

### HOW TO DO BUSINESS LIKE THE MAFIA

In our trying economic times, this might be a good opportunity to look to new business models, different ways of doing things, etc. to adjust and adapt. In our ongoing attempts to help our readers, we at *THE NEWS* have summarized a story which appeared in *The Guardian Weekly* about a year ago, which tells how one organization has changed with the times. Of course, part of this organization's "problem" is that it technically does not exist, but... you just might learn something!

They're violent, they're ruthless, they have caused misery to many, but you can't fault their business sense: Mafia bosses know how to make a profit. Its practices may be largely illegal, but Cosa Nostra is not as retrograde, or conservative, as it has often been portrayed. Its raison d'être is profit. Like any business, it is pragmatic and constantly changing to exploit new opportunities.

When Bernardo Provenzano took over the organization in Sicily in the mid-1990's, he inherited a depleted and demoralized workforce. Their bombs that killed anti-Mafia judges had created a PR disaster and a law enforcement backlash. Hundreds of members were in prison, and many of them were so disillusioned with the organization that they were telling the authorities everything they knew, despite the famed "omerta" code of silence.

Provenzano was the charismatic force who revived the fortunes of Cosa Nostra. Observers note that, had he turned his talents and resources to legitimate business, he would have been extremely successful. Fortunately, the Mafia's business practice of violence to create monopolies and price-fixing cartels is not widely accepted, but Provenzano reversed the decline of the failing organization with far-sighted tactics worthy of any business impresario. The fact that he wrote his reforms by letter means that we have what amounts to seven rules for running a successful business.

#### Rule 1: Submersion

When a company is failing, the first step is to take it below the radar. You want to lose that cursed epithet "troubled" as quickly as possible, even if it means disappearing from the business pages.

Announcing his system, Provenzano warned that recovery would take time. Members might have to wait between five and seven years before

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### APRIL DINNER MEETING

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

**THURSDAY, APRIL 2, 2009**

Crowne Plaza Hotel Philadelphia-Valley Forge • 260 Mall Boulevard, King of Prussia

**NOTE CHANGE IN DATE AND LOCATION!**

Cocktails 6:00 PM • Dinner 7:00 PM • Meeting 8:00 PM

**SUBJECT: The Future of the US 422 Corridor**

**SPEAKER: Leo D. Bagley**, Section Chief, Transportation Planning and Assistant Director, Montgomery County Planning Commission

**RESERVATIONS MUST BE SUBMITTED BY FRIDAY, MARCH 27.** Please send your check for the number of attendees at \$40 per member or guest, \$20 per ASCE Student Member. Checks should be made payable to "Philadelphia Section ASCE" and sent to ASCE, Engineers' Club of Philadelphia, 215 S. 16th Street, Suite 16, Philadelphia, PA 19102. Reservations can also be made on the Engineers' Club message center, (215) 985-5701, or via e-mail at [info@asce-philly.org](mailto:info@asce-philly.org). Walk-ins will be subject to acceptance on a space-available basis. **THERE IS NO GUARANTEE THAT SPACE WILL BE AVAILABLE IF YOU DO NOT RESERVE A SPACE.** As usual, if you would like to attend the meeting only and not have dinner, you are welcome to attend at no cost.

**SPECIAL FEATURE: Swarthmore College, Temple University and Villanova University Night.** The ASCE Student Chapters, Faculty and Alumni of all three schools will be honored at this meeting. All Faculty, Alumni and Students are cordially invited to attend and participate.

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

**SPECIAL FEATURE: Past Presidents Night.** All Past Presidents of the ASCE, Philadelphia Section are cordially invited to attend as guests of the Section to be honored for their contributions.

The US 422 corridor in northwestern Montgomery County is the classic example of development following a new road with the result that the corridor is one of the most congested in the Philadelphia region. The presentation will focus on the growth and transportation issues of the Corridor. The Planning Commissions of Berks, Chester and Montgomery Counties recently issued a report, the R6 Norristown Line Service Extension Study, that examined a simplified service plan for establishing rail service between Norristown and Reading. It identified a general tolling of the

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### ANNUAL SPRING SOCIAL AWARDS & DINNER DANCE

**Wednesday, May 13, 2009**

**Celebrate Philadelphia's Landmarks!**

The **2009 Spring Social** will be conducted on **Wednesday, May 13, 2009** at the **Loews Hotel** at 12th & Market Streets in Center City. We will enjoy the spectacular view from the **33rd Floor ballroom** of the Loews.

We invite all ASCE, Phila. Section members and their guests to attend our annual season-ending dinner, where we will, as we always do, thank our current Officers and Board of Direction for its service, welcome and induct incoming Officers and Board Members, honor our Section Award winners, cite those who are receiving Section scholarships and who have won our **Delaware Valley**

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## PRESIDENT'S MESSAGE

I cannot believe I am actually writing my final message as President of the ASCE, Philly Section. This year has absolutely flown by. Our goals for the 08-09 year included improving the website, resurrecting our outreach, stimulating the tech groups, and organizing a program for continuing education.

