

# the news



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

Vol. 65-3

Our 79th Year

November-December, 1992

## NOVEMBER DINNER MEETING

Philadelphia Section, American Society of Civil Engineers

### WEDNESDAY, NOVEMBER 18, 1992

WILLIAMSON'S • GSB BUILDING • CITY LINE AVENUE • PHILADELPHIA  
Cocktails - 5:30 p.m. Dinner - 6:30 p.m. Meeting - 7:30 p.m.

**SUBJECT: THE NEW REORGANIZED PA DEPT. OF ENVIRONMENTAL RESOURCES**  
**SPEAKER: JAMES W. RUE**, Southeast Regional Director, DER

The PA Department of Environmental Resources has recently implemented the second phase of a two-part reorganization. The major changes on the regional level entail the creation of an Environmental Cleanup Program. This incorporates the storage tank and hazardous sites cleanup divisions, and creates a special projects unit to oversee remediation work unrelated to these two programs. One of the major goals of the reorganization is to improve the level of service to the public.

Jim will also share his thoughts on the responsibilities and challenges he faces as Regional Director.

The recent appointment of **James W. Rue** of West Chester as DER Southeast Regional Director, brings to the Department an excellent blend of environmental and management experience in both the public and private sectors. His abilities in these areas will be invaluable in DER's efforts to improve its services to the public in the Southeast Pennsylvania.

As Regional Director, Rue will be responsible for DER field operations and about 200 employees

(Continued on Page 2)

## TECHNICAL GROUP ACTIVITIES

### Structural Group

#### December Meeting

Date: **Wednesday, December 9, 1992 - 7:00 p.m.**  
Location: Hill Seminar Room, LeBow Engineering Center, Drexel University, 31st and Market Streets, Philadelphia, PA

**SUBJECT: Repair and Strengthening Structures Using Post-Tensioning**

**SPEAKER: Dan Falconer, P.E.**, Branch Manager, VSL Corporation

Mr. Falconer will discuss a variety of post tensioning methods which may be used to strengthen existing structures.

If you are interested in joining us for this informal meeting (snacks and refreshments will be provided), please make your reservations with **Richard D. Roberts**, Chairman, Structural Group (215) 561-0460.

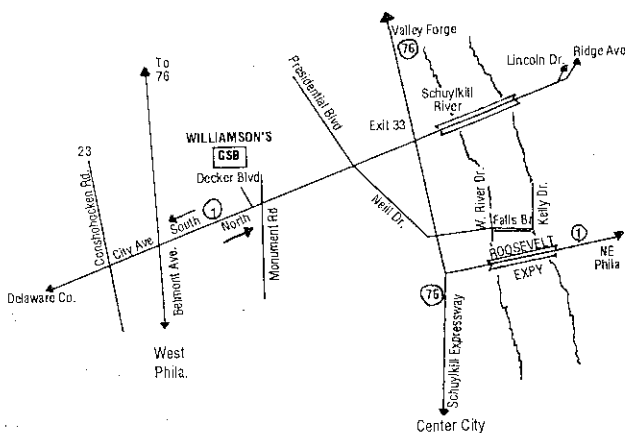
## IMPORTANT MESSAGE TO MEMBERS

### Re: Delinquent Section Dues

Because of financial constraints, the Philadelphia Section, ASCE announces that those Assigned Members who have not paid their \$18.00 Section dues for the 1992 Calendar year must remit the payment to National Headquarters now, or they will be omitted from the mailing list of THE NEWS after this issue (November-December, 1992). We regret this action, but it is necessary to counterbalance mounting costs.

Members not receiving THE NEWS are deprived of all the technical and social activities announcements; reviews of previous Section meetings featuring addresses by distinguished speakers; updating of National and Local official reports; Members in the News; and the numerous miscellaneous subjects covered in the monthly issues.

So—if you are in arrears, please do yourself and your Section a service, by mailing your check, including the Philadelphia Section dues of \$18.00 per year, with the dues bill(s) which you have received from National Headquarters in New York. Only thus will you enjoy all the benefits that accrue with receipt of the monthly issues of the Philadelphia Section newsletter, THE NEWS.



**LOCATION MAP FOR WILLIAMSON'S  
GSB Building, City Line Avenue, Philadelphia**

## DECEMBER FIELD TRIP/LUNCHEON

Philadelphia Section, American Society of Civil Engineers

### WEDNESDAY, DECEMBER 9, 1992

(See Page 2 for Details)

## November Dinner Meeting

(Continued from Page 1)

in the region, comprising Bucks, Chester, Delaware, Montgomery and Philadelphia counties. Since 1987, Rue has been Director of Operations at A T Biochem, Inc. in Malvern. He also has held management positions with International Biotechnologies, Inc. in New Heaven, CT. He was a Consultant with Pace Consulting Group in Hartford, Assistant Director of the Audubon Society of Rhode Island and a forestry aide with the U.S. Department of Interior.

