

the news



**PHILADELPHIA SECTION
AMERICAN SOCIETY OF CIVIL ENGINEERS**
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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

Vol. 80-6

Our 95th Year

March 2008

SCIENCE FAIRS COMING UP — WANT TO BE A JUDGE?

The Delaware Valley Science Fairs will be conducted on **Wednesday, April 2, 2008**, at the **Valley Forge Convention Center, Scanticon Complex**. The ASCE, Phila. Section will once again participate in the Fairs and offer four Special Awards for projects that have a Civil Engineering theme, with two awards for Grades 6 through 8 and two for Grades 9 through 12.

As usual, judges are needed for this effort. The judging will require you to spend most, if not all, of your day (approximately 8 am to 3 pm) at the Fairs, examining and short listing possible projects in the morning and then interviewing the students who assembled them and finalizing the selections in the afternoon. It is always a very interesting and enlightening experience.

If you are interested in being a Special Awards Judge for the Section please contact **Chris Rood** at crood@drjtbc.org. You will also need to register for this and this can be done through the Fairs' website www.dvsf.org.

For more information on the Fairs please visit the above website.

We hope you can join us for this!

CIVIL CHUCKLES

by Alma Radocaj

QUESTION: What is the difference between Mechanical Engineers and Civil Engineers?



ANSWER: Mechanical Engineers build weapons, Civil Engineers build targets.

MARCH JOINT DINNER MEETING

American Society of Civil Engineers, Philadelphia Section
Institute of Transportation Engineers, Mid-Atlantic Section
Engineers' Club of Philadelphia

THURSDAY, MARCH 13, 2008

Down Town Club • Public Ledger Building, 6th and Chestnut Streets, Center City Philadelphia
(enter from 6th Street)

Cocktails 5:30 PM • Dinner 6:30 PM • Meeting 7:30 PM

SUBJECT: The New CBS 3 / CW 57 Multimedia Studio

SPEAKER: **Anthony F. Naccarato, P.E.**, Principal, O'Donnell & Naccarato, and
Rich Paleski, Director of Broadcast Operations and Engineering, CBS-3 / CW 57

RESERVATIONS MUST BE SUBMITTED BY FRIDAY, MARCH 7, 2008. 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.**

SPECIAL FEATURE: Life Members Night. Newly-inducted Life Members will be featured and honored at this meeting as guests of the ASCE, Philadelphia Section.

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

Philadelphia's CBS network television station, KYW, also known as Channel 3, moved from a nondescript location on the 1600 block of Walnut Street in the early 1970's into a state-of-the-art studio on Independence Mall. The studio, which was shared with counterparts KYW 1060 Newsradio and WYSP 94 FM, was becoming too cramped, and the station began to look for

Continued on Page 3

APRIL JOINT DINNER MEETING

American Society of Civil Engineers, Philadelphia Section,
Engineers' Club of Philadelphia,
Women's Transportation Seminar, Philadelphia Section

THURSDAY, APRIL 10, 2008

Down Town Club • Public Ledger Building, 6th and Chestnut Streets, Center City Philadelphia
(enter from 6th Street)

Cocktails 5:30 PM • Dinner 6:30 PM • Meeting Presentation Follows

SUBJECT: Developments at the Port of Philadelphia

SPEAKER: **John Estey**, Chairman, Philadelphia Regional Port Authority

RESERVATIONS MUST BE SUBMITTED BY FRIDAY, APRIL 4. 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.**



PRESIDENT'S MESSAGE

FACT: Fewer than 10% of the nation's Engineers are women.

FACT: Girls do not lag behind boys in grades or test scores in math and science.

FACT: By eighth grade twice as many boys as girls are interested in science careers.

FACT: Hands-on learning with role models is a proven tool for all students and particularly females.

The above facts come from the Executive Summary of the Extraordinary Women Engineers Project (www.engineeringwomen.org).

Here is one more fact: At the Proclamation Luncheon for Delaware Valley Engineers Week, Governor Rendell has asked the leaders in the Engineering profession to devise a way to encourage more girls in Pennsylvania to consider Engineering as a career.