- We actually have PayPal on the website for April, thanks to the webmaster and our Board members working out a few (more than a few, multiple, mucho...!) kinks. A main concern for the website advancement was actually the disorganization of the Chairman of the Website Committee, who also happened to be the Section President.

- Our Section Outreach still needs work, both on the public side and the student side, but I think the Section is aware of this and will make it happen! We are looking for "volunteers." We did gain effective outreach through the infrastructure issues, the Report Card release, and the stimulus funding attention. More information will follow for our Back Home visits in May with our local elected officials.

- The Tech Groups showed renewed interest under the capable and energetic direction of **Kristen Bowman Kavanagh**. The Section held more tech group meetings this year. The Section is looking at other options to improve the Tech Groups.

- Last, the Continuing Education program is in the capable hands of **Jeremy Colello**, and I am sure will blossom as the requirements from the Commonwealth for Engineers to meet State minimums approach in 2010.

I wanted to take the time to thank the Past Presidents that remain thoroughly active in the Section, and really make us tick! **Bob Wright** helped me in so many ways to get everything done in a second... I cannot thank him enough. **Chris Menna** kept our legislative efforts moving and was always available to answer questions. As Region Governor, Chris continues to provide the Section with excellent representation. **Jim Markham** also helped by representing the Section at many events, and by handling MANY of the administrative details that operate the Section.

On January 28, ASCE National announced the release of an updated National Infrastructure Report Card. The release was accelerated from the planned date of March 2009 to coordinate with the ongoing discussions of the federal stimulus funding. ASCE National has released the detailed back-up for the Report Card update. That information is available at [www.asce.org/reportcard/2009](http://www.asce.org/reportcard/2009).

On behalf of the Philadelphia Section officers, please join us for the April meeting and the May Social. *Let's Go Flyers!*

Mark J. Tiger, P.E.  
President, ASCE, Philadelphia Section

## SPRING SOCIAL DINNER

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**Science Fair top prizes**, and, above all, **have fun!**

The evening will start with a **cocktail hour at 6:00 PM**, with dinner and the evening's program following. Our theme of the evening will be the **Engineering Landmarks of Philadelphia**. We will be in one, the former PSFS Building, for the Social, and we will be able to see many nearby landmarks from our vantage point.

*Make plans to attend and share the honors.*

Please visit our website for cost and reservation information. The Loews Hotel website ([www.loewshotels.com](http://www.loewshotels.com)) has additional information on the hotel, parking, etc.

## FREE SEMINAR — THE EVOLUTION OF THE TUNNEL BORING MACHINE

The **Franklin Institute**, in conjunction with **Villanova University**, will present a **FREE** seminar on "A Revolution in Tunneling — The Evolution of the Tunnel Boring Machine."

Presenters will be: **Richard J. Robbins**, President, The Robbins Group, LLP; **Lok Home**, Chairman, The Robbins Group Board of Directors; **Joe Roby**, Manager, The Robbins Group, Kent, WA office; and **Shani Wallis**, Editor, *Tunnel Talk*. The seminar will be moderated by **E. Fred Brecher**, with a welcome by **Dr. Frederic Bertley**, Vice President of the Franklin Institute.

Mr. Robbins is the developer of the **Tunnel Boring Machine**, enabling the construction of large bore tunnels in almost any geological

material. He will describe the facets of the development that culminated in the present day tunnel construction technology. Mr. Roby will expand on the breadth of tunnel construction world wide. Ms. Wallis will comment about the current activity in tunneling around the world.

The seminar will be held on **Thursday, April 23**, starting at **8:30 AM** at the **Villanova University Connelly Center**. A free continental breakfast will be served. No RSVP is necessary — you merely have to show up!

## 2009 SECTION AWARDS TO BE PRESENTED AT SPRING SOCIAL

As is our custom, ASCE, Phila. Section Awards will be presented to six nominees this year at the **Annual Spring Social and Dinner Dance on May 13**. Information and details on the Social are given elsewhere in *THE NEWS*. The Section Award recipients are:

- **David Lowdermilk**, Pennoni Associates — *Philadelphia Civil Engineer of the Year*
- **Don Gusic**, Pennoni Associates — *Philadelphia Young Civil Engineer of the Year*
- **Robert Sabanas**, NTH Consultants — *Geotechnical Engineer of the Year*
- **Michael DiCamillo**, SEPTA — *Engineering Manager of the Year*
- **Karen Jehanian**, KMJ Consultants — *Transportation Engineer of the Year*
- **Janet Cunningham**, JBC Associates — *Construction Engineer of the Year*

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

## ASCE, PHILADELPHIA SECTION OFFICERS AND BOARD OF DIRECTION — 2008-09 SEASON

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SUMMER '09 ISSUE

JUNE 19, 2009

## TECHNICAL GROUPS/CHAIRS

Information on the ASCE, Philadelphia Section's Technical Groups is given below. President-Elect **Kristen Bowman Kavanagh** will coordinate activities of the Groups. If you have any topics that you think would be of interest to the Groups, please feel free to pass this information along to the Group Chair.