Rue holds Masters Degrees in public and private management and forest science from Yale University, and a Bachelor of Science degree from Pacific Lutheran University in Tacoma, WA.

### SPECIAL FEATURE: DREXEL UNIVERSITY

The ASCE Student Chapter, Alumni and Faculty of the Department of Civil & Architectural Engineering of Drexel University 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 (@ \$25 or \$12.50 Student each) payable to: Philadelphia Section, ASCE • P.O. Box 58186 • Phila., PA 19102-8186. The deadline for reservations is **November 13, 1992.**

## DECEMBER FIELD TRIP/LUNCHEON

### Tour of Pennsylvania Convention Center

Arranged by Engineering Management Technical Group, Al Zion, Chairman

Tour will commence at 11:00 a.m. Attendees will be advised of staging point beforehand. Attendees must sign waiver form to participate and are encouraged to bring hard hats (Hard hats will be supplied to those who do not bring their own.)

Tour is limited to a maximum of 60 persons. Registration will be on first come-first served basis. No tickets will be available at the door – **only reserved places obtained through mail-in system will be accepted!!** (See mail-in instructions for November 18th meeting above.)

Lunch will be served after the tour (approximately 12:30 p.m.) at the Imperial Inn, 142 North 10th Street. (Lunch is optional.)

Cost: Tour Only – \$3 per person; Tour and Lunch – \$13 per person. Deadline for reservations will be **December 2, 1992**, or when capacity is reached.

## AWARDS PROGRAM

### Delaware Valley Chapter American Concrete Institute

The Delaware Valley Chapter of the American Concrete Institute (ACI) is pleased to announce its 2nd Annual Awards Competition. The purpose of the Competition is to recognize outstanding concrete projects. The previous Competition was a great success, honoring four Grand Prize winners and nine finalists. It is hoped that the Competition will continue to promote an appreciation of excellence in concrete design and construction among the industry and general public.

All submittals must be projects completed between January 1, 1988, and December 31, 1992. Projects located in the Chapter Counties of Philadelphia, Montgomery, Bucks, Delaware, Chester, Berks, Lehigh, Lancaster, Lebanon, Dauphin and Northampton in the Commonwealth of Pennsylvania or in the State of Delaware are eligible for the Competition. You are invited to submit nominations in the following categories:

1) Precast concrete systems buildings; 2) Cast-in-place frame construction; 3) Concrete bridges;

4) Architectural concrete/precast claddings; 5. Special Award: concrete structures 25 years or older

The jury will consist of professionals in the fields of architecture, construction and education. Awards will be judged for outstanding conception, originality, and applicability in design and construction.

Winners will be honored at an ACI banquet in late April 1993. The time and location of the banquet and a copy of the evening program will be forwarded to you at a later date.

To enter, please provide the information requested on the Awards Competition Prequalification form which may be obtained by contacting **David A. VanOcker, P.E.**, Chairman of the Awards Committee, c/o Christakis & Kachele, Inc., 6910 Ludlow St., Upper Darby, PA 19082; (215) 352-7676. You will be notified if your project prequalifies and sent a brochure detailing submission requirements.

We sincerely appreciate your interest in the program and look forward to your entry.

## Greetings of the Season

The Editor and staff of THE NEWS, on behalf of the Officers and Board of Directors of the Philadelphia Section, ASCE, extend to the Members and their families Heartiest Wishes for a Joyous Holiday Season, and a Healthy, Prosperous and Fulfilling New Year.

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JANUARY 1993 ISSUE  
DECEMBER 9, 1992**

## OCTOBER DINNER MEETING

October 15, 1992

Officers' Club, Phila. Naval Base

### Chicago's Freight Tunnels

A good turnout for the first regular Dinner Meeting of the Philadelphia's Section's 1992-1993 season enjoyed a knowledgeable address by **Bruce G. Moffat**, Administrator of Funding for Technical Study and Planning Projects, Chicago Transit Authority. Mr. Moffat's talk was entitled: "Forty Feet Below – The Story of Chicago's Freight Tunnels."

