

# the news



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PHILADELPHIA SECTION  
AMERICAN SOCIETY OF CIVIL ENGINEERS  
P. O. Box 58186, Philadelphia, PA 19102-8186

Vol. 65-2

*Our 79th Year*

October, 1992

## OCTOBER DINNER MEETING

Philadelphia Section, American Society of Civil Engineers

### THURSDAY, OCTOBER 15, 1992

OFFICER'S CLUB • U.S. NAVAL BASE • PHILADELPHIA  
Cocktails – 5:30 p.m. Dinner – 6:30 p.m. Meeting – 7:30 p.m.

**SUBJECT: FORTY FEET BELOW – THE STORY OF CHICAGO'S FREIGHT TUNNELS**  
**SPEAKER: BRUCE G. MOFFET**, Administrator of Funding for Technical Study and Planning Projects, Chicago Transit Authority.

A life-long Chicago resident, Mr. Moffet has authored a book of the same title as our featured dinner speech. He graduated from Illinois State University with a degree in Mass Communications and earned a Masters Degree in Urban Planning and Policy from the University of Illinois. He began employment with the Chicago Transit Authority in 1977, followed by positions with Continental Air Transport and the Regional Transportation Authority before returning to the CTA in 1988.

Mr. Moffet became interested in the Chicago freight tunnel network while a student at Illinois State. These tunnels had been unused since the early 60s and Bruce researched the unusual railroad and explored some of the network. Using old bankruptcy court and ICC files, and with additional tunnel exploration undertaken with the City of Chicago, "Forty Feet Below" was published in 1982. It has now been through seven printings totaling more than 10,000 copies.

### SPECIAL FEATURE: SWARTHMORE COLLEGE & UNIV. OF PA. NIGHT

The ASCE Student Chapters, Alumni and Faculty of the Departments of Civil Engineering of Swarthmore College and the Systems Dept. of the University of Pennsylvania will be honored at this meeting. All Students, Alumni and Faculty are cordially invited to attend.

**RESERVATIONS ARE REQUIRED.** Please send your check for the number of plates required (@ \$20 or \$10 Student each) payable to: Philadelphia Section, ASCE • P.O. Box 58166 • Phila., PA 19102-8186. The deadline for reservations is **October 12, 1992.**

practice in which Civil Engineers normally consider the best interests of current and future Civil Engineering users, clients and practitioners. (This could suffice to answer the "why." However, with many positive response and ideal results, why not also dram or imagine what the future will be like when **EVERYBODY** is well informed and **ALWAYS** favorably disposed towards Civil Engineering? For most communities — and Civil and Environmental Engineering departments — the consequences could be staggering!) In connection with this, I developed specific Civil Engineering class projects and related material, which I tested

and intend to use in conjunction with my planned participation in E4E and our own **Civil Engineering Class Projects Committee**. It would be very interesting to **develop many good answers for the question posed above and to work with Civil Engineering firms, members of ASCE, and others with a significant interest in the future of Civil Engineering**. You may leave a message for me at (215) 687-7741, the new **24-hour ASCE/Philadelphia Bulletin Board and Message Center**. You may also write to me at Temple University Mail Stop 084-53, Philadelphia, PA 19122, or call (215) 787-7802 or (215) 787-7800.

## CIVIL ENGINEERING – THE EARLIER, THE BETTER

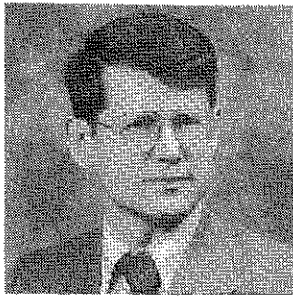
By: Stephen G. Jochum, P.E., Associate Professor of Civil Engineering, Temple University

Sixth and eighth graders want to know: "How do our Civil Engineers decide what materials they want to use?" "How do they make everything so perfectly? I want to know because everything they do looks as if it were made for that particular spot. They don't seem to make mistakes." First, sixth and eighth graders alike, are fascinated by slides which show Civil Engineering projects, the "bones" of the Statue of Liberty or other structures designed by the same engineer, Gustave Eiffel. Yes, even in Elementary and Middle schools, I found a very real need and interest for good information about Civil Engineering. **The desire for a meaningful interaction with our profession** seems to be shared by these students, their teachers and counselors. Many see specific benefits resulting from direct contacts (and continuing relationships) with members of the Civil Engineering profession. Since most of us already have significant demands on our time, we need good answers to the question: How and why should we respond to this need?

One response could be that many individual Civil Engineers will decide to become a small part of **E4E (Engineers for Education, 1-800-489-0348)** which is a coalition of over forty engineering societies looking for 100,000 engineers as volunteers to provide support towards making American students "first in the world in math and science achievement by the year 2000." While the stated goals of this effort are not specifically aimed at Civil Engineering, there are provisions within this program to utilize the services of role models — such as Civil Engineers — who apply math and science and can give students convincing reasons for doing well in math, science, communication and many other subjects as well.

Philadelphia Futures, a local program, suggests that it may not be a good response to "shake your head and shrug your shoulders." You might become involved because it is altruistic, personally very satisfying, or simply an extension of standard

## THE PRESIDENT'S MESSAGE



The 1992-1993 year is now in full swing. The Board of Directors met once a month during the summer to bring the program together. What is now needed is your active support and participation. The attendance, interest and past comments of the Section Membership were major factors in guiding the program planners. It is critically important that your ideas and comments are brought to the attention of the Section officials and committee personnel; only thus will the Membership be better served. I urge you not only to discuss your ideas with Board Members and Technical Group officials, but also to make use of our newly established **Electronic Message Center**. Please use it freely to convey your ideas and to inquire about all Section activities in which you are inter-

ested. You will also receive via the Message Center an update of all coming Main Section meetings, as well as Technical Group meetings, tours, etc.

Time ran out for a 1992 casual, family-oriented get-together, but one is planned in 1993 (see list of 1992-1993 Meeting Notices on Page 4). The picnic-type format will attempt to include jointly the Philadelphia Section Reading Branch and the South Jersey Branch of the New Jersey Section. I am seeking ideas and volunteers to help bring about the event. Please let me know your thoughts via the Electronic Message and Bulletin Board. I anxiously await your comments and ideas, and look forward to your involvement.

### *Gouda Nominated by Section for Engineer-of-the-Year*

As noted in the Page 1 editorial in the May, 1992 issue of THE NEWS, the Philadelphia Section, ASCE expressed its sentiments and gratitude for Past President Moustafa Gouda's (1991-1992) unstinting leadership and dedication to the Section and ASCE nationally, by endorsing him as the Section's nominee for 1993 Delaware Valley Engineer of the Year — the prestigious honor to be awarded in the Fall by delegates from the many Technical Societies of the area.

I fully realize that I have a tough act to follow to fill Moustafa's shoes. But I'll try and, with your help, we will continue the fine work he accomplished.

Sincerely, Klaus K. Fuelleborn, President, Philadelphia Section, ASCE

## SEPTEMBER LUNCHEON MEETING

September 23, 1992

Downtown Club

### **From Intelligent Highways to Glass Skyways: The Future of Transportation in the Delaware Valley**

By: Francesco M. Russo, Temple U. Staff Writer

Welcome back once again for another exciting year of Civil Engineering in the Delaware Valley.

The 1992-1993 ASCE Philadelphia Section "season" started off in grand fashion with a luncheon meeting at the Downtown Club.

The topic of the meeting was the future of transportation in Philadelphia. We were blessed to have not only the Philadelphia Section's Civil Engineer of the Year, PennDOT's Leo Leonetti, but also the City of Philadelphia's Deputy Mayor for Transportation, Denise Goren.

Mr. Leonetti began his presentation with a discussion of some of the major rehabilitation and retrofit work that will be occurring in the Metro-Philadelphia area. This work includes, but is certainly not limited to, the addition of two additional, and reversible, lanes to I-95. These two lanes will serve a dual purpose. First, these lanes will serve as a means of construction access for the reconstruction of I-95. Secondly, their overall objective is to function as High-Occupancy-Vehicle (HOV) Lanes to be used during rush hour. Mr. Leonetti also highlighted a new innovation that PennDOT will be employing, an Intelligent Traffic Monitoring and Control System for I-95.

This system will initially consist of four variable message signs, two at the Betsy Ross Bridge,

and two at Philadelphia International Airport. These signs, in conjunction with video data that PennDOT will receive via a number of video cameras stationed along the length of I-95 through the city, will allow Penn DOT to display a variety of messages to oncoming motorists alerting them as to any traffic problems ahead. The long-term goal of this pilot project will be to allow PennDOT to simultaneously monitor I-95, the Pennsylvania Turnpike, the Blue Route and incoming traffic from New Jersey.

### *From Visioning to Visionary*

The next, and final, speaker of the day was the City of Philadelphia's Deputy Mayor for Transportation, Denise Goren. Ms. Goren took an entirely different approach to transportation in Philadelphia. Her approach was one of what could be in the 21st Century. Some of her plans and goals for transportation in the Delaware Valley and beyond consist of:

- An extension of the PATCO High-Speed Line from its terminus in New Jersey to Glassboro and possibly to the South Jersey Beaches.
- Construction of SEPTA's Bustleton Transfer Station which would extend the Market-Frankford Line from its present terminus at Bridge-Pratt terminal, north on Bustleton Avenue.
- Extension of the Broad Street Subway to the

(Continued on Page 3)

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NOVEMBER 1992 ISSUE  
OCTOBER 15, 1992**

## SECTION 1992 AWARDS GIVEN AT SPRING SOCIAL

by Bob Wright, Staff Writer

The Section's Annual Spring Social and Dinner Dance was conducted on Saturday, May 16, 1992 at Catalina Restaurant in Center City. Approximately 130 attendees were treated to a memorable evening with excellent food and entertainment.

In addition to the induction of the 1992-93 slate of Section officers and Board Members, seven local professionals were cited as recipients of Section awards. Each was highlighted in a short slide presentation. Some information on each of the awardees is given herein.

### Philadelphia Civil Engineer of the Year

The recipient of the Section's highest award is **Leo Leonetti**, the Assistant District Construction Engineer for the Pennsylvania Department of Transportation, District 6. Leo is in direct charge of all major State Highway construction projects in Philadelphia. In addition to the Vine Street Expressway, he has recently managed large undertakings such as the I-95 Ramp Completion in Center City/Penns Landing, the Walnut Street Bridge replacement and the Airport interchange ramps. He has been involved in numerous construction projects on State Highways throughout the Philadelphia area during his over twenty years career with the Department of Transportation.

Leo is a graduate of Drexel University. He is a Past President and Director of the Delaware Valley Section of the American Society of Highway Engineers in addition to being a member of ASCE. He was recently granted the Secretary of Transportation's Award for Excellence and was cited by the Delaware Valley Section of American Society of Highway Engineers as its Person of the Year in 1992.

Leo & his family reside in Northeast Philadelphia.

### Young Civil Engineer of the Year

**Richard P. Markwith, Jr.** took the honors for 1992. He is Principal Engineer and Technical Director at the Philadelphia office of Fredric R. Harris Consulting Engineers, where his area of emphasis is the design of highways and bridge structures. He graduated from Lehigh University is currently enrolled in graduate studies at the University of Pennsylvania. He is a member of several professional societies in addition to ASCE.

Many of us know Rich as the dynamic leader of the Section's Younger Member Forum, where he has been busy recruiting new members and reactivating this dormant resource. This is a tough task but we hope Rich can maintain his level of enthusiasm and continue to do good things for the Section.

Rich lives in the Fairmount section of Philadelphia.

### Young Government Engineer of the Year

The recipient of the award is **Darin L. Gatti**. He is a Senior Project Engineer in the Bridge Section of the Engineering Division of the Philadelphia Department of Streets where he supervises the de-

sign of highway structures which are the City's responsibility. He was instrumental in the recruitment and training of 14 entry-level engineers in 1990 to ease a critical personnel shortage. Among the bridges he has designed are the aesthetically-pleasing Northwestern Avenue span and the Dunks Ferry Road bridge, which recently won first prize in a national design competition.

Darin graduated from Drexel University. He currently serves the Section as Treasurer, and is also a member of the American Public Works Association.

Darin and his wife Carolyn live in the Fox Chase section of Northeast Philadelphia.

### Government Engineer of the Year

**Vince L. Calvarese, Jr.** took the award this year. Vince nearly retired from over thirty years of service with the United States Army Corps of Engineers. He has considerable experience in the planning, design and construction of numerous projects for the Corps. He has risen through the ranks of the Philadelphia District Office to Design Branch Chief.

Vince is a graduate of Widener University. He is an active member of the Society of American Military Engineers and the United States Committee on Large Dams in addition to ASCE.

Vince and his family live in Wayne.

### Transportation Engineer of the Year

This year's awardee is **John J. Heany**, the Chief Traffic Engineer in the City of Philadelphia Department of Streets. In this position he is in direct charge of the Department's Traffic Engineering Division and has responsibility for planning, design, operation and maintenance of traffic control and street lighting in the City. He retired in June after 37 years of service in the Department.

John is a graduate of the Drexel Institute of Technology. He is a member of the American Public Works Association as well as ASCE.

John and his family reside in the Rhawnhurst section of Northeast Philadelphia.

### Construction Engineer of the Year

This year's awardee, **Brian Stover**, is a Project Manager in the Construction Management Division of Urban Engineers. He directed the construction management team for the Vine Street Expressway construction from groundbreaking to opening. He has also received many awards and recognition for that major effort, and provided invaluable assistance and direction in the Section's recent pursuit of Outstanding Civil Engineering Achievement honors for the Vine Street Expressway project.

Brian is a graduate of the University of Pennsylvania. He currently serves as Treasurer in the Construction Management Association of America and is a member of the American Society of Highway Engineers in addition to ASCE.

Brian and his family live in the Rhawnhurst section of Northeast Philadelphia.

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### Government Service Award

The recipient, **Denise Goren**, currently serves as Deputy Mayor for Transportation and Director of the Mayor's Office of Transportation in the City of Philadelphia. She has held transportation advisory positions in the City for the past eight years, both in the Mayor's office and in the Office of the Managing Director. In these positions she has been intensely involved with the development of recent major transportation projects in the City.

Denise received a bachelor degree from Simmons College and a degree in Law from Temple University. She is a member of the Pennsylvania Bar as well as several other legal and professional transportation groups.

Denise and family live in Center City.

Since Denise was out of the country on a previously-planned vacation, she was unable to accept the award at the Social. The Section has arranged to honor her in person at its September meeting.

The Section offers its collective congratulations to the awardees, as well as thanks to the Awards and Spring Social committees for another job well done.

### September Luncheon

(Continued from Page 2)

Navy Yard and hopefully into South Jersey.

- Construction of an intermodal facility at 21st and Market Streets in downtown Philadelphia.

- Construction of an elevated skyway from a newly refurbished and hopefully greatly expanded 30th St. Station.

Ms. Goren indicated that some of these plans, though rather distant, have already been given preliminary consideration by the City Planners. PATCO is in fact expanding. Plans for 21st and Market have been developed; SEPTA is actively pursuing the Northeast Extension of the Market-Frankford Line; and planning for the Arch St. walkway is ongoing.

Obviously, Civil Engineering is not the stoic profession we once thought it was. It is, on the contrary, a dynamic, vibrant, and forward looking profession with the advancement of society and the enhancement of the quality of life as its' prime motivation. For that, we should all be proud.



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## ELECTRONIC MESSAGE SERVICE AND BULLETIN BOARD ON LINE

As announced in the September, 1992 issue of THE NEWS, the Electronic Message Center and Bulletin Board for the Philadelphia Section, ASCE, is now in operation for the convenience of its members. This service was initially established to provide meeting and scheduling information to our members on a continuous basis, by calling (215) 687-7741 any hour of any day.

An additional feature of this service is the capability for the caller to leave a recorded message. The system will instruct the caller vocally how to record. The date and time of the message will also be recorded by the device. The voice mail system will be checked on a regularly scheduled basis and messages will be answered as necessary. To date, the Message Center has been used relatively infrequently, with messages usually involving upcoming programs. It is hoped that members will use the service liberally, to ask questions or provide commentary on any subject concerning the Section or ASCE nationally. Your opinions and suggestions are welcome to help us improve all of our activities, programs and social events. Let's "get on the phone"... we're waiting to hear from you! NOTE THE NUMBER: (215) 687-7741.

### JOIN THE SECTION'S TECHNICAL GROUPS

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## IMPORTANT! 1992-1993 MEETING NOTICES

MARK YOUR CALENDAR for the dates of the remaining Philadelphia Section, ASCE monthly meetings and social functions, as follows: (Check each issue of coming editions of THE NEWS for details, possible date and topic changes.)

### ALL DINNER MEETINGS

Cocktails - 5:30 p.m. Dinner - 6:30 p.m. Meeting - 7:30 p.m.

STUDENTS: All dinner and/or luncheon charges one-half price. If you prefer, you are welcome to attend all meetings after dinner or luncheon, at no charge.

#### Wednesday, November 18, 1992 - Dinner Meeting - Williamson's City Line

Subject: The New Reorganized PaDER  
Speaker: Regional Administrator, PaDER  
Drexel University Night

#### December, 1992 - Luncheon Meeting - Date and location to be announced Walking Tour of Pennsylvania Convention Center

#### Wednesday, January 13, 1993 - Dinner Meeting - King of Prussia Holiday Inn

Joint Meeting with ASHE  
Subject: To be announced  
Speakers: Tom Larson, Bill Thomsen  
Villanova University Night

#### Thursday, February 25, 1993 - Dinner Meeting - Harbor League Club, Camden

Joint Meeting with South Jersey Branch ASCE  
Topic to be announced  
Speaker: Dr. Robert Koerner, Honorary Member, ASCE  
Temple University Night

#### March, 1993 - Date and location to be announced

Spouse and Family Event - Camden Aquarium Tour

#### Wednesday, April 14, 1993 - Dinner Meeting - Officers Club, Naval Base

Joint Meeting with SAME  
Subject: Pennsylvania Convention Center Update  
Speaker: Harry Perks  
Widener University Night

#### Sunday Evening, May 16, 1993 - Annual Spring Dinner Dance, Officers' Club, Phila. Naval Base Spring/Summer Picnic - Phila./Reading Branch & South Jersey Sections Informal Family-Oriented Picnic

#### Geotechnical

*Dr. Joseph P. Martin, Chairman*  
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