The Governor noted that several other countries are surpassing the United States in the number of Engineers that graduate each year. In order to remain competitive we cannot leave the great potential of our young women on the sideline. The Governor indicated that Pennsylvania can provide some funds, but he is counting on us to make sure they are used judiciously.

A few months ago I used this space to ask for your help in making the ASCE, Philadelphia Section better by volunteering for a committee, board position, or a one-time task force. The Governor is now asking us to make the Commonwealth of Pennsylvania better. ASCE will undoubtedly have a leading role in this endeavor. **Will you?**

If you are interested in helping to shape the future of our nation by working with ASCE and the Governor of Pennsylvania to encourage young people of ALL backgrounds to consider Engineering as a career, please let us know by contacting the board at info@asce-philly.org and indicating your interests.

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

2008 ENGINEERS WEEK — OVER AND OUT...

As you may have heard (we hope!), **Engineers Week 2008** was celebrated from Friday, February 15 through Saturday, February 23. And, once again, the Week's events were successful. The "bookend" events were the Luncheon and Banquet. The Luncheon, held at the Loews Hotel in Center City on February 15, where nearly 200 guests were honored by the appearance of both **Governor Rendell** and **Mayor Nutter**, who helped kick off Engineers Week in a big way. The Banquet, hosted by Drexel University on February 23, attracted over 180 participants. Both were great affairs. The Young Engineer of the Year dinner on February 20 was similarly well attended.

Of course, the job's not over. Planning for next year's celebration is just beginning. The Delaware Valley Engineers Week Council (DVEWC) is always in need of volunteers to assist in many of the activities surrounding Engineers Week. Whether you have an hour, a day, a weekend, or more, DVEWC has a need for your talents and skills. Consider becoming involved in one of the following ways: newsletter, website coordination, Hall of Fame, Proclamation Luncheon, Annual Banquet, PR, fund development, or general assistance as needed.

If you are interested in volunteering with DVEWC, or have any questions on the Council or any of the volunteer opportunities, please contact **Mike McAtee**, Vice Chair, at mjmcatee@urbanengineers.com or 215-922-8081, x 1622.

NOMINATIONS FOR SECTION OFFICES NOW OPEN

In accordance with the Constitution and Bylaws of the ASCE, Phila. Section, President **James Markham** has appointed the Nominating Committee to recommend a slate of Officers for all ASCE, Phila. Section elective offices for the 2008-09 administrative year.

The positions which will be open for nominees are President Elect, Vice President, Secretary, Membership Secretary, and at least three Director positions.

The deadline for nominations is **Friday, March 28**. Any nomination should be submitted to the ASCE, Phila. Section's Secretary, **Jenn Walsh**, whose contact information is given in the column to the right.

SPRING SOCIAL '08 — HOLD THE DATE!

Our annual **Spring Social and Dinner Dance** has been scheduled for **Thursday, May 15, 2008**. Please mark your calendar accordingly. More details on the location, cost and other information will be provided in the April/May issue of THE NEWS.

No act of kindness,
no matter how small,
is ever wasted.

— Aesop

ASCE, PHILADELPHIA SECTION OFFICERS & BOARD OF DIRECTORS 2007-08 SEASON

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**COPY DEADLINE FOR
APRIL/MAY '08 ISSUE
MARCH 14, 2008**

DO YOU TAKE YOUR HUMOR SERIOUSLY?

This article appeared in the December 2007 edition of **The Reporter**, the magazine of the American Public Works Association (APWA), and is reprinted with permission. You might figure out why it appealed sufficiently to your Editor to earn a spot in THE NEWS.

by Daniel Robin, President, Daniel Robin & Associates, Santa Cruz, California

Part 1: Measuring Mirth

Business people are obsessed with measurement. Measurement creates the illusion of control. Control, as we all know, is a popular substitute for power. Power, as any fool could tell you, is where all the fun is. (With power you get to do stuff nobody else can.) Therefore, if you want to have fun, measure things.

In case you're not totally convinced that measuring things is fun, try measuring your HQ—that's your "Humor Quotient." Unlike your IQ, a high HQ gives you all the fun with none of the responsibility. If you tell your boss you have an exceptionally high HQ, they won't know what you're talking about, so you can get away with being weird in the service of entertaining yourself and your colleagues.

What would you rather have: an awesome bottom line and a company of miserable people or a respectable bottom line and a bunch of goofballs? Tough choice, huh? Fortunately, if we measure our HQ, we don't even have to make this decision—measurement bypasses all the things that business people really need to know and provides hard data instead.

Upbeat versus Beaten Up. Although your boss may be wondering what HQ has to do with productivity and improving that bottom line, I can assure you that science and common sense are both on our side. Humor can work miracles, gets the job done with less wear and tear, relieves tension, keeps things light and upbeat. Until now, however, it couldn't be quantified!

When stress is high, with pressure whacking your sensibilities, when situations are at their most uncomfortable...what works best? To tighten up and charge ahead or to loosen up and have a laugh? In prior articles (see our website, keyword: Humor), we've shown that the ability to laugh despite difficult odds happens to be a master coping and leadership skill. Furthermore, scientific studies of creativity and innovation have shown that laughing first (and second and last) is the best way to solve any problem.

According to Daniel Goleman, author of *Emotional Intelligence*, "Laughing, like elation, seems to help people think more broadly and associate more freely, noticing relationships that might have eluded them otherwise..."

What's Your Humor Quotient?

What, exactly, is your HQ? It's a way to measure on-the-job mirth, merriment, and madness (the good kind of madness, so-called "crazy wisdom"—not the stuff that gets you arrested or put on idiot detail). HQ asks several juicy questions:

- Do you have a sense of humor? What portion of it are you now using?
- Is your workload's gravity outweighing your levity, making you unavailable for humor?
- Do you have humor skills? There are at least three: rapport, respectful boundaries, and handling your inner critic.

Workplace humor isn't about telling jokes, pies in the face, whoopee cushions. Humor is a tool, not a weapon. Am I suggesting that you cancel your joke-of-the-day subscription or stop posting Dilbert cartoons? No. It's all good. And there's lots of creative ways to make sure you have fun on the job without being seen as unprofessional. Indeed, some of the most successful people in business carry their sense of humor like a raincoat—they always have it ready, sometimes they lay it down for others, and it doubles as a flack jacket.

The important thing is to show that you have a sense of humor and you're not afraid to use it. Let your unique sense of humor give you access to the things that are most important at work and in life: pure enjoyment, a sense of meaning, ease and relaxation.

Part 2: Taking Your Humor Seriously

Humor isn't merely about having fun (often at other people's expense), it's about expressing the soul's desire to fly. Yeah, it's hard to get paid when your soul is flying around the office, but if you can access that warm, fuzzy place inside you—where seriousness can melt into silliness, when meticulous order and the "best-laid plans" can suddenly turn to mush—then you're onto something!

I've found that most business people would trade feeling the weight of things undone for a good belly laugh any day, but we run aground somewhere between concerns about harassment (or the fear of getting slapped) and mustering the courage to humiliate oneself in front of coworkers.

— To Be Continued

**NEXT MONTH: Your Humor Quotient:
How to calculate it and how to raise it.**

ON THE WIDE WORLD OF THE WEB...

We are offering this new feature in THE NEWS to alert you to websites and articles of interest.

At the **Plan Philly** website (www.planphilly.com/node/2712) there is an interesting article and slide show on the **Center City Commuter Rail Connection**, with commentary from ASCE, Phila. Section members **Mike Griffin** and **Ruben David**, who both worked on the "Tunnel".

At the *New York Times* site (www.nytimes.com), you can search under "Doug Glanville" for an interesting op-ed piece from this former major

MARCH DINNER MEETING

Continued from Page 1

alternate sites. After an investigation of a possible new building at 15th and Arch Streets, it decided to move to the former Smith Kline factory at 15th and Spring Garden Streets in Franklinton, just north of Center City.