#### Swarthmore College Night

The meeting honored the ASCE Student Chapter, Alumni and Faculty of the Civil Engineering Department of Swarthmore College. **Dr. Faruq M.A. Saddiqui**, Professor of Civil Engineering, and for many years Faculty Advisor of the ASCE Student Chapter, introduced the officers: President – **J.P. Barton**; Vice President – **Josh Lee**; Secretary-Treasurer – **Bosi Cohen**; and Contact Members – **Daniel Hoenig** and **Richard Mabry**.

Vice President Lee thanked the Philadelphia Section for its courtesies, and described the active and aggressive agenda of the Student Chapter. The diverse list of activities planned for this year include: participation in the Delaware Valley Chapter, ACI Concrete Beam Competition, in which three Swarthmore teams will be entered; co-sponsoring a meeting on October 29, 1992 with the Student Chapter of ASME, featuring as speaker a finalist in the U.S. Olympic Committee Sports Equipment and Technology Design Contest; and representation in this year's Student Workshop at the University of Pittsburgh.

Mr. Lee hopes that other events will follow, and he encourages fellow ASCE Student Chapters to join the Swarthmore group in its activities, and to attend its functions.

#### Bill Thomsen Introduces Mr. Moffat

Phila. Section Vice President **William T. Thomsen**, who, with Section Past President **Susan K. Lior** arranged the October 15th meeting, introduced the principal speaker, **Bruce G. Moffat**. Mr. Moffat became interested in the Chicago Freight Tunnel network while a student at Illinois State University. He researched the unusual railroad system. His book on the network, "Forty Feet Below," published in 1982, has been a best seller.

#### Origin, History and Construction

Mr. Moffat described the origins of the idea, and drew a historical perspective of the tunnel complex, which was built around the turn of the century – the drama, humor, tribulations, challenges, and almost insurmountable financial obstacles of such an innovative concept. The almost inconceivable structural problems encountered in such a massive undertaking were vividly illustrated by our speaker. The elliptical tunnels are 7'-0" high and 6'-6" wide, and generally located forty feet below street level. Hand-mined and hand-packed, the concrete walls are 12" thick, unreinforced, and the digging was beneath all major downtown Chicago streets. Adja-

cent buildings were charged fees to tie in to the network, but many did not do so because of the expense – due to the depth of the tunnels – of special elevators required to reach track level from building basements. Because there were few sidings to buildings, and the tunnel company had no yards in which to store its 3,500 freight cars, the tunnels themselves were later used as storage areas.

The cars were originally powered by an electric locomotive, with a central third rail, which was also a cog rail for traction on grades. Later, an overhead trolley wire was installed for current pickup. The initial intended function of the railroad was for delivery of coal to buildings for boilers, and the removal of coal ash. (Neither task could be accomplished by the horses-and-wagons of the day). Ash was delivered to various downtown sites for use as fill, the major one being the present-day Grant Park on the lakefront. Later, the system handled packages and express to and from steam railroad freight houses, all of which had connections to the tunnel railway. Passengers generally were not accommodated, except for special visits, and these were discouraged in later years.

#### Bankruptcy and Abandonment

The tunnel company went bankrupt in 1959 and the tunnels were abandoned. Some equipment and cars were not handily retrievable by scrap contractors and were left in place. The remaining tools, work benches and other equipment strewn about the system looked – in Mr. Moffat's words – "as if all the workers went to lunch and never came back." The City of Chicago assumed ownership and responsibility. The tunnel system was generally unused until the 1970's, when some utilities began to rent portions for use as underground line corridors. Some tunnels were obliterated by new construction of buildings and highways.

The tunnels were generally forgotten – except for the diverse purposes of mail transport, telephone and electrical transmission systems, as well as numerous commercial enterprises of Chicago's business community, such as coal and lumber delivery. A rude awakening came when water leaks in building basements began to crop up earlier this year. The cause was found to be violation of the tunnel beneath the river, principally breaks due to piling construction. This led to disastrous flooding and major disruption to downtown business and commerce. The massive shutoff efforts, cleanup and rehabilitation undertaken to restore the tunnel system and the buildings affected cost hundreds of millions of dollars.

Mr. Moffat's presentation used slides profusely, and his witty commentary complemented the illustrations. He described numerous labor problems and trucking industry competition of the tunnel company rail commerce. He detailed the complicated operations program and logistics of the vast system. He also illustrated alternate methods of

tunnel construction, including excavation by tunneling and arch forms; and building at grade and submerging of sections.

#### Audience Questions and Commentary

Many questions were directed to Mr. Moffat regarding the tremendous job of stopping the leaks; pumping out water and debris from streets and buildings; assessing structural damage to the tunnel walls; construction of new concrete and steel bulkheads reinforcement; legal and political overtones regarding criticism and blame; responsibility for possible inspection deficiencies; previous knowledge by technical personnel of contingent or incipient problems with the tunnel structure.

