grow in success and positive influence upon our professions, and our communities. If you have an idea you think will add to the Board's value, please submit them to our Section secretary **Jeremy Chrzan, secretary@ymfphilly.org**. We have the capacity to make new ideas a reality.

Upcoming Events

Our social chairs are currently planning the 2007-08 year kick-off happy hour. Please check out the website for more details as they develop.

Thanks to those who read my newsletter content this past year. I'll see you around town.

Signing off,

Fred Vesce

2006-07 Newsletter Editor



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

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