After extensive renovations to create the first made-for-HDTV facility, CBS 3 moved from Independence Mall to the new studios in July. At the same time, sister station WPSG (CW 57) joined it in the new building. The radio stations relocated next door to the former studios in the 400 Market Street building, in April.

As a principal at O'Donnell & Naccarato, a local center city Philadelphia Consulting Structural Engineering, façade restoration consultant and parking consultation firm, **Anthony Naccarato** actively participates in all phases of the firm's major projects located throughout the Mid-Atlantic Region. As a project leader, he motivates the firm's project teams to meet and exceed client expectations, while always providing the least cost structural solution. He is involved in the firm's quality control/assurance process to ensure that structural requirements have been appropriately acknowledged and reflected in the documents prepared by the architectural and MEP consultants.

Rich Paleski began his broadcast career in 1980 working as a UHF transmitter Engineer and encoded video specialist for WWHT in Newark NJ. In 1983, he designed an efficient cost effective modification to convert consumer receivers to work as private listening devices for the visually handicapped persons in New Jersey. That system is still in use today. He was hired by WNYW-TV in New York City in 1985, where he spent 16 years as an Engineer specializing in electronic news gathering and DTV. He was involved in some of the earliest tests of the feasibility of digital microwave in the harsh environment of midtown Manhattan. In 2002, he was brought to KYW-TV/CBS-3. In May 2006, he and the CBS-3 Engineering team began the design and construction of the facility to be presented at this meeting.

league player and University of Pennsylvania Civil/Systems Engineering graduate entitled "*In Baseball, Fear Bats at the Top of the Order.*" This was posted on January 16, 2008.

If it's not one thing, it's another.

— **Rosanne Rosannadanna**
(aka **Gilda Radner**)
Saturday Night Live

MEMBERS IN THE NEWS

ONE MORE MCATEE

Mike McAtee and family grew by one with the birth of **Owen Michael**, arriving on January 30 at 7lb, 8oz, and 19.75 inches long (we know how Engineers love those statistics!). Mike, his wife Ann, and Owen's two big sisters are excited about his arrival, and Mike is happy to no longer be the only male in his house.

HANLY IN EGYPT

Dave Hanly reports from his temporary assignment in Damietta, Egypt, which is on the Mediterranean coast, 70km west of Port Said. He is working on the construction of a \$650 million container terminal within the Port of Damietta. Dave's firm, DMJM Harris, is the construction manager in association with the firm Kuwait United Development. Dave arrived on site last October.

The project will construct a U-shaped reinforced concrete quay with a dredged terminal basin and a terminal complex with a capacity of 4,000,000 TEU. It will include a four-story administration building as well as customs offices and maintenance buildings. The final full-capacity terminal will have about 1500 employees.

Dave reports that he is picking up a little Arabic, and, fortunately, Engineering is a universal language.

LIFE MEMBERS TO BE HONORED AT MARCH DINNER MEETING

This year, 15 ASCE, Philadelphia Section Members have become Life Members.

Achieving Life Membership in ASCE requires a career of service to ASCE and the Civil Engineering Profession. To qualify for Life Membership, individuals in the grade of Fellow, Member, Associate Member or Affiliate shall:

- have reached the age of 65,
- have paid dues for a minimum of 30 years, and
- have had 10 years continuous membership immediately preceding the attainment of Life Membership.

Life Members are exempt from dues and need only pay a small service fee to receive *ASCE News* and *Civil Engineering* magazine.

In 2008, the following members of the ASCE, Philadelphia Section will achieve the status of Life Member:

Francis X. Browne; Harold G. Byer; Ronald J. Cutler; James F. Fulton; J. Robert Gallagher; Henry G. Garfield; James M. Graf; Robert A. Kase; Earnest Y. Liou; Robert W. Naef; Robert F. Preston; George F. Rubin; Daniel J. Shoemaker; Joseph J. Ucciferro; and Paul L. Zamrowski.

ASCE appreciates the lifelong support of these members. We thank them for their contributions and years of dedication to our profession. We hope you will join us on **March 13, 2008** to congratulate our new Life Members.

ANACE*

TRIVIA & OTHER OBSCURE STUFF

With the ongoing television writers' strike, the Editor continues to occupy his wealth of free time with books, and many of them have words in addition to pictures, so he has more historical and other topical items for your edification.

★ ★ ★

The first tunnel to be bored between New Jersey and New York was the **Hudson & Manhattan Railroad's uptown tunnel** (today's Port Authority Trans Hudson (PATH) service). Being built in a similar fashion as the North Tunnel, from each side of the river, the two bores met under the Hudson on March 11, 1904. The Hudson & Manhattan would complete another set of tunnels for its "downtown" line, which was opened on July 19, 1909, with two large office buildings constructed above the Manhattan station. These buildings, called **Hudson Terminal**, were razed in the late 1960's and replaced by the **World Trade Center** twin towers.

(This "bit" was inadvertently cut off in the printed version of the February edition of THE NEWS, so we're repeating it here for your knowledge.)

★ ★ ★

1957 was the first year in which the number of annual airline passengers exceeded the number of intercity railroad passengers in the United States. (Thanks to "Cinders," the newsletter of the Philadelphia Chapter, National Railway Historical Society, for this item.)

★ ★ ★

1957 was the last year that many major railroads in the United States operated steam locomotives, including the Pennsylvania Railroad, once considered the "Standard Railroad of the World" and headquartered right here in our town.

★ ★ ★

The **first VCR** was made in 1956 and was the size of a piano.

★ ★ ★

The **Ridge Avenue subway** (what?) opened for service 75 years ago, on December 21, 1932. Yes, Philadelphia has a Ridge Avenue subway, a branch of the Broad Street line.

★ ★ ★

Bubble wrap was created by two Engineers, Alfred Fielding and Marc Chavannes, in 1957. Like many innovations, it was accidental. The team was trying to create a textured plastic wallpaper with paper backing that could be easily cleaned. The term is a registered trademark but, like many things, the name has been genericized. In case you didn't celebrate it, **National Bubble Wrap Day** is held on **January 28**. You may want to put it in your calendar for next year.

★ ★ ★

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.

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Mt. Laurel, NJ 08054
(856) 778-5517

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

In Washington, the newly-elected Mayor is trying to end something that's been in effect for as long as anyone can remember. **Taxicabs in the District of Columbia do not have meters.** Fares are charged based on an arcane zone system. Many of the zones are based on travel patterns that have changed greatly since they were adopted, and the Mayor is suggesting that meters be installed in the cabs to make the fare structure less complex and more equitable for short trips. The proposal is generating lots of controversy in the District and is being fought by consumer advocates, who argue that the zone system allows riders to know exactly what the fare is for any trip at the start of the trip.

**Absolutely Nothing About or Concerning Engineering*

YOUNGER MEMBER FORUM NEWS

by Krista Pohl, Forum Editor

Joe Platt, Forum President 2007-08

Traffic Planning and Design Inc.

Sanatoga Commons

2500 E. High Street, Suite 650

Pottstown, PA 19464

(610) 326-3100

jlplatt@trafficpd.com

Winter Social = Big Success

As we have come to expect, the **YMF Winter Social** was a huge success, and the YMF members involved in the planning and coordination of this event continue to set the bar high and outdo themselves. To provide enough space for every attendee, we rented the entire first floor of **McGillin's Olde Ale House** in Center City. Several Winter Socials were held here in the past, but they were relegated to the second floor private room. This proved to be a good move, as, at last count, there were 198 Engineers and their guests in attendance. While the party was supposed to end at 8:30 PM, many stayed through the evening and kept the festivities going.

While socializing and moving slowly through the crowd, the YMF managed to do some charity work. Through the raffle ticket sales the YMF was able to make a \$250 donation to the **Future Cities Competition** and \$950 to **Philabundance**. This event was a great success. Maybe next year, we will break 200. Thanks to all who participated!

