

the news



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The Sidney Robin Memorial Newsletter of the Philadelphia Section ASCE

Vol. 77-4

Our 92nd Year

December 2004/January 2005

JANUARY JOINT DINNER MEETING

Philadelphia Section, American Society of Civil Engineers
Reading Branch, American Society of Civil Engineers and
Delaware Valley Section, American Society of Highway Engineers

WEDNESDAY, JANUARY 19, 2005

RADISSON HOTEL, VALLEY FORGE • 1st Avenue & Gulph Road • Valley Forge, PA

Cocktails - 6:00 p.m. • Dinner - 7:00 p.m. • Meeting - 8:00 p.m.

Cost \$25 before January 10, 2005; \$35 January 11, 2005 and after, and at the door

1 3 1 2 5 4 1 8 2 3 3 6

SUBJECT: Happenings on the Schuylkill River

SPEAKER: Joseph R. Syrnick, P.E., Chief Executive Officer, Schuylkill River Development Corporation (SRDC)

RESERVATIONS MUST BE MADE THROUGH DELAWARE VALLEY SECTION, ASHE.

The Philadelphia Section, ASCE will NOT be accepting any reservations for this meeting. Checks should NOT be sent to our Post Office Box and calls will NOT be accepted through the Section Hotline. *Payment for reservations must be received at ASHE by the January 10 deadline.* Those who reserve past this date, and walk-ins, will be charged the higher rate.

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.**

Checks for reservations should be sent to Delaware Valley Section ASHE, 1500 Walnut Street, Suite 1105, Philadelphia 19102. Checks should be made to "Delaware Valley Section ASHE".

In May 2004, the first phase of the new Schuylkill River Park was officially dedicated and opened. This project has been in development for over forty years and found its way to reality only after the solution of a series of challenging real estate, legal, operational, and engineering design issues. Additional projects are in the works to enhance and extend the Park and connect it to other roadway bridges across the Schuylkill River to complete the original concept of the effort. With opportunities such as the replacement of the South Street Bridge and major rehabilitation of both the Market Street and Kennedy Boulevard Bridges on the horizon, the coordination of the access and aesthetic issues will be critical.

Joe Syrnick, a Past National Director of ASCE and Past Phila. Section President, recently retired from his position as Chief Engineer and Surveyor in the City of Philadelphia Department of Streets,

(Continued on Page 2)

SPONSOR PROFILE

**Traffic Planning and Design, Inc.
Ranks 5th in the Nation and 1st in
PA as a Great Place to Work.**

Judges for the fourth annual *CE News* magazine **Best Civil Engineering Firms To Work For** contest ranked Traffic Planning and Design, Inc. (TPD) as the No. 5 firm on the prestigious list of the top 50 best civil engineering firms to work for in the United States. In addition, judges for the **2004 Best Places To Work In PA** contest ranked TPD as the No. 1 firm on their list of the best companies to work for in the Commonwealth.

All of the firms that participated in the contests completed an extensive questionnaire about workplace practices and allowed judges to conduct an anonymous Employee Satisfaction Survey of their staff. The Employee Satisfaction Survey ensures that employees' opinions — an inherently important aspect to this type of ranking — were considered strongly in assessing the many fine firms in the competition.

TPD President, **Kevin L. Johnson, P.E.**, stated, "TPD takes great pride in our high ranking among so many excellent organizations, especially given the fact that the opinions of our staff members were included as a major portion of the competition this year. We have many talented individuals who successfully plan and design great engineering solutions, but a far greater challenge is designing an environment in which our employees can grow as professionals while balancing their personal obligations."

Johnson also noted the associated benefit realized by TPD's business partners. He stated, "our success in recruiting and maintaining a group of top-notch professionals means that our business partners can count on consistency in terms of both the high quality of our work and the stability of our staff. Business partners know they will be working with the same engineers on their current project and future projects due to our extremely high employee retention rate of over 98%."

TPD is an 80-member firm focused on transportation engineering and related environmental services. From offices in Harrisburg, Pottstown,

(Continued on Page 4)



*We Wish You A Merry Christmas . . .
. . . and a Happy New Year!*



(feel free to add your own music!)

Whatever holidays you celebrate this time of year, the Officers and Board of Directors of the ASCE, Philadelphia Section join in wishing all the best to our Members and their Families and Friends. We hope they are safe, enjoyable and memorable.



PRESIDENTS' MESSAGE

During this Holiday Season, I trust that everyone reflects on the accomplishments of the year past, and plans for the challenges in the year ahead. Let us look at the differences we made in our profession for the community, and realize the importance of the role each of us plays each and every day. I challenge everyone to determine if there are additional activities that you can do to better the communities that we live in, whether it be through our jobs, or the volunteer activities that you perform.

Your ASCE, Philadelphia Section Board had a magnificent year. Under the leadership of **Allan Moore**, the Section flourished with the culmination being a beautiful evening at Sugarloaf at the Spring Social. Many Board members participated in Engineers Week activities, participated in Science Fair judging, provided outreach to local schools, and the Younger Member Forum participated in many community activities. I urge each of you to talk to a Board member to see how you can get involved.

As we look into the New Year, the biggest challenge that we face as a community is the support through federal funding for the many critical projects that are needed to keep our infrastructure safe and reliable. The funding is needed to keep pace with the decaying roads, the additional demands on our airports, and the upgrading and expanding of our transit systems to relieve congestion on the roads, and reduce the pollutants congestion brings. Get involved! Write your Representatives and Senators and let them know how important it is to keep up with the needs of our communities.

One of the major accomplishments during the past year was the completion of the National Constitution Center. This Center captures the most important elements of our Country's history within a magnificent structure. This structure was completed on time, with a last minute push to open on July 4, 2004. Besides the Engineering of the structure, the building provided educational value in the many tours that were given. Both the design and construction of this building were tributes to the Engineering profession.

I wish everyone the happiest of the New Year, and that you will keep all of your resolutions that you make, and that this year will be better than last, both in this country and abroad. **HAPPY NEW YEAR!**

Sincerely,
 Brian A. Stover, P.E.
 President - Philadelphia Section, ASCE

January Joint Dinner Meeting

(Continued from Page 1)

a position he held for the last 18 years of his nearly 35-year career with the Department. As the newly-installed CEO of SRDC, his charge is the leadership of the private/public coordination efforts and continued development to ensure that the Park and its surrounding area, becoming known as the "Schuylkill Gateway," succeed. He will present his insight on the plans and programs for this exciting undertaking.

DIRECTIONS TO RADISSON HOTEL VALLEY FORGE:

From Philadelphia via I-76 - take exit 327 (Mall Blvd.): Turn right onto Mall Blvd. at the traffic signal at the end of the ramp. Turn right onto Gulph Road at the next traffic signal. Follow Gulph Road for approximately 2 miles to its intersection with 1st Avenue. The Radisson/Scanticon complex will be on your right past 1st Avenue.

From Pennsylvania Turnpike: from the Philadelphia/Valley Forge interchange (exit 326), follow I-76 to exit 327, the first exit past the toll plaza (Gulph Road). Bear right on the ramp onto Gulph Road. Follow Gulph Road for approximately 1 mile to its intersection with 1st Avenue. The Radisson/Scanticon complex will be on your right past 1st Avenue.

"FIRST, YOU GUESS. Don't laugh, this is the most important step. Then you compute the consequences. Compare the consequences to experience. If it disagrees with experience, the guess is wrong. In that simple statement is the key to science. It doesn't matter how beautiful your guess is, or how smart you are, or what your name is. If it disagrees with experience, it's wrong. That's all there is to it."

— Richard Feynman, on how to discover a new law of physics

WHO GETS THE NEWS?

As of September, the Phila. Section, ASCE has 1949 members assigned to us by National. This is based mainly on geographical preference (members who both live and work within the boundaries of the Section are automatically covered, and those who either only live or work in our coverage area have a choice of Sections). We also have a fairly high percentage of members who pay our Section's dues compared to other Sections and Branches around the country.

Several years ago, the Section made an administrative decision that only those members who paid Section dues would receive THE NEWS. Generally, THE NEWS is sent to all assigned Section members in October, just so all are up to speed on Section events, and only Section dues-paying members receive the following issues.

This year we have sent the first three editions of THE NEWS to all of our assigned members. So, if you are not paying Section dues, you will not be getting any more copies of THE NEWS sent your way for the remainder of the season.

Since your dues renewal form has recently been sent to you by National, it may be a good time to consider the benefits of being a dues-paying member of the Section. We hope you will join us if you are not already a member.

SECTION WEB SITE!

Our Section's web site has taken on a new look! Check us out at www.asce-philly.org. Make sure you bookmark this site to check on our latest meetings and events, links and much more! Comments and/or suggestions? Please contact us either via our Electronic Message Hotline at 1-800-461-4190 (24 hours a day) or e-mail at info@asce-philly.org.

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**COPY DEADLINE FOR
 FEBRUARY '05 ISSUE
 JANUARY 21, 2005**

YOUNGER MEMBER FORUM NEWS

by James Markham
Forum Editor

Alyson Radel Lester, P.E.
2004-2005 President
Urban Engineers, Inc.
530 Walnut Street, 14th Floor
Philadelphia, PA 19106
(215) 922-8081
arlester@urbanengineers.com

The Younger Member Forum (YMF) membership includes college students, recent graduates and young engineers, including Registered Professional Engineers, who are 35 years of age or younger. The objectives of the group are: 1) to provide networking opportunities, 2) to interact with schools and the general public to promote civil engineering and 3) to enhance career development.

Young engineers or college students who would like to become part of the YMF and be added to the announcement list should contact **John Federico** of Urban Engineers, at secretary@ymfphilly.com or at (215) 922-8081. There are no fees to join!

YMF Volunteer Event

On the chilly morning of Saturday, November 13, 2004, **David Hanly, Jason Hennessey, Nicole Aloï, Jim Markham, Alyson Lester,** and **Catherine Chomat** formed the ASCE YMF team at a volunteer event at Philabundance. The group joined dozens of other volunteers in separating donated foods into groups so that a second group of volunteers later in the day could fill Thanksgiving baskets for families in need. The group had a great time while helping out a great cause. Special thanks to Catherine Chomat, who organized the event, and to Alyson Lester who stuffed us all with breakfast muffins so we wouldn't be tempted to take the food!

Technical Meeting

On **October 13, 2004**, the YMF held the first technical meeting of the year at the Municipal Services Building. **Lane Fike, P.E.** from the City of Philadelphia Streets Department gave a half hour presentation on the Germantown Avenue Bridge Replacement and then answered questions from the audience.

The Germantown Avenue Bridge crosses the Wissahickon Creek in Chestnut Hill in the far northwestern corner of Philadelphia, is within the City's Fairmount Park and adjacent to Chestnut Hill College. The new structure replaces a 9-span bridge built in 1920 on piers dating to the late 1700's.

The new bridge was designed by URS Inc. and the prime contractor was Neshaminy Constructors. It is a 3-span 313-foot curved girder bridge with two 11-foot travel lanes separated by a 4-foot granite block median, two 5-foot bicycle lanes, and a pedestrian promenade.

Coming Attractions

The YMF Annual Winter/Holiday Social has been scheduled for **Thursday, January 13, 2005** at McGillin's Old Ale House. RSVPs should be emailed to rsvp@ymfphilly.com by **January 6, 2005**.

FEBRUARY JOINT DINNER MEETING

Philadelphia Section, American Society of Civil Engineers and
New Jersey Section, South Jersey Branch, American Society of Civil Engineers

THURSDAY, FEBRUARY 17, 2005

WYNDHAM HOTEL • Route 73 • Mount Laurel, NJ
Cocktails – 5:30 p.m. • Dinner – 6:30 p.m. • Meeting – 7:30 p.m.

SUBJECT: PATCO's Future Plans

SPEAKER: Robert A. Box, P.E., General Manager, Port Authority Transit Corporation

RESERVATIONS MUST BE SUBMITTED BY FRIDAY, FEBRUARY 11, 2005. Please send your check for the number of attendees at \$30 per member or guest, \$15 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.**

SPECIAL FEATURE: Swarthmore College Night. The ASCE Student Chapter, Faculty and Alumni of the Department of Engineering of Swarthmore College will be honored at this meeting. All Students, Faculty and Alumni are cordially invited to participate.

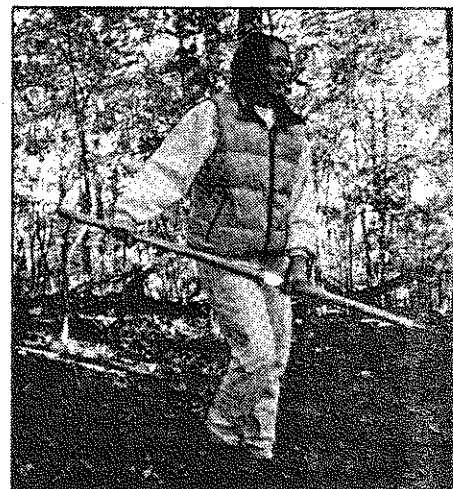
Member Spotlight

Sheri M. Miller, P.E. serves as a Business Development Engineer for Turner Construction's Philadelphia Business Unit, pursuing future projects and further developing pre-existing relationships with clients within Philadelphia and the surrounding suburbs. Sheri joined Turner in 2002 working out of their Somerset, NJ office in its Special Projects Division and relocated to Philadelphia last fall.

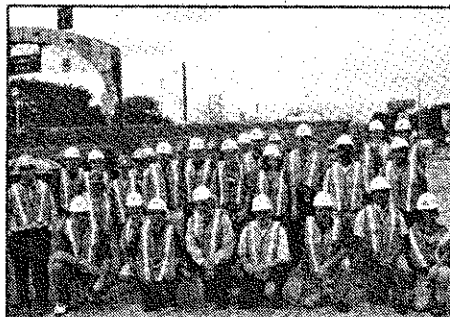
Prior to joining Turner, Sheri traveled regularly to manage international cable station construction projects for Tyco Telecommunications in Panama, Spain, Portugal and France. She spent the first five years of her career as a civil and environmental design engineer for Camp Dresser and McKee in Edison, NJ concentrating in wastewater treatment design and construction. During her 10 years of industry experience, Sheri has developed a unique combination of leadership experience in international project management, construction management, cost estimating, civil and environmental engineering design.

She earned her BS in Civil Engineering from Lehigh University, and completed her Masters in Civil Engineering at Rutgers University. Sheri is also a Professional Engineer licensed in the State of New Jersey, and is a member of the American

Society of Civil Engineers, Chi Epsilon National Civil Engineering Society, the National Association of Women in Construction and donates her time to the ACE Mentoring Program. Sheri and her husband, Rich, reside in Chester County.



Catherine Chomat hard at work at the YMF's Fairmount Park Trail project.



This is the group of over 30 participants in the YMF tour of the Ben Franklin Bridge on September 16, 2004. YMF President Alyson Lester is in the first row, far right (the one wearing the hardhat).



...and, Greg Lester doing the same.

GRAMMAR QUIZ ANSWERS

Last month, we presented a reprint of an article on grammar, punctuation and usage. At the end of the article, there was a quiz consisting of five sentences. Each of the sentences contains one error in grammar or punctuation. Can you correct all of the errors? As a reminder, the sentences are repeated below.

1. A group of young engineers are working together to boost company morale.

2. Just because many of our competitors are filing for bankruptcy is no reason that we should lay down on the job.

3. The most likely candidate is a P.E. with five years of experience; someone who has worked in both the public and private sectors.

4. Any software which exceeds \$1,000 must be approved by the chief financial officer.

5. The grammar course was a pre-requisite for the composition course I took at the university.

And here are the long-awaited answers:

1. A group of young engineers is working together to boost company morale (see "Problems in subject/verb agreement).

2. Just because many of our competitors are filing for bankruptcy is no reason that we should lie down on the job.

The verbs "lay" and "lie" are commonly confused. To lie means to repose or rest. To lay means to put or place. However, "lay" is the past tense of "lie." If you're confused, see the sentences below.

To lie (rest)

Present: Today, I lie on my bed.

Past: Yesterday, I lay on my bed.

Past participle: I have often lain on my bed.

To lay (put)

Present: Today, I lay my book on the table.

Past: Yesterday, I laid my book on the table.

Past participle: I have often laid my book on the table.

3. The most likely candidate is a P.E. with five years of experience: someone who has worked in both the public and private sectors.

Many people confuse semicolons and colons. In strength, a semicolon is in between a comma and a period; it is used to link two complete sentences. A colon is used to introduce a list or a long example that explains or elaborates what came before the colon. The information to the right of a colon may be a complete sentence or a fragment. The information to the right of a semicolon must be a complete sentence. In this example, a colon is needed instead of a semicolon because the information to the right of the punctuation mark is not a complete sentence and is used to explain further the information presented to the left.

4. Any software that exceeds \$1,000 must be approved by the chief financial officer.

Most grammarians suggest using "which" for clauses that could be put in parentheses or removed entirely (nonrestrictive clauses) and "that" for clauses that cannot be removed without distorting the meaning of the sentence (restrictive clauses). A better solution, suggested by a reader, also eliminates the passive voice: "The chief fi-

ancial officer must approve the purchase of any software that costs more than \$1,000."

5. The grammar course was a prerequisite for the composition course I took at the university.

In general, a hyphen is required between a prefix and a base word in a few instances: when a prefix ends in a vowel and a base word begins with the same vowel (anti-intellectual), when it's needed to prevent the reader from mistaking the word you're using with another word (refuse versus re-fuse), when the base word is capitalized (un-American), when the base is a number (pre-1990), when the prefix is "self-" (self-addressed), or when the word may be mispronounced without a hyphen (co-op). When in doubt, consult a dictionary. There is no hyphen in "prerequisite."

So, how'd you do?

• 0 correct – you very likely graduated at the top of your class in engineering school.

• 1 or 2 correct – you're probably a great engineer since you've replaced all that useless grammar knowledge in your brain with much more important technical data.

• 3 correct – your memory's better than you think, or you got some help from lucky guesses.

• 4 correct – all those threats that Sister Mary Innocent made in 5th grade obviously paid off, and you've managed not to suppress all the memories!

• 5 correct – would you like to be the Interim Editor of THE NEWS?

The 20 most commonly misspelled words are:

1. their/there/they're; 2. too/to; 3. a lot; 4. noticeable; 5. receive; 6. lose; 7. you're/your; 8. an/and; 9. develop; 10. definitely; 11. than/then; 12. believe; 13. occurred; 14. affect; 15. cannot; 16. separate; 17. success; 18. through; 19. until; 20. where.

Engineers have found a way to put misspelled and accommodate on this list also!

Keep in mind that sometimes you may spell the intended word incorrectly and your computer checker may let it go as correct, since you haven't misspelled it, but you've misused it. This often happens with the following homonyms:

1. their/there/they're; 2. too/to; 3. weather/whether; 4. accept/except; 5. who's/whose; 6. its/it's; 7. your/you're; 8. affect/effect.

That ends today's grammar lesson. Now get back to Engineering!

Sponsor Profile

(Continued from Page 1)

and the Lehigh Valley, TPD serves public and private clients in Pennsylvania, New Jersey, Delaware, Maryland and Virginia.

For more information, please contact **Joe Platt** (jplatt@trafficpd.com or 610-326-3100) or visit www.TrafficPD.com.

TPD will be the featured Meeting Sponsor at the ASCE, Phila. Section January meeting.

"The South produced statesmen and soldiers, planters and doctors, lawyers and poets, but certainly not engineers or mechanics. Let Yankees adopt such low callings."

— from Margaret Mitchell's "Gone With the Wind"

2005 ENGINEERS WEEK – RIGHT AROUND THE CORNER!

The 2005 celebration of **Engineers Week** will take place from **Friday, February 18 to Saturday, February 26, 2005**. As you may be aware, Engineers Week is held in February each year to highlight the birthday of our nation's first president, George Washington, who supported extensive engineering and surveying activities throughout his military service. It is a time during which various engineering accomplishments throughout the nation are cited and honored. Locally, Engineers Week programs have been held since 1953, and these include the selection of the Delaware Valley Engineer of the Year, the Delaware Valley Young Engineer of the Year, and other honors.

Engineers Week's activities will kick off with the Proclamation Luncheon at the Union League on Friday, February 18, with the 2005 Delaware Valley Engineer of the Year, Donald Dalessandro, as the guest of honor.

The 2005 Delaware Valley Young Engineer of the Year will be cited at the Young Engineer dinner on **Wednesday, February 23, 2005**, at the McCall Country Club, Upper Darby.

The culmination of the Week's events, the Engineers Week Banquet, will take place at Villanova University's Conferece Center on **Saturday, February 26, 2005**. Numerous award winners and projects will be recognized, including the Engineer of the Year, the Young Engineer of the Year, the Outstanding Engineering Achievements in the Delaware Valley, the Outstanding Math Teachers, Student Paper Contest winners, Scholarship recipients, and the winners of the local Future City Competition.

Please consult the Delaware Valley Engineers Week Council's website, www.dvewc.org, for more details and information on prices and reservations for these events.

The Phila. Section, ASCE is well represented on the Delaware Valley Engineers Week Council, which coordinates Engineers Week activities locally.

GET YOUR NEWS ELECTRONICALLY!

You can get THE NEWS on your computer, directly via e-mail, and all you have to do is ask!

Over 200 of your fellow Section members have chosen the electronic version of THE NEWS since this service began a few years ago. If you elect the e-mail option, you can get THE NEWS sent to the computer of your choice (home, work, wherever) and therefore will see it about a week before the mailed copy might reach your mailbox.

You can also choose to get THE NEWS in both formats (hard copy and e-mail) if you prefer.

If you would like more information or would like to enroll in the e-mail list, please contact us through the Section website, our electronic message hotline, or via "snail mail" through our Post Office Box.

PHILADELPHIA SECTION 2005 AWARDS PROGRAM

NOMINATIONS NOW OPEN!


The ASCE, Phila. Section's Awards Program for 2005 is now open for nominations. These Awards recognize Section members and others for their contributions to the Civil Engineering profession. All Awards will be presented at the **Spring Social/Dinner Dance**, which will be conducted on **Friday, May 6, 2005**. (More information on the Spring Social will be included in upcoming issues of THE NEWS.)

GUIDELINES/RULES

- Nominations must be postmarked by **Friday, February 11, 2005**, or faxed to the Awards Committee Chair by the close of business that day. Nominations should be submitted on nomination forms which are available from the Committee Chair.
- Individuals may be nominated for awards by a member in any grade of membership.
- Individuals may receive only one award in a single year, but may be nominated for more than one award in a single year.
- Award recipients are subject to the approval of the Section's Board of Directors.
- All awards are presented only in years in which, in the judgement of the Selection Committee or the Board, there is at least one suitable candidate.
- The Selection Committee, at its discretion, may nominate an alternate for each Award for Board consideration.
- The Selection Committee will recommend to the Board whether the recipient should also be nominated for applicable National or Regional awards by the Section.
- A nominee for any award **MUST** be a member in good standing of the Philadelphia Section in the year in which the nomination is made, with two exceptions (Government Service Award and Philadelphia History and Heritage Award). For these awards, membership in the Philadelphia Section, ASCE is **NOT** required.

HAVE AN ARTICLE? SEND IT IN!

THE NEWS welcomes articles, submissions, photos and just about anything that can be printed if you think it would be of benefit to the Section membership. If you have something you would like to share in these pages, please contact the Interim Editor about it.



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AWARDS

The Phila. Section, ASCE has a total of 13 awards which cover various specialty areas. In addition, the Section President can nominate an individual for the Presidential Award at his/her discretion. The awards are as follows:

- Philadelphia Civil Engineer of the Year
- Philadelphia Young Civil Engineer of the Year
- Philadelphia Government Engineer of the Year
- Philadelphia Young Government Engineer of the Year
- Government Service Award
- Educator of the Year
- Philadelphia History and Heritage Award

Individual Technical Awards:

- Civil Engineering Manager of the Year
- Construction Engineer of the Year
- Geotechnical Engineer of the Year
- Structural Engineer of the Year
- Transportation Engineer of the Year
- Water Resources Engineer of the Year

If you are interested in submitting a nomination for consideration, please contact **Bob Wright**, Committee Chair, at **(215) 686-5538**, e-mail: robert.wright@phila.gov to obtain a nomination form. You may also call Bob if you have any questions or need any additional information on the Section Awards Program.



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Be careful about reading health books.
You may die of a misprint.

— Mark Twain

VILLANOVA SHORT COURSE - HYDROLOGIC MODELING

Villanova announces a short course on The Corps of Engineers Hydrologic Engineering Center's Hydrologic Modeling System. The course will be held on Villanova's Campus **January 12-14, 2005**.

This course has been designed to familiarize the civil and environmental engineer with both the theoretical and practical aspects of using HEC-HMS, the surface water hydrology computer model developed by the Hydrologic Engineering Center of the U.S. Army Corps of Engineers. HEC-HMS is the second of the Next Generation (NexGen) engineering software packages to be released by the Corps. HEC-HMS replaces HEC-1, much as HEC-RAS replaced HEC-2. Villanova offers training on both HEC-RAS and HEC-HMS.

The instructors, **Robert G. Traver, Ph.D.**, and **Ronald C. Chatterton, Ph.D.**, have extensive consulting, research, and academic experience with hydrologic models. Villanova provided feedback in the HEC-HMS development process.

Each course participant will receive the latest HEC-HMS software, program documentation, and course notes. The program software is not copy protected. 2.5 CEU's will be awarded. The course will begin on January 12, 2005, at 9:00 AM and will finish on January 14, 2005 at 12:30 PM. Enrollment is limited. Further details may be found on the VUSP homepage at www.villanova.edu/VUSP.



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FROM THE ANNALS OF THE SECTION'S HISTORY...

MEETING LOCATIONS

The Main Section Meeting program has settled in at a new home at the Union League in Center City. For the past two years, most of the main Meetings have been held there, the major exceptions being joint meetings with other societies and associations at their "home bases". Over the past 15 years or so, however, the Section has intermittently wandered in search of a "home" location. Those of you who remember the halcyon days of the Engineers Club may wonder why its space is not used by the Section any more. Well, wonder no more...

Way back in the "dark ages" (also known as B.C. - Before Computers!), the Section's functions were nearly exclusively held at the Engineers Club. Before 1990, the Club had its own building at 1317 Spruce Street, and most engineering societies used its meeting space facilities. When the Section first started using the Club for its gatherings is a good question (and hopefully someone reading this knows the answer!). The food there will certainly bring back memories (and we won't say whether they are good or bad ones - we'll leave it at "interesting"!) The tubs full of complimentary cold bottles of beer usually found around the meeting room probably contribute to the memories (or lack thereof) of the Club's cuisine.

The Section, as a rule "went it alone" with meetings, unlike the current scenario in which we have several joint efforts with other groups. The lone exception to this for quite a while was the annual meeting co-sponsored by the Society of American Military Engineers (SAME), Philadelphia Post. The first such joint affair was conducted in April 1959. (This author, still in diapers at the time, was not there to partake!)

In January 1989, as an experiment, the Section scheduled a joint meeting with the American Society of Highway Engineers (ASHE), Delaware Valley Section at ASHE's "home base", the King of Prussia Holiday Inn. This has continued to be held almost every year since then (it was skipped in 1995 because of a scheduling conflict). This was also, to the best of this author's knowledge, the first time the Section ventured outside the confines of the City of Philadelphia for a main Section meeting. (Again, if someone knows differently, this information would be appreciated.)

Things began to change, although not entirely by choice, when, in February 1990, the Engineers Club sold its building and moved to new quarters in the Public Ledger Building. While the Club, in its new spot, still had the use of the meeting space of the adjacent Downtown Club, it was not as readily available and was less convenient to the Section's membership. The Section was therefore forced to explore other venues for Section meetings.

A new emphasis was put on joint gatherings which could share the meeting spaces used by other organizations. One such place was the Harbour League Club in Camden, where the South Jersey Branch ASCE conducted its meet-

ings. A joint effort with South Jersey was first held in March 1991 and this function has been scheduled every season since then. The Harbour League Club, a popular location with our Section's members, unfortunately closed its doors in 2002, forcing the South Jersey Branch joint gathering to other places.

For the 1991-92 season, a new "home base" was established at the Naval Base Officers Club, long the location of the SAME joint meetings. The Section stayed there for several dates, except for some joint gatherings at other locations, through the 1993-94 season. In the latter part of that season, the Section was advised that the Club would be closing. As the song goes, on the road again...

During this same period, the Section began to become a "nomad" of sorts. A number of new and different venues were tried, including Fisher's Restaurant in Northeast Philadelphia in March 1994. Williamson's Restaurant on City Avenue in Bala Cynwyd was established as the Section's new home by President Bill Thomsen in the 1994-95 season. The Section found this to be a comfortable and convenient spot, and remained at Williamson's until the end of the 2001-02 season. Under President Ruben David, a push began to reconnect the Section to Center City and, accordingly, meetings were moved to the Union League in the 2002-03 season. (Williamson's closed its doors this past summer - are you sensing a pattern here!?)

Joint meetings have also expanded to include other groups such as the American Concrete Institute, American Public Works Association, Institutes of Transportation Engineers, Women's Transportation Seminar, Pennsylvania Society of Professional Engineers and others. The January meeting in the King of Prussia/Valley Forge area has also become a convenient time and spot to invite our Reading Branch to co-sponsor that event.

This season, our plan is for three meetings (October, March and April) at the Union League, and four on others' turf (November with ACI in Valley Forge, December at SAME's location at the Airport Hilton, January in Valley Forge with ASHE, and February in New Jersey with South Jersey Branch ASCE). The joint arrangements with other groups, which have been quite successful, will continue.

So why not use the Engineers Club? Well, the Club itself moved from the Downtown Club to the Racquet Club in 1995. As with the Downtown Club, the Racquet Club has very limited facilities available for gatherings such as our main Meetings. Thus, we have explored other options, such as the Union League.



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OK. Now for a quiz! Your job is to count the number of times the word "meeting" or any of its synonyms were used in this article. If you come up with the correct number, you win the honor and glory of winning and a special assignment to help with articles like this in the future! There may be another special prize involved here, so if you feel brave, please send your count to the Interim Editor to be included in the contest.

WORD ORIGIN CORNER — MACADAM

Many of you already know that **John L. McAdam**, a Scotsman, developed several innovative road-building techniques in the mid-19th century. McAdam's methods generally involved the use of small stones, between 1 inch and 2 1/2 inches in diameter. This mixture, as he noted, "shall unite by its own angles so as to form a solid, hard surface." Perhaps most importantly, the mixture would keep water from seeping into the roadway base, a significant problem which faced road constructors at the time.

McAdam later experimented with a mixture that consisted almost entirely of 2-inch stone. This later became known, incorrectly, as "macadam."

Workers in the field did not always have precise instruments to measure the diameter of the stone close at hand. Knowing this, McAdam instructed them to use only those stones that could fit into their mouths.

We can only imagine that the evolution of dental plans as a benefit for workers probably got its start somewhere about this time also?

THOUGHT FOR THIS MONTH

General George Washington Goethals, the US Army officer who was in charge of the construction of the Panama Canal, was considered for a post on the AASHO (now AASHTO) Joint Board on Interstate Highways in 1924. He declined, offering that he often found boards "long, narrow and wooden."



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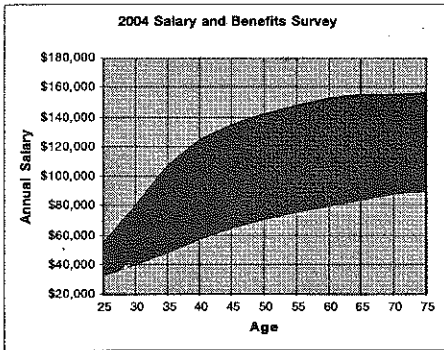


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SALARY AND BENEFITS SURVEY - PART 2

In the October edition of THE NEWS, we presented the results of the 2004 Salary and Benefits Survey. Space limitations precluded the publishing of the accompanying graph. We had intended to get the graph into the November issue and once again ran out of space. Finally, we have the graph for your edification!



OOPS!

The staff of THE NEWS would like to correct three errors in the November edition.

On page 3, the Sponsor Profile article had an incomplete first sentence. The sentence should read: "Structural Engineer" magazine selected Timothy Haahs & Associates, Inc., of Blue Bell, Pennsylvania, as one of the 'Best Places to Work', awarding the firm 4th place in a nationwide competition among consulting structural engineering companies." (The underlined portion was inadvertently omitted.)

And, on page 4, in the "Make Peace with Grammar and Punctuation" article (as luck would have it!), the portion of the first sentence in parentheses managed to violate the first-mentioned common error - subject/verb agreement - and it should also end with a period. The sentence should read:

"... (not that any of us actually needs this information!)"

Obviously, the Interim Editor seems to need this information, and will be staying after class for the foreseeable future to atone for this mistake on his part!

Lastly, on page 9, in the "From the Annals of the Section's History - Part 2", the last sentence of the first paragraph managed to violate still another grammar rule. The sentence read, "This year, we're doing it a little different." The last word should be an adverb - "differently." Thanks to Shelly Kinbar for pointing this out to us.

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MEMBERS IN THE NEWS

May Welcomes New Addition

Past Section President Sandra May experienced a blessed event on Friday, August 13 with the arrival of her son, Brysan Dane. Little Brysan was 21½ inches in height and tipped the scales at 7 pounds 8 ounces. Mom (Sandra) assures us that he's a "joy" and that his big sister, Shayla, is handling everything nicely.

In the "small world" department, Brysan shares his birthday with Past Section President Ruben David (see November's "Members in The News"). The youthful Ruben, as we know, is a few (!) years older than Brysan.

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PHILA. SECTION, ASCE SEEKS HISTORIC LANDMARK STATUS FOR CITY HALL

In November, the Phila. Section, ASCE submitted Philadelphia City Hall for consideration as a National Civil Engineering Historic Landmark. The submission package was assembled by Past Section President Ruben David, who is, on his "day job", the Project Manager for the City Hall Rehabilitation effort.

You may have seen a National Historic Landmark plaque on the north portal of City Hall inside the courtyard, and you may be wondering, isn't it already a landmark? The plaque actually cites the City's water supply system. The location of City Hall, Center Square, was actually occupied by one of the City's reservoirs at one time.

The Section thanks Ruben for still another job well done, both on City Hall and the nomination package, and Service Point (formerly Charrette Program) for its donation of the reproduction service for the nomination package.

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NOVEMBER JOINT DINNER MEETING

November 17, 2004

Sheraton Hotel—Park Ridge, King of Prussia, PA

"The Saint James Washington Square Building"

By James Markham, Staff Writer

For the November dinner meeting, the Philadelphia Section of ASCE joined with the Delaware Valley Chapter of the American Concrete Institute (ACI) at the Sheraton Hotel – Park Ridge in King of Prussia. After a nice social hour, **Ralph Calistro**, of Chris P. Stefanos Associates, Inc. gave an informative presentation on the design features and challenges of **The Saint James**, a new concrete residential building on Washington Square.

Chapter President **Vic Scotese** and Section President **Brian Stover** opened the meeting with several announcements, before introducing **Dr. Edward Glynn**, a member of the Civil Engineering Faculty at Villanova University. After telling us a bit about the program at Villanova, he introduced the Villanova ASCE Student Chapter members who were present at the meeting. Chapter President **Rob Guinivan** shared with us the many activities in which this very busy chapter has been involved recently.

Mr. Calistro began his presentation on Philadelphia's newest (and tallest at 498 feet) residential tower, **The St. James**, with some of the pro's and con's of choosing a concrete structure rather than a steel structure. Some of the pro's included the very small floor depth (8"), the result-

ing lower overall height of the building, and better fireproofing. Some of the con's included, the longer construction schedule, the affect of the weather on the construction, the need for constantly shoring and re-shoring as the project ascended, and the exposed concrete walls on the final building. In the final analysis, it was determined that the benefits of the concrete structure outweighed the difficulties and thus a concrete design was begun.

Mr. Calistro described several of the design features. He presented a very colorful dynamic picture of the loads on the various floors, and noted that one of the biggest challenges was on the transfer level where the load on the columns for the residential floors, had to be shifted to the columns for the garage floors at the bottom of the building. Another feature that anyone walking by may have noticed is that the building is built immediately adjacent to the facades of historic buildings on Walnut Street, including the landmark PSFS Bank branch. These facades were eventually attached to the new building and incorporated into its design.

After Mr. Calistro described the design of the building, other members of the construction team joined him on for a brief panel discussion of the

construction phase of the project. These panelists included, **Jim Morrissey** of JDM Materials, **Mike Delo**, of L.F. Driscoll, and **Paul Spiegel** of US Engineering Laboratories. Together, they answered several questions from the inquisitive audience.

After the question and answer period, Presidents Scotese and Stover thanked the presenters and gave them some small tokens of our appreciation.

Some fun facts about the St. James from www.emporis.com:

- The St. James is Philadelphia's tallest residential tower.
- It surpassed the *Loews Philadelphia Hotel* (former PSFS Building – the PSFS letters remain atop it) as the tallest building east of Broad Street. The Loews, completed in 1932, is 38 stories tall.
- The tower was constructed on the west side of the lot, while the historic PSFS Bank branch overlooking Washington Square at the southwest corner of 7th and Walnut Streets was renovated into office and restaurant space.
- Studio, one-bedroom, two-bedroom, and three-bedroom apartments are available. Only the studios do not have balconies.
- A sun deck, health club, and 60-foot indoor pool are located on the 11th floor.
- A parking garage, exclusively for residents, makes up the first nine floors.

DECEMBER JOINT DINNER MEETING

December 8, 2004

Airport Hilton, Philadelphia, PA

"Navy Yard Master Plan"

By Bob Wright, Interim Editor

A raucous crowd of over 100 attendees participated in the joint meeting of the Society of American Military Engineers (SAME), Philadelphia Post and the ASCE, Phila. Section on Wednesday, **December 8, 2004**. Post President **Eric Stahl** opened the meeting with several remarks and passed the microphone to Section President **Brian Stover**, who made a few announcements. Younger Member Forum President **Alyson Lester** also updated everyone on the Forum's current activities.