### CONSTRUCTION

Dennis MacBride  
SEPTA  
1234 Market Street, 12th Floor  
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215-580-3404

### DELAWARE VALLEY GEOINSTITUTE

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### STRUCTURAL

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### TRANSPORTATION and URBAN DEVELOPMENT

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Urban Engineers, Inc.  
530 Walnut Street, 14th Floor  
Philadelphia, PA 19106  
215-922-8080

## ...AND THANKS TO OUR SPONSORS!

As you have seen, the Section Sponsorship Program was a big hit once again this season. We ended the season with 25 participants. This is especially notable in the difficult economic times we have, so we'd like to extend our special and collective THANKS to each sponsor for their financial commitment and support.

Of course, as they say, one good deed deserves another, so we'll be contacting current sponsors later this summer to see if they'll go again in 2009-10. We hope the program will be as successful then as well.

## YOUNGER MEMBER FORUM NEWS

*Lindsey Glavin*, Forum Editor  
*Don Gusic*, Forum President 2008-09  
Pennoni Associates, Inc.  
3001 Market Street  
Philadelphia, PA 19104  
215-222-3000  
dgusic@pennoni.com

### Happy Hour

On March 5, the YMF hosted a happy hour at World Café Live located on 30th and Walnut Streets. World Café is the home of WXPB and a music hall dedicated to showcasing live music. This was YMF's first event at World Café. Approximately 20 young engineers came out for this event. Many thanks go out to our social chairs and event planners for making this happy hour a great success.

### ASCE YMF CAN Make a Difference

YMF is creating a can structure to raise awareness of global hunger. The event, called **Canstruction**, will be held at **Liberty Place** on **April 18** with structures on display through **April 26**. Locally, the event is sponsored by **Philabundance** and **AIA Philadelphia**. YMF will be organizing food drives and collecting donations from corporate sponsors to collect thousands of cans to build their structure "**Stop Hunger**." The structure will be in the octagonal form of a stop sign which will spell the word "hunger" in lieu of "stop." This will send a powerful message to the community and beyond. After the event, all of the cans will be collected and donated to Philabundance for distribution to those in need. For more information about the event or how you can help YMF, please contact **Chris Gray**. He can be reached at **cgray@timhaahs.com**.

### Critical Issues Seminar Set

Our annual **Critical Issues Seminar** will be held on **Tuesday, April 28** at the Elephant and Castle Restaurant, in the Crowne Plaza Hotel, 18th & Market Streets, Center City. The topic will be "*Economic Crisis or Infrastructure Opportunity*," which will cover the current stimulus programs to repair and restore our infrastructure. Speakers include representatives from the City of Philadelphia, SEPTA, PennDOT, DVRPC, and ASCE National.

### Board Members

The YMF is currently looking for people interested in joining the 2009-10 YMF Executive Board. Joining the YMF Board is a great way to develop contacts in the industry and also prepare you for taking part in the Section Board. All of the YMF Board positions are open for election (President, Vice President, Secretary, and Treasurer), but candidates for President need to have been on the YMF Board for at least a year. The remaining non-Exec positions will be appointed based on a committee of this year's YMF Board. If you are interested, further information on the positions can be found on our

website at [www.ymfphilly.com](http://www.ymfphilly.com) in the membership section under member responsibilities. If you are interested in serving on the board please contact our current President, **Don Gusic, P.E.**, at **dgusic@pennoni.com** to discuss your interests.

### Our Summer Event

Don't forget about ASCE during the summer months! The younger member groups of South Jersey, Delaware and Philadelphia are co-hosting a **Phillies outing on Monday, July 20**. The details for this event can be found on the Philadelphia YMF website under the Events section.

## A CALL FOR SAFER HIGHWAYS

By *Joseph M. Fiocco, P.E., PTOE, Senior Project Manager of McMahon Associates, Inc.*

Over 42,000 people die each year on our nation's highways. Countless more suffer significant injuries and permanent disabilities as a result of vehicle collisions. The level of sophistication at which our roads are designed, constructed, and maintained can and does make a considerable difference. We have been making our highways significantly safer over the past 40-plus years. According to the Federal Highway Administration (FHWA), we have steadily reduced our highway fatality rate from 5.5 (per 100 million vehicle miles) in 1966 to 1.37 in 2007. If we were not making our highways safer, we could have seen over 164,000 people killed in 2007 using the 1966 crash rates and 2007 vehicle miles traveled (VMT). Using these figures, our highway safety efforts have saved about 120,000 lives in 2007 alone. However, we can do more!

I am writing this article in an effort to raise your awareness of the influence that we highway professionals have on the safety performance of our nation's highways. Too often we blame the driver's error as the sole cause of the crash and fail to admit that we can prevent crashes. While it is true that a large majority of traffic collisions are caused by driver behavior (45 to 75 percent according to one FHWA report), the quality level at which we do our jobs to design, construct, and maintain our roads can and will affect the likelihood that driver errors take place, or that the errors will cost them their lives.

If you are at all committed to seeing a reduction in the carnage that is realized every day (we lose 116 lives; 35 of them are under the age of 25) on our highways, you will be happy to hear that there is a significant amount of technological advancements that is coming our way in the very near future. The following efforts hold the promise that we will be much better equipped to utilize the precious limited public funding that is available to maximize our impacts on highway safety:

**1.** The first edition of the Highway Safety Manual (HSM) is scheduled for completion in early 2009.

The purpose of the HSM is to provide practitioners with the best factual information and tools to facilitate roadway design and operational

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## MARCH MEETING REPORT

Thursday, March 12, 2009

The Down Town Club, Center City Philadelphia

### *The "Big Dig" and What Went Wrong*

by Robert Wright, Editor

A few days after March roared in like an angry lion, the snow was gone and the sun was just setting (thanks to Daylight Savings Time) as the Philadelphia Section returned to the Down Town Club for our March Section meeting. After having the last two meetings "on the road", being back in Center City seemed a little different.

An intimate crowd of about 50 attendees decided to spend the eve before the second Friday the 13th of the year at this event to hear a little about where \$15 billion or so went in Boston. Section President Mark Tiger got the evening started, welcoming Director Ann Tomalavage to the podium to lead us in the blessing of the meal. After dinner, President Tiger returned for several announcements and once again brought Director Tomalavage to the front to introduce the evening's speaker, Robert McCue, Managing Partner of MDC Systems.

#### THE PROJECT

Mr. McCue started with a brief history of the Central Artery/Tunnel (CA/T) project, better known as the "Big Dig." As originally conceived in the 1980's, the project would relocate I-93 along the Boston waterfront from its elevated viaduct to a below-ground facility. Since the opening of the highway in the 1950's, it had effectively cut off the waterfront from downtown, and the removal of the structure would create new possibilities for redevelopment of an otherwise blighted area. At the time, the estimated cost was a staggering \$2.2 billion.

The effort had the backing of the Speaker of the House and two powerful Senators who were tireless supporters and found the necessary funding to make it happen. Thus, as Mr. McCue reported, it became fairly easy to add other elements into it, as long as they had political support. A long-desired third tunnel under Boston Harbor and the reconstruction of the I-90 (Massachusetts Turnpike) interchange with I-93 on the edge of downtown were included. Transit supporters, not to be left out, asked for a bus rapid transit component as well as a study of the linkage of North and South Stations, similar to our Commuter Tunnel, to allow integration of the region's commuter rail network. As long as funding was flowing and politicians were supportive, the project expanded.

By the time the initial construction contracts were being awarded in the mid-1990's, the estimated cost of the project had doubled. Construction management, assigned to a joint venture of Bechtel and Parsons Brinckerhoff, would utilize state-of-the-art monitoring systems developed by MIT to track the schedules of what would become a myriad of construction segments, all of which had to be coordinated and tied together in some fashion. As Mr. McCue noted, however, it quickly became obvious that this was not happening.

#### THE SCHEDULE

From the beginning it appeared that the schedule could not handle the complexity of the project. There was little accountability as problems were reported but seemingly no one was reading the reports as no action was taken. Mr. McCue observed that the schedule was hopelessly unrealistic in its content. As an example, in 1999, there was a total of over 2800 days' worth of float time, with 10 individual items each having over 8 years of float.

The schedule problems apparently were not news and only became obvious to the public after segments of the work began to be completed and open to use in 2004. Many leaks were found in the tunnels, and it has been estimated that the repairs of these may take as long as 10 years. Mr. McCue indicated that numerous instances of poor concrete quality were found. Perhaps the most serious failure was the concrete ceiling slab that dislodged and fell on an automobile in July 2006, resulting in the death of a motorist. It was determined in the subsequent investigation that the slab bolts had been secured using an epoxy generally specified for temporary installations, thus the entire ceiling system had to be removed and replaced.

This required a closure of the road, and that agitated the public. Only then, as Mr. McCue commented, was the seriousness of the problems fully appreciated by the public and their elected representatives. He noted that, like each one of us, problems need to be detected at the earliest possible time in order for prevention and/or mitigation to be effective. Projects will develop detectable symptoms, which if left alone, will degenerate into disease, and they will take a worse course if not remedied early.

Because of the magnitude of the project, it was believed that the formation of a claims settlement group to handle disputes was a good idea. As this turns out, this was ineffective and often made large awards. Dispute resolution was revised to be handled by binding arbitration but this was found not to always be binding and often was elevated to the court level for settlement.

#### THE END?

It was reported that when the Bechtel/PB management team's contract concluded at the end of 2007, the total cost of the Big Dig was over \$14 billion. Mr. McCue's investigation found that the real cost is not known and may never be, as there another possible \$7 billion in interest and penalties that have not yet been accounted or quantified. The largest civil contractor on the project has gone bankrupt. Since the federal money was limited to \$6 billion, the State of Massachusetts has had to provide the remainder, and it does not have the resources to do this. As a result, the gasoline tax is being proposed to be doubled from its already high 27 cents/gallon, and projects across the state

have been cancelled or deferred. The current talk of federal stimulus dollars appears to be a solution if this funding can be obtained.

Mr. McCue added that there is disagreement on whether the project was worth it. There are measurable project benefits, as typical travel time within the I-93 corridor particularly in downtown Boston has been drastically reduced from 40 minutes to 16 minutes. However, the traffic bottlenecks have been moved to interchanges and locations outside of the central area, so the overall benefits are minimal. Because the state had to devote most of its transportation funding to the Big Dig, there was no money for ancillary improvements or work on other parts of the system.

Mr. McCue's conclusion was that the sought-after "miracle" to have the project on budget and on schedule was certainly not realized.

Several insightful questions were posed by the attendees and ably answered by Mr. McCue.

President Tiger and Director Tomalavage presented Mr. McCue with the brand-new ASCE, Phila. Section speaker gift, a Pilsner glass, as a token of our appreciation for his presentation.

## ANACE\* Cemeteries

If you're familiar with the eastern reaches of the boroughs of Brooklyn and Queens in New York City, you've probably noticed that there are over a dozen cemeteries along the border between the two. Like many things, there is a basis and reason for this.

In 1847, the New York state legislature passed the Rural Cemetery Act. This dictated that no burial organization could acquire more than 250 acres in one county. The rationale behind this law is not clear, but it remains in effect.

There were two direct results from this Act. One, there are noticeably small burial grounds, particularly within New York City. This is odd especially when one considers the large population of the City. Second, speculators got around the law (don't they always?) by buying land that straddled county lines. In this fashion, they could have larger continuous cemeteries that did not violate the 250-acre rule. Significant examples are in the so-called "cemetery belt" noted above between Kings County (Brooklyn) and Queens County (Queens). Another such area, somewhat smaller, is on the border of Bronx County (The Bronx) and Westchester County.

Also interesting to note is the boundary between Brooklyn and Queens, which zigs and zags its way through city blocks as well as cemeteries. This is one of only two places in New York City that two boroughs/counties share a land border. (We'll accept guesses as to where the other is.) All the other boundaries between boroughs are formed by bodies of water.

\*ANACE - Almost Nothing About or Concerning Engineering

## APRIL DINNER MEETING

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US 422 Expressway as way to finance the capital improvements needed for the expressway and the rail line. It recommended a detailed feasibility study to develop traffic and revenue forecasts and other associated issues, preliminary Engineering to develop costs of the improvement, a rail operating plan, and an extensive public outreach program. The consultant team's efforts will be underway in the summer of 2010 and be complete by early 2011.

**Leo Bagley** is Assistant Director of the Montgomery County Planning Commission and head of its Transportation Planning Section. He is responsible for policy and technical issues associated with highways, transit and airports affecting the County, and as such has extensive interaction with federal and state legislators, local elected officials, PennDOT, the Turnpike Commission, SEPTA and DVRPC.

Mr. Bagley has worked for the Planning Commission for 23 years and prior to that held transportation planning positions in Michigan and northeastern Pennsylvania. He is a native of Sullivan County, PA, a county with only one traffic signal (!), and returns to the homestead frequently to avoid the 600 signals in Montgomery County.

Mr. Bagley is a graduate of the University of Scranton and the University of Pittsburgh and resides in Blue Bell with his wife.

### DIRECTIONS TO CROWNE PLAZA HOTEL

**From Philadelphia via I-76:** Take exit 327 (Mall Blvd.) Turn left onto Mall Blvd. at the traffic signal at the end of the ramp. Follow Mall Blvd. for approximately 1/2 mile. The Crowne Plaza Hotel will be on your left, past the King of Prussia Plaza entrance intersection.

**From Pennsylvania Turnpike, Philadelphia/Valley Forge interchange (exit 326):** Follow I-76 to exit 328B (US 202 North). Follow US 202 North to Mall Blvd. and turn left. Follow Mall Blvd. for approximately 1/4 mile. The Crowne Plaza Hotel will be on your right, past the Wills Blvd. intersection.

**From US 202:** Turn left (from US 202 North) or right (from US 202 South) at Mall Blvd. Follow Mall Blvd. for approximately 1/4 mile. The Crowne Plaza Hotel will be on your right, past the Wills Blvd. intersection.

## NEW LIFE MEMBERS

In the meeting announcement in the March edition of *THE NEWS*, it was noted that this meeting would, as it traditionally does, feature our newly-inducted Life Members for 2009. A miscommunication with National resulted in our inability to send invitations to the new Life Members, so this will be rescheduled for our next (April) meeting.

One new Life Member, **Ted Robb**, was in attendance at our March meeting. Congratulations to Ted on reaching Life Member status!

## MAFIA BUSINESS

*Continued from Page 1*

they were making profits again. Rebuilding links with business and politicians could only be done out of the glare of publicity. In relative obscurity, Cosa Nostra would be repositioned to shake off its image and become part of the industrial and political institutions.

### Rule 2: Mediation

After a decade of unspeakable violence under the previous leader, Provenzano changed the culture of Cosa Nostra by instructing his men in the art of negotiation and the importance of dialogue. Playing for time, he encouraged his men to negotiate agreements between them. If that failed, he was at his typewriter night and day, offering his wisdom and experience (and just occasionally, a little double-dealing) to resolve disputes.

Like any company director, who carefully crafts his or her media persona, Provenzano didn't want to come across as a tyrant — he preferred to be a “kindly dictator.” He coordinated the activities of different and competing groups, without imposing his will. He was the uncontested boss, but he gave the impression that his decisions were reached after long consultation.

### Rule 3: Consensus

Like the charity work carried out by major corporations today, Provenzano was clear: the Mafia must present itself as a positive element of society. The boss had to appear as a beneficent figure, an uncle whose advice and consent was sought on all matters — business and personal. He understood that persuading the people they need you is a far more effective way of promoting your business than imposition and violence.

One key step in the organization's recovery was recapturing the popular consensus. The Mafia has always relied on the obedience of the community. In the business of selling protection, social control is essential: if your “clients” unite and rebel, you're in trouble.

### Rule 4: Keep God on your side

To support his bid to reclaim the people's trust and rehabilitate Cosa Nostra with its traditional followers, Provenzano presented himself in pastoral role — trustworthy and authoritative. His letters read like the parish priest's homily, and he would send his men tracts copied from the Bible.

Investigators tried hard to discover a hidden code beneath all the underlined passages in his Bible. In fact, it seems, he found them genuinely

useful as leadership tools.

Provenzano's choice of tracts revealed, according to investigators “a certain attention to rules, to punishments, guilt and vengeance, as though he were searching for some inspiration and authority to support him in his responsibilities and the decisions that were a necessary part of being the head of an organization.”

### Rule 5: Be politically flexible

Provenzano took this further, changing his political allegiance whenever it suited him. He looked for politicians who were prepared to pursue his self-serving demands for lighter sentences against convicted members, as well as the end of protection for collaborators.

### Rule 6: Reinvention

With Provenzano's new directives, not only did the negative headlines cease, but he managed to dissociate himself from the scandals that had gone before. Like everyone else, he had emerged from Cosa Nostra's most violent decade with his reputation in tatters. With the help of his PR-savvy advisers, he made sure no one associated him with the violent years, and created his image as the peacemaker.

### Rule 7: Modesty

During his career, Provenzano transformed himself from a hired thug, to business investor, political mastermind and, ultimately, strategist and leader. Part of his mystique was that no one really knew whether he was a genius or an illiterate chancer. To emphasize his humble character and present himself as a simple man of the people he would write letters full of spelling and grammatical mistakes, and always signed off with the same humble apology: “I beg your forgiveness for the errors in my writing...”

Every letter ends with the same saintly and affectionate benediction and an apology for grammatical errors. The bad spelling and schoolboy mistakes detracted nothing from the authority of its writer. For a man who moved easily in the worlds of business and politics, it was apparently part of a carefully constructed image. Investigators maintain his semi-literacy was a deliberate ruse.

Provenzano took false modesty a step further, suggesting (almost entirely untruthfully) that he would rather have someone else in charge. Unfortunately for him, since his arrest in 2006, his wishes have been fulfilled.

## OUR “LAST BLAST” FOR 2008-09 — GOODBYE UNTIL FALL

Where does the time go? Believe it or not, this is the LAST edition of *THE NEWS* for this season. As of this issue, the machinery that is *THE NEWS* shuts down for some needed tweaking and fine-tuning, and we'll be back in the fall rarified air to go again for the new season (2009-10, also hard to believe). We hope you enjoy your summer.

And, as we have done for the past couple of years, we will likely end our respite in a couple of months to crank out a Summer edition of *THE NEWS*, if for no other reason than to let you know we're still here. Keep an eye on your mailbox for this.

Unlike the slackers who run *THE NEWS*, our Officers and Board of Directors do not get the same summer break and will continue to toil throughout the summer to put together a meaningful and interesting meeting program for the coming season.

## THE YEAR OF THE TIGER (MARK, THAT IS)

It must be the end of another ASCE, Phila. Section season, since your Editor has reminded himself that he has to complete his sendoff the current Section President. This has become more or less a tradition in *THE NEWS* — one that was here when your Editor took the reins, so he will do his best to continue it. One major departure that your Editor has taken from the methods of his esteemed predecessor is that you will no longer have to have the dictionary handy when you read this — the big words will be history, for the most part. (The simple rule of *THE NEWS* — if we have to look words up to verify the spelling and/or meaning, we don't use 'em.)

Last year, when we "roasted" then-Section President **James Markham**, you may recall that I (your Editor will now step into the first person to make this easier to read) confessed to not knowing Mark as well as I knew Jim, so I would have to pay close attention this year to gather information for this article. As noted then, paying attention is not one of my stronger attributes, but I worked on it, so here goes.

I also thought about other tigers and cats I have known, and did a little research (as you will see, the key word is "little") for this piece. I don't know very much about cats and don't consider myself a cat-person, so I obviously needed some guidance (and a lot of you have told me you think I need help, so you already know). This will be used to draw a few comparisons, so we'll see how that works out.

I can relate to experiences Mark must have had, growing up with name that's an easy target for jokes, insults, ridicule, etc. When we asked Mark about his nicknames last year in preparation for his receipt of the Section's Transportation Engineer of the Year award, he listed "Tig, Tige, Tigger and El Tigre," so you can bet that he got his share of teasing. I always wondered that if I had a nickel for every time I heard "wrong," "left," "Orville," "all the women are looking for you, because you're Mr. Wright," etc., Bill Gates and I would be playing cards somewhere, breaking the tedium between sessions of counting our millions. I'm sure Mark's experience is much the same.

Sources describe the tiger as an "essentially solitary and territorial animal." That sounds a little like Mark, at least the solitary part. As he explained in one of his President's Messages, he could be described as someone who would like to be in a room, working, not being bothered by people or things. Of course, that could describe a good deal of Engineers, so he's not alone there.

On the territorial part, Mark is a local boy and has the tell-tale accent that will not allow him to deny his roots. This is not a bad thing. It shows how dedicated to Philadelphia he is that he's stuck it out here this long. He didn't even leave to go to college, as he's a product of Drexel. Just like Rocky — the eye of the tiger? (And now you can't get that song out of your head...!)

Mark started off the year well by having Board meetings which featured food. In my

book, that's a good thing. Even though I'm not on the Board, I keep going to the meetings, and the prospect of food doesn't deter me. We tend to find that a well-fed Board is a happy Board. Would this be the place to bring in Tony the Tiger, with the food connection (I know it's not cereal we're talking about)?

Mark has proven to be a good leader and motivator, and he gets things done. As I noted in the Markham sendoff last year, some people distrust a "do-er." Can't imagine why. He certainly isn't the "wizard behind the curtain" either, as he's out in front, doing, so there's no comparison to the Wizard of Oz. And he's certainly no Cowardly Lion (I know, not a tiger — yes, I'm really reaching!) Or is the Esso/Exxon tiger we used to put in our tank, for more power and efficient running, more appropriate to demonstrate how "driven" he is here?

He has a dry sense of humor and always seems to be smiling, just like his predecessor. You just can't be too careful around someone like that. (That's what I hear...) Kind of like Snaggletooth (darn, another lion). Or would this be better to show Mark's qualities in terms of those demonstrated by Top Cat's gang — TC himself, Benny the Ball, Fancy Fancy, Spook and The Brain — yeah, I know, a bunch of alley cats? (You younger members may need to Google cartoons of the 1960's to fully get this...)

Mark has had a 22-year career in aviation. He's been getting us off the ground and is quite proud of his accomplishments in opening Runway 8-26 at Philadelphia International Airport and the new terminal complex in Fort Myers, FL. He once noted that one of his career milestones was that he took the EIT and PE on the same weekend. He didn't say whether he passed either. He did ask himself what was he thinking. This takes guts. (By the way, before you get any ideas, the Pennsylvania State Board won't allow this to be done any more.) Again, the comparison to the Cowardly Lion who gets courage might work. But, how about Tony the Tiger again, because Mark has certainly done some GRRREAT! stuff.

We learned a little about Mark in his President's Messages every month. He even bared his soul a bit in the February *NEWS*. This was good for me — it helps write this. He noted that his time spent with his young son and daughter was that much more meaningful these days, and it is vastly more important than what we do (which is also important, but in another sense — and Mark didn't even mention anything about Max, the dog — just like a cat to "diss" a pooch!). Of course, having to make these tough decisions may have led Mark to invoke the old "eenie meenie miney mo, catch a tiger by the toe..." method of our childhood?

So, hats off to Mark for a job well done as our 96th Section President! And now you get to do some relaxing wherever tigers go to unwind (although we know you won't relax), and you don't need to pen any more President's messages. You can help us keep our feet on the ground, much like the B.F. Goodrich Tiger Paws tires. We are very thankful to you, Mark, for all

of your efforts and a great year of service!

And as we watch the tiger slip away into the meadow with its prey in its jaw (imagine Marlin Perkins narrating this), our 97th Section President, **Kristen Bowman Kavanagh** will carefully wander into the jungle that is often our Section to take charge. Kristen has already accomplished quite a bit with our Technical Groups and other matters, so we'll be in good hands. She will be only our fourth female President, if you're keeping score, so we're very slowly getting away from the "all boys' club." And, once again, I'll have to pay close attention to what happens so I can have enough "ammo" to write her sendoff a year from now - that is, unless she decides to fire the loose cannon that is the staff of *THE NEWS* and avoid the sendoff altogether. Good luck, Kristen!

## SAFER HIGHWAYS

*Continued from Page 3*

decisions based on explicit consideration of their safety consequences. The HSM will be an effective resource that can be used to quantify and predict the safety performance of the variety of elements which go into road planning, design, maintenance, construction, and operation (NCHRP Synthesis 367, pg 11). More information can be found at [www.highwaysafetymanual.org](http://www.highwaysafetymanual.org).

2. The Interactive Highway Safety Design Model (IHSDM) is a suite of software analysis tools for evaluating safety and operational effects of geometric design decisions on two-lane rural highways.

IHSDM is a decision-support tool. It checks existing or proposed two-lane rural highway designs against relevant design policy values and provides estimates of a design's expected safety and operational performance. IHSDM results support decision making in the highway design process. Intended users include highway project managers, designers, and traffic and safety reviewers in state and local highway agencies and Engineering consulting firms. The 2008 release of IHSDM may be downloaded free-of-charge at [www.ihsdm.org](http://www.ihsdm.org).

For the majority of my years working in the field of highway safety, there has been very little scientific information available to help us determine how our designs will perform relative to reducing crashes. It often comes down to an "opinion" as to whether design option A is a safer and more prudent design option than B. A considerable amount of new safety analysis tools are expected to be available to the highway design community in the coming months, and I am hoping that we are open-minded about their potential, and work through the bugs efficiently. Together we can do our part to help NHTSA (National Highway Transportation Safety Administration) reach its established fatality rate goal of 1.0 per 100 million VMT by 2011. This translates into saving an additional 12,000 lives annually. Each one of those lives saved is someone's loved one, and they would certainly thank you personally if they only knew that you were the one who made the difference.

*Continued on Page 7*

**TECHNICAL GROUP MEETINGS**

**Structures Technical Group Meeting**

**DATE: Wednesday, April 22, 2009**

**SUBJECT: Scour Analysis and Countermeasures Design Certificate Course for Bridges**

**SPEAKERS: Dr. Peggy Johnson**, Chairperson Civil Engineering Department, Pennsylvania State University; **Dr. Nazhat Aboobaker**, Adjunct Professor, Widener University; **Dr. Mohiuddin Ali Khan**, Adjunct Professor, Temple University

**TIME: 9:00 AM – 4:30 PM** (8:30 AM Registration; coffee break, buffet lunch and afternoon tea break included)

**LOCATION: Municipal Services Building; 15th Street and Kennedy Blvd., 16th Floor, Room C**

**COST: \$250 pp** (including refreshments and buffet lunch)

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

**May Luncheon Meeting**

**DATE: Tuesday, May 19, 12:00 Noon to 1:30 PM** (A buffet lunch will be served starting at 12:00 Noon, presentation begins at 12:30 PM)

**SUBJECT: "On Movable Bridges"— Design, Construction and Operation**

**SPEAKER: Charles Birnstiel, Ph.D., P.E.** of Hardesty & Hanover will discuss design and practical aspects of the different types of movable bridges located on rivers in the Northeast. Dr. Birnstiel has considerable experience in design and operation of movable bridges and has published a text book and numerous papers on the subject. He is a registered Professional Engineer in a number of states.

**LOCATION: Conference Room E on the 16th Floor of the Municipal Services Building, 15th and JFK Blvd, Philadelphia**

**COST: \$12; Students \$5**

Reservations can be made through **Dr. Khan**, Chairman ASCE Structures Group at **mohidin@temple.edu**, the Engineers' Club at **(215) 985-5701**, or via e mail at **info@asce-philly.org**.

Please send your check payable to **Phila. Section, ASCE to ASCE, Engineers' Club of Philadelphia, 215 S. 16th St., Suite 16, Philadelphia, PA 19102-8186.**

**SAFER HIGHWAYS**

*Continued from Page 6*

For questions or comments about this article, please contact **Joe Fiocco** at **(215) 283-9444**; email, **joe.fiocco@mcctrans.com**; McMahon Associates, Inc., 425 Commerce Drive, Suite 200, Fort Washington, PA 19034.

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**Action may not always bring happiness, but there is no happiness without action.**

— Benjamin Disraeli

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