Professional Registration Seminar

The YMF, in conjunction with the Engineers' Club of Philadelphia, will conduct an informational event on **Professional Registration** and how/why/when you should get your PE. The event will be held on **Thursday, March 20** at the **Elephant and Castle**, located in the Crowne Plaza Philadelphia Centre at 18th and Market Streets. The seminar will focus on all things pertaining to the PE Exam. Topics include examination eligibility requirements, the application process, preparation for the exam, and the importance of having your PE in the Engineering business world. *We hope to see you there!*

MORE HAPPY ENGINEERS WEEK

With Engineers Week now finished, our celebration is done, so get back to work! We thought we'd leave you with a couple more things you may hear from your non-Engineer counterparts (especially, ironically, architects and IT specialists!).

You might be an Engineer if:

- You have more friends on the Internet than in real life.
- You know what `http://` stands for.
- You see a good design, and have to change it.
- You think that people yawning around you are sleep-deprived.
- You window-shop at Radio Shack.
- Your laptop computer cost more than your car.
- You've already calculated how much you make per second.
- You've tried to repair a \$5 radio.

OOPS!

It's comforting to know that this is the first time we've had to "pull this lever" this season. We would have preferred to not have to, but things happen...

We have decided to adopt a motto for THE NEWS, as we do not have one in place, and, since Latin always sounds classy, our motto will be "Non omnia possumus omnes." Before we give the translation away, let's see if some former altar boy out there can figure it out. (And, no, it has nothing to do with possums...!)

At any rate, technical difficulties (we guess!) resulted in a couple of articles being cut off in the printed version of the February edition of THE NEWS, in specific the last line of the March meeting announcement (page 1), the last line of the PM4 abbreviation (page 3), and the last line of the Historical Tidbits (page 5).

We have updated the March meeting information in this issue. As for PM4, the abbreviation stands for "Professor Malarkey's Project Management Practical Methods, Pitfalls and Musings"(which is why we use PM4!). We have repeated the last Historical Tidbit in its entirety in this issue under the "Trivia Etc" column.

Also, one of our members was kind enough to point out that the Editor used the wrong word in that tidbit ("raised" instead of "razed"), and we have corrected it accordingly. We appreciate the assistance of this anonymous member (thanks, Shelly!).

SECTION HUMPHREY FUND SCHOLARSHIP PROGRAM

The ASCE, Philadelphia Section is pleased to announce the availability of undergraduate scholarships. Scholarships will be awarded at our Annual Spring Social/ Dinner Dance, where the recipients will be invited to be honored as guests of the Section.

We anticipate that at least two Student Chapter scholarships will be awarded. The number and amount of the actual awards remains at the discretion of both the ASCE, Phila. Section's Scholarship Committee and the Section's Board of Directors. Scholarships are available to incoming Juniors and Seniors and in two categories — members of Student Chapters within the Section and students attending colleges outside the Section's boundaries who have a parent who is a ASCE, Phila. Section member.

Awardees will be invited guests at our Annual Spring Social/Dinner Dance to receive their awards and will be asked to participate in future ASCE educational outreach activities.

More information on submissions and requirements is provided on our website (www.asce-philly.org). The deadline for submissions is **March 28**.

TECHNICAL GROUP ACTIVITIES

Structures Group Scour Analysis Course

DATE: Thursday, April 17, 9:00AM– 4:30PM

LOCATION: Room E, 16th Floor Municipal Services Building; 1401 Kennedy Blvd. (at 15th Street), Philadelphia

COST: \$250 (refreshments and buffet lunch included)

SPEAKER: Dr. Mohiuddin Ali Khan, PhD, PE

SUBJECT: Scour Analysis Course

Believe it or not, scour is the leading cause of bridge failure. This one-day course is an overview of scour analysis and design of scour countermeasures. The course provides an understanding of the theoretical and practical requirements for the selection and application of scour countermeasures, based on erosion type, substructure component, and economics.