President Stahl introduced the evening's speaker, **Carmen Zappile**, Senior Project Manager for the Philadelphia Industrial Development Corporation (PIDC). Mr. Zappile was a last-minute substitute for the advertised presenters, **Peter Longstreth**, Executive Director, PIDC, and **John Grady**, Senior Vice President, PIDC, who were both unable to attend. As those present would find out by the meeting's end, Mr. Zappile fulfilled this challenging role quite well. He did mention that part of his attraction to the Navy Yard might be related to the fact that his grandparents met there in 1945.

Mr. Zappile began with an overview of the **Philadelphia Navy Yard** and PIDC's efforts to re-shape and market the facility for re-use after its closure as an active naval base eight years ago. He noted that it has 1000 acres and 56 miles of

streets, roughly the same size as Center City. It has been divided into four zones in the master plan for re-use — intermodal, mixed use, industrial and shipyard. The concentration of the talk would be on the mixed use zone, where most of the current redevelopment is focused.

Mr. Zappile highlighted this zone, which is subclassified, from west to east, into five planning areas. The overall zone encompasses 239 acres, roughly 25% of the Yard, and will need about \$52 million in infrastructure improvements to bring it "up to speed." The sub-zones are:

- Corporate Center — the first new building will be completed in September 2005.
- Historic Core — this area has many older buildings that will be renovated. There is also a mile of waterfront that adds to its appeal. Urban Outfitters has recently signed on to occupy part of this area.
- Research Park — local colleges will partner with the Navy in this area.
- Marina District — this could be office or residential, but no long-term vision has been set. Economic market factors will likely dictate the final use.
- East End — no long-term plans have been developed.

Among the infrastructure improvements needed, Mr. Zappile categorized the lack of ad-

equate electric distribution and water/sewer facilities as key challenges. Transportation connections, especially to the adjacent areas of the City, are sorely lacking. Plans are in the works to address these deficiencies. As an example, Mr. Zappile noted the proposed extension of the Broad Street Subway into the Navy Yard, a project first considered in 1966 at a cost of \$15 million. Today, it will cost \$250 million. Some thoughts have been offered to construct a PATCO branch from New Jersey into the Yard, but the cost of this has not been estimated.

Open space will be a key part of the Yard's redevelopment. Over 13 acres will be devoted to wetland mitigation and parks. The first, Crescent Park, will be completed shortly. An ambitious Riverfront Esplanade along the Delaware River will require the rehabilitation of an over-100-year-old seawall. Mr. Zappile added that sustainable design is the goal, with desires to preserve the Yard as a walkable area.

There are Engineering challenges throughout the Yard. The soil is mainly fill and not great. Many environmental problems are present. Existing infrastructure is both inadequate and poorly documented. Despite these problems, Mr. Zappile remained optimistic about the Yard's success in the future.

Several insightful questions were posed from the audience and ably answered by Mr. Zappile.

Presidents Stahl and Stover thanked Mr. Zappile and gave him tokens of appreciation from the Post and Section.

IF YOU REMEMBER WHAT A SLIDE RULE IS...

This article appeared recently on Purdue University's website. Those of us over the age of 45 or so will recall when we had slide rules strapped to our belts. Those of you younger than 45 have probably seen slide rules on the desks of old-timers and wondered what purpose they serve. Those of you under 35 see a slide rule and wonder what that funny-looking ruler thingy is, and why anyone would bother to use it instead of a calculator, or you may be puzzled as to where the batteries go.

THE NEWS offers this just in case those in the older group were thinking about places to visit on your vacations this year...

Astronauts Neil Armstrong and Jerry Ross, along with about 200 other Purdue University alumni, have added their slide rules to a new exhibit at their alma mater that testifies to the past mathematical prowess of these computational devices. The permanent display, on the first floor of the university's Potter Engineering Center, houses the pre-digital analytical marvels, some of which were made in the 19th century and range in length from a few inches to seven feet.

"There was a point in time when the slide rule was king," said **James Alleman**, a professor of civil engineering who began collecting the slide rules from alumni 15 years ago. "During a period of about 400 years, anything anybody built that was of any magnitude would have required a slide rule."

Then, in the early 1970s Hewlett Packard came out with the first commercial calculator, the HP-35, signaling an end to the slide rule's dominance in scientific computing. Purdue alumnus and retired civil engineering professor Robert Miles fondly recalls the calculator's debut.

"We bought 10 HP-35s and had six installed in the civil engineering structures lab," said Miles, who helped design the display and paid for its construction. "Those six calculators were mysteriously missing within about two weeks, even though they were chained down."

Although calculators revolutionized the world of computation for engineers, scientists and students, they also introduced a disturbing educational trend. "Many people who push the buttons on calculators don't really know what the numbers mean, while on a slide rule you had to analyze where the decimal point went, and you had to better understand the mathematics," said Miles, who taught civil engineering at Purdue for 40 years, retiring in 1990. He also holds a bachelor's degree and master's degree in civil engineering from Purdue.

"A slide rule gives you an amazing amount of computational ability, and people today don't even remember what these things are capable of doing," Miles said.

Alleman said he began collecting the slide rules out of personal interest and for a display to coincide with civil engineering's centennial celebration in 1987. The new glass-enclosed wall exhibit includes slide rules from four astronauts who are Purdue alumni: Armstrong, the first man to walk on the moon; Ross, who has logged more space-walking hours than any other astronaut; Richard Covey and

(Continued on Page 10)

MEET THE ASCE, PHILA. SECTION'S OFFICERS & BOARD MEMBERS

Here is information on some of the ASCE, Phila. Section's Officers for the 2004-05 season. More will follow in upcoming editions of THE NEWS.

James Markham, P.E., Director

Jim is a Project Engineer for the Transportation Division of Pennoni Associates, in Philadelphia where he has worked since 1999. He graduated from the University of Pennsylvania in 1993. He is an active member of the Younger Member Forum, and is currently serving his first term on the Philadelphia Section Board of Directors. He lives in the Queen Village section of Philadelphia.

Kristen Bowman Kavanagh, P.E., Secretary

Kristen is a Project Manager in the Philadelphia office of Flow Science Incorporated where she specializes in hydrodynamic and water quality modeling of lakes, reservoirs, rivers, and coastal discharges. Kristen holds degrees in Civil Engineering from Stanford University (B.S. and M.S., 1995) and is a Professional Engineer in both Pennsylvania and California. Kristen has previously served the Section as President of the Younger Member Forum and was named the 2002 Philadelphia Young Civil Engineer of the Year. She is also a member of the American Water Works Association, the North American Lake Management Society, and the American Council of Engineering Companies.

Thomas W. Brady, P.E., Membership Secretary

Tom is a Senior Highway Project Manager at Vollmer Associates LLP Kennett Square office. Tom holds degrees in Civil Engineering from Drexel University (BS-1993) and from Villanova University (MS-1999). Tom previously served the Section on the Younger Member Forum Board and also created their logo. He is an active member of ASHE and the Engineers' Club of Philadelphia. He was a finalist for the 2004 Delaware Valley Young Engineer of the Year. He and Sharon, his wife, and children, Catherine and Victoria, reside in Exton.

Robert M. Wright, P.E., Interim Editor

Bob is the current Interim Editor of the Section's newsletter, THE NEWS. He has served the Section in several capacities since 1981 and was Section President in 1993-94. Bob is the Manager of the Transportation Engineering and Planning Section of the Engineering Division of the Philadelphia Department of Streets. He has been employed by the City since his graduation from the University of Pennsylvania in 1979. During his career, he has been involved with the planning and design of major highway improvement projects for the City. His position includes liaison and coordination with the Pennsylvania Department of Transportation's Interstate and major highway construction and improvement programs within the City.

THE WHAT IS HISTORIC?

In the "you've got to be kidding me" department, here's an item reported in a recent issue of "Cinders," the newsletter of the Philadelphia Chapter of the National Railway Historical Society.

The massive porcelain urinals in the Amtrak/Green Mountain Railroad station in Bellows Falls, Vermont are historic! The town wants to convert the station, built in 1922, into a \$3 million intermodal center. If plans to save the urinals fall through, they might be donated to the American Sanitary Plumbing Museum in Worcester, Massachusetts.

Photos of the historic urinals are available online at www.urinal.net.

We are not making this up!

WELCOME NEW MEMBERS!

The following new members were added to the Section's rolls in November:

Corinne Abrams, Daniel Archdeacon, Leonorh Beckley, Steven Bhardwaj, Candace Bradford, Andrew Brown, Frances Bui, Richard Burrell, Michael Cann, Anthony Cavallo, Damon Cherenzia, Michael College, Stephen Cosenza, Steven Davidheiser, Jennifer Dietrich, Theodore Dmytryk, Gary Dragona, Derek Durkin, Walid El-Morshedy, Bryan Enslein, James Eways, James Faddis, Michael Ford, Matthew Forsyth, James Gardner, Keith Graham, Pamela Hans, Keith Hass, Jessica Hawthorne, Roger Heffernan, Jeffrey Herrera, Denis Hulme, Alejandro Jauregui, Alex Kahaikin, Melisa Keskin, William Lambing, Brian Legare, Michael Lese, David Lisanti, Mark Lotto, Jaclyn Marge, Zenon Markewycz, Michael Martignetti, Douglas Mayer, Kieran Mcnamara, Megan Miller, Anthony Munoz, Nicole Needle, Ngoc-Thuy Nguyen, William Off, Sara Olson, Mark Onesky, Christie Pace, Michael Padula, Sharon Perez-Suarez, Lea Pineda, Nadia Rattley, Lindsay Rehl, Genevieve Reilly, Jacqueline Reilly, Michael Rohl, Pete Rose, John Rowe, Justin Ruby, Ramon Ruiz, Ashot Sargsyan, Andrew Schwaiger, Ann Schweihs, Thomas Shannon, Bart Shippee, Rebecca Sichler, Stefanie Smith, Andrew Stoeri, Martin Swaggard, Gregory Teich, Michael Thomas, Craig Van Collie, Dawn Vanderwende, Edwin Van Otoo, Terry Wagaman, Douglas Waite, Alexander Waldman, Zachary Warren, Jared Wigger, Darrell Wilder, Joseph Wintz, Scott Yeager, and Athena Yiantos.

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**ASCE, PHILADELPHIA SECTION MEETING SCHEDULE
2004-2005 SEASON**

MARK YOUR CALENDAR NOW! Please keep in mind that this information, as always, is to the best of our knowledge at press time, but it is also TENTATIVE and subject to future change.

ALL DINNER MEETINGS (except as noted): Cocktails – 5:30 pm; Dinner – 6:30 pm; Meeting – 7:30 pm. All dinner and/or luncheon meetings have discounted prices for students. In addition, all are welcome to attend meetings without having the meal, at no charge.

Thursday, March 17, 2005	Joint Meeting with Women's Transportation Seminar, Philadelphia Section • South Jersey Transportation Authority Master Plan • Union League
Thursday, April 21, 2005	Philadelphia International Airport Expansion • Union League
Friday, May 6, 2005	The Annual Spring Social and Dinner Dance at the Sugarloaf Conference Center in Chestnut Hill.

This schedule will be updated and repeated in THE NEWS throughout the coming season.

Slide Rule

(Continued from Page 9)

Roy Bridges. Eugene Cernan, the last man to walk on the moon and also a Purdue alumnus, has promised to send his slide rule, as well.

"There are a lot of human stories here," Alleman said. "If these slide rules could talk – because of all the alumni who donated these things – I am sure they would each tell remarkable stories about projects they were used on."

The display, which is roughly 6 feet high and 12 feet long, "is sort of a history of slide rules," he said. "Our gigantic 7-foot-long slide rules really catch your eye, and then as you get up close the display kind of pulls you in with the story that it tells," Alleman said.

The exhibit is arranged in a series of panels about the history of slide rules, recounting how English scientists developed the devices. It all began in 1614, when Scottish mathematician John Napier discovered the logarithm, with which multiplication and division could then be completed

using addition and subtraction. Six years later, English mathematician Edmund Gunter created a number line in which the positions of numbers were proportional to their logarithms, and in 1632 fellow countryman William Oughtred used Gunter's approach to invent the first slide rule.

The display includes cylindrical slide rules and slide rules made of metal, wood, bamboo, paper and plastic.

The largest slide rules were used in classes to teach students how to use them, Miles said. "Taking a course to learn how to use a slide rule was mandatory at one time," he said. "And from then on you used it for the rest of your academic career."

Interim Editor's note – some of us still have 'em. Whether we still use them, well, why should we, when there are calculators, and log tables are so hard to find?!

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