Section President **Klaus Fuelleborn** thanked Mr. Moffat for his outstanding presentation. He also extended the Section's appreciation to Sue Lior and Bill Thomsen for arranging the excellent meeting.

## 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.**

## SECTION CO-SPONSORS CONFERENCE

The Philadelphia Section, ASCE is a co-sponsor, together with universities, United States Environmental agencies, Ministries throughout the world, and numerous technical societies in the United States and abroad, in *The Eighth International Conference on Solid Waste Management and Secondary Materials*. The Conference will be held in Philadelphia on **November 15-18, 1992** at the Penn Tower Hotel, located on the University of PA campus near 30th Street Station. The Conference Chair is **Dr. Iraj Zandi**, University of Pennsylvania; and the Planning and Program Chair is **Dr. Ronald**

(Continued on page 5)

## EIT AND PE REVIEWS AT TEMPLE UNIVERSITY

Material required for the ENGINEERING FUNDAMENTALS examination (also known as the EIT Exam) will be covered in an evening course which starts on **Tuesday, January 12, 1993** and finishes in time for the April test. This is a non-credit course with a course fee of \$260. Additional information may be obtained from Professor Jochum, who also coordinates the PE Workshops for Civil Engineers.

As preparation for taking the CIVIL-SANITARY-STRUCTURAL Professional Engineering (PE) Examination, the Civil Engineering Department at Temple University is offering Saturday workshops for PE Examination Applicants. **The workshops are designed to supplement other preparation**, which may include well-selected graduate or undergraduate courses, self study and more extensive PE Review Courses. The workshops are considered appropriate as a final effort and as an early start.

Within each year, three different PE workshops are now scheduled for the last Saturday of **January, March and September, 1993**. Participants may enroll in one, two or all three workshops depending on their specific needs.

**Each of the three workshops addresses a well selected third of the total subject area likely to appear in the CIVIL-SANITARY-STRUCTURAL Examination.** Each workshop includes a testing exercise with criteria-specific feed back and direct access to at least three presenters with highly specialized qualifications in diverse areas of Civil Engineering.

**Dr. Frederick Higgins, Dr. Frederick Schmitt and Professor William Thomsen** are the core faculty involved with these workshops, which are organized and coordinated by **Professor Stephen G. Jochum**.

Details on the upcoming workshops may be obtained by calling the Civil Engineering Department at (215) 787-7814, Fax (215) 787-6936 or by writing to Professor Stephen G. Jochum, P.E., Department of Civil Engineering, Temple University (084-53), Philadelphia, PA 19122. The fee for the next workshop is \$88. Notes are included. Other references are recommended and optional.

## ACI REINFORCED CONCRETE DESIGN COURSE

The American Concrete Institute (ACI), the world's leader in the development of concrete design codes and information on concrete is sponsoring a new short course in *"Designing Reinforced Concrete."* The Seminar, being scheduled in cities throughout the United States, will be held in Philadelphia, PA on **November 12–13, 1992**, at the Holiday Inn, King of Prussia, PA (215) 265-7500, starting at 8:45 a.m. both days. World renowned instructors will lead discussions on subjects, including: Design Concepts and Safety Provisions; Flexural Strength in Members; Serviceability (Deflection and Crack Control); Shear Strength of Beams; Develop-

ment of Reinforcement; Combined Bending and Axial Compression (Uniaxial and Biaxial Bending); Length Effects on Columns; Design of Two-Way Slabs and Plates; Footings; Designing for Seismic Forces. Books you will receive include: Building Code Requirements for Reinforced Concrete ACI 318-89; Commentary on the ACI Building Code, ACI 318R-89; Design Handbook on Beams, One-Way Slabs, Brackets, Footings and Pile Caps, SP-17, Vol. 1; Design Handbook on Columns, SP-17, Vol. 2; Design Handbook on Two-Way Slabs, SP-17, Vol. 3. The course is worth 1.3 Continuing Education Units, which may soon be needed to maintain your license.

By attending this course you will: • Learn how to design efficient and safe reinforced concrete structures; • Understand how to use design aids to increase your design efficiency; • Gain confidence in your design decisions; • Discover the intricacies of the ACI 318-89 Building Code; • Master state-of-the-art design technology for improved performance and economy; • Work through practical design examples using the ACI Design Handbook (SP-17); • Learn from some of the top concrete design teachers in the world

**Why Attend?** To learn the answers to questions like: • Why are strength reduction factors so important?; • What are the six basic assumptions for strength design?; • Why are beams always under-reinforced?; • What is the minimum concrete cover over reinforcing steel?; • How do I select the best size and distribution of reinforcement in two-way slabs and plates?; • How can I account for stability considerations in slender columns?; • How do I interpret the anchorage and development requirements in the Code?; • What is meant by shear-moment transfer and how do I account for it in designing for shear?; • Why do we need compression steel in concrete?; • Can I design non-rectangular sections with simple design aids?; • Which framing systems provide superior seismic resistance?