This course is based on the procedures of current FHWA HEC-18 and HEC-23 Publications. In addition, NCHRP 24-07 and CIRIA Manual on Scour at Bridges Guidelines will be discussed, as well as recent progress made by PennDOT Design Manual 4 and other States' Manuals in using new countermeasures and recommendations. The price of the course includes a folder with essential notes and solved examples.

Dr. Khan has acquired considerable experience in design and analysis of scour countermeasures. He has developed the chapter on scour analysis for NJDOT Bridge Design Manual and he is co-author of a *Handbook on Scour Countermeasures*, which was approved by FHWA. His textbook on rehabilitation of bridges is being published by McGraw-Hill Inc. He is Chairman of the ASCE, Phila. Section's Structural Group and manages the bridge department for Johnson, Mirmiran & Thompson's Mount Laurel, New Jersey Office. He teaches the subject of bridge design and scour analysis to graduate classes at Temple University as Adjunct Professor. He is licensed in PA, MD, DE, and NJ.

Sign up by emailing mohidin@temple.edu. Checks, payable to ASCE, are due by **April 10**. Send checks to: Treasurer, ASCE Philadelphia Section, P.O. Box 58186, Philadelphia., PA 19102-8186. Reservations can be made through our Electronic Message Center: **1-800-461-4190** (Open 24 hours/day).

Space is limited to 30 people, so sign up early!

A common mistake that people make when trying to design something completely foolproof is to underestimate the ingenuity of complete fools.

— Douglas Adams

FEBRUARY JOINT DINNER MEETING

Thursday, February 7, 2008

Crowne Plaza Hotel, Cherry Hill, NJ

"Extreme Makeover" Project Home

By Robert Wright, Editor

The ASCE, Phila. Section's annual trek to the farms and wilds of South Jersey for our Joint Meeting with the South Jersey Branch of the New Jersey Section saw over 80 participants coming out on an unusually warm February evening to hear about the "Extreme Makeover" home in Camden/Pennsauken. About half the crowd ventured across the Delaware from the friendly confines of our Section to attend the event. And, at last report, no one had any encounter, confirmed or otherwise, with the mythical Jersey Devil.

Chet Tuthill, Branch President, welcomed those in attendance, and allowed ASCE, Phila. Section President **James Markham** some time for quick announcements. Jim brought Past Section President, Swarthmore College Professor, and Swarthmore Student Chapter advisor **Dr. Faruq Siddiqui** to the podium to recognize Swarthmore as the evening's featured college. (As things turned out, this was an "unadvertised special" not listed in the February edition of THE NEWS, and the Editor apologizes profusely!) Faruq introduced Student Chapter co-president **Chris Caruso**, who updated everyone on the Chapter's activities. A small contingent of Swarthmore Student Chapter members accompanied Chris to the meeting and showed support for their school, along with a handful of faithful alumni.

President Tuthill and Past Branch President **Brian Lipko** introduced the evening's featured speakers from J.S. Hovnanian & Sons, **David Blackwell**, Director of Purchasing, and **Donald Yoos**, Director of Construction. Messrs. Blackwell and Yoos mentioned that Hovnanian has been cited by the J.D. Power organization with awards in excellence for quality and customer satisfaction. They proceeded to present the new house the firm constructed for the **Marrero family** this past summer in conjunction with the ABC program "Extreme Makeover: Home Edition."

The ABC television network selected the Marrero family, one of six local contestants which applied. **Urban Partners**, a local Baptist ministry, recommended this selection. Once this decision was made, Hovnanian was contacted by ABC to determine its interest. The firm's principals were not convinced this was a good idea at first, but left the decision to Messrs. Blackwell and Yoos. At the time, the firm had a slight lull in activities, so it decided that it had the time and manpower available to do this.

Extreme Schedule

The key throughout this process would be the extreme schedule. New home construction usually takes about 90 working days from plans to completion. ABC and the "Extreme Makeover" program required this to be done in 96 hours, thus each day in the process had to be

virtually reduced to one hour in the schedule. Once the "go" decision was made, Hovnanian had a total of 3 weeks to complete the home — this included design, permits, construction and interior fittings/decoration. Mr. Blackwell noted that there was a pressing need to get trade partners, contractors and suppliers on board very quickly to meet this tight schedule, and "rallied the troops" to do so.

The site was a long and narrow lot in an area of row homes, thus the new house had to meet these constraints. ABC had many very strict requirements and details that had to be met, most of which were not technical or construction related. For example, the finished color was one that had to look good on television. Because Hovnanian has its own high standards for construction, there were several instances where its requirements and ABC's were in conflict. In some cases, the firm's standards were higher than the network's.

Messrs. Blackwell and Yoos visited an underway "Makeover" home in Boise, Idaho to get some pointers. As they suspected, they were reminded that schedule was the absolute key to success, and that 96 days had to indeed be translated into the same number of hours. They carried this experience back to the New Jersey site.

Extreme Measures

With this knowledge, Hovnanian knew it would need help. It approached New Jersey DOT and the local government agencies involved to see how they could assist. It did get several special considerations, such as the use of a nearby state highway ramp, which was allowed to be closed for the staging of trucks bringing in supplies, and the availability of building inspectors on site during the work to make instant decisions. The inspectors filmed many operations for future reference and documentation.

On the first day, the ABC crew brought the Marrero family from its existing rental home in Camden and filmed the move-out, as the program typically does. Since the family occupied a rental unit and that unit was not being rehabilitated, often the focus of the program, the usual staged demolition could not be filmed.

Mr. Yoos noted that, at times, the ABC requirements were very onerous. The network would not allow survey stakes to be visible on the new site, so surveyors had to carefully mark offsets on nearby physical features such as a fire hydrant. It would not allow overhead power lines to be visible in shots, so the overhead power line that had been arranged to provide electricity to the site and its temporary panel had to be hidden and buried.

Extreme Difficulties

The constraints of the site also presented difficulties. The lot shape and size dictated a

long and narrow home, and there was little on-site space for storage. Additionally, the site sloped slightly, which made installation of prefabricated walls tricky. The panels had to be set temporarily on stone to allow the concrete pad to cure. Even with high-early strength concrete, this took 3 hours before the concrete could be walked on. However, each such constraint was challenged with many examples of innovation with materials. Hovnanian insisted that this be done without any sacrifice in the finish. The firm's high standards of quality held as for any other new home that it built.

In some cases, extreme measures were needed to get materials, given the tight schedule. One example was siding, which was not available from any local supplier. One of the contractors found a sufficient quantity from a Virginia dealer and immediately dispatched trucks to get it back to the site.

Extreme Effort

There were many volunteers (3,000) for this 2800 sf house. The workers wore color-coded shirts to represent who was who, and this made it easy for Hovnanian project directors to differentiate them. So many people were on site that those who took breaks often got in the way and slowed progress a few times. Over 200 companies participated. Many firms that usually compete worked together. Amazingly, given the tight schedule and the number of workers, there was only one minor injury on the job.

Work started shortly after 12 noon on a Tuesday, and Messrs. Blackwell and Yoos walked the crowd through the progress with their photos. ABC wanted to have the home ready by the following Saturday. Hovnanian would need to have everything ready for the interior decorators and finishers on Friday. The work was barely done on time, 96 hours after it started.

The presentation ended with a short video on **Jirair "Jerry" Hovnanian**, the founder of the firm, who was on site throughout the process. Sadly, he passed away eight days after the house was completed.

Several questions were posed from the attendees, and these were ably handled by the speakers.

Presidents Tuthill and Markham thanked Messrs. Blackwell and Yoos for their efforts and presented tokens of the Branch's and Section's appreciation to them.

COMING NEXT ISSUE...

- Information on the Spring Social
- Information on Recipients of ASCE, Phila. Section Awards
- Season Wrap-Up
- Look for this in the April/May edition of THE NEWS, coming in late March

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