YOU will find the answers to these questions plus a hundred more.

For full information and registration forms, contact ACI Member Services, American Concrete Institute, P.O., Box 19150, Detroit, MI 48219-0150, Phone: (313) 532-2600; Fax: (313) 533-4747.

## ATLSS SEMINAR SERIES

The Lehigh University Center for Advanced Technology for Large Structural Systems (ATLSS) announces a Seminar, open to the public, entitled: *"Engineering Design Research Center Activities Related to Architecture-Engineering-Construction,"* to be held at Sinclair Auditorium, Lehigh Campus, Bethlehem PA, on **Wednesday, November 11, 1992, 3:10 p.m.** (refreshments will be served at 2:45 p.m.). The speaker is **Dr. Steven J. Fennes**, Sun Company University Professor, Department of Civil Engineering and Engineering Design Research Center, Carnegie Mellon University, Pittsburgh, PA.

Additional inquiries may be directed to: **J. William Jahn, (215) 758-6107**; or **Richard Sause, (215) 758-3565**; or Fax (215) 758-6250.

## MEMBERS IN THE NEWS

### Wittes Receive National Award

**David R. Wittes** of Wittes & Associates, Philadelphia, PA, has received a \$1,500 Bronze Award in the 1992 Professional Awards Program of The James F. Lincoln Arc Welding Foundation. The national program, which recognizes those who have completed arc welding projects demonstrating cost reductions, safety enhancements, structural improvements or design innovations, granted a total of \$32,000 to 17 individuals.

Wittes's Bronze Award entry describes his use of full and partial penetration welds to create a carousel-type roof for a restaurant that echoes the Victorian ambiance of the Saratoga Racetrack, where it is located.

The Phila. Section congratulates Dave on his latest honor!

### Polk Reappointed to SEPTA Committee

Phila. Section, ASCE Past Director **William H. Polk** has been reappointed to the Southeast Pennsylvania Transit Authority (SEPTA) Regional Citizen's Advisory Committee for a term of two years, until September 1, 1994. In a letter from Montgomery County Commissioners Mario Mele, Jon D. Fox and Joseph M. Hoeffel, the Commissioners stated: "We in government are most appreciative of the tremendous contribution made to our county by people such as you. The challenges of county government remain great, and we are sure you will continue to make a fine input as a member of the SEPTA Regional Citizen's Advisory Committee."

The 16-member Committee, of which Bill Polk has been the co-chairman, is developing a plan to help Montgomery County lessen its transportation woes into the 21st century. The task will not be easy, Mr. Polk says, because movement of people and materials through the county is being complicated by an increasingly hard to maintain public transportation system, and decreasing funds from financially strapped Federal and State governments for maintaining highways and byways.

Bill Polk's Committee represents a variety of viewpoints. The cross section of individuals who are members include engineers, consultants, representatives of citizens groups, and people specializing in transportation for handicapped persons and mass transit.

### The Plotnicks Create a Masterpiece

IT'S A GIRL! Fred and Kim Plotnick (he's the Phila. Section, ASCE Construction Technical Group Chairman) proudly announce the birth of their first offspring: Harri Leigh Plotnick, on September 18, 1992.

Their beautiful creation weighed in at 7 lbs. 1 oz. – 20 inches. The Phila. Section extends its heartiest congratulations to the happy couple.

**"No one can make you feel inferior without your consent."**

## 1993 YOUNGER MEMBER GROUP AWARD

The purpose of the award is to promote excellence among the Younger Member Groups of the American Society of Civil Engineers. Younger Member Groups are defined as Associate Member Forums (AMF), Younger Member Forums (YMF), Younger Member Committees (YMC), etc. which operate at the Section and Branch level. It does not include Younger Member Councils. The award was officially instituted by action of the Society on July 9, 1985.

The award is known as the Younger Member Group Award. It is made annually to the most outstanding Younger Member Group of the American Society of Civil Engineers. Certificates of Commendation may also be awarded.

The Committee on Younger Members (CYM) shall recommend the winner of the award and those Groups receiving Certificates of Commendation.

The award shall consist of a framed certificate to be presented to the Younger Member Group at an Annual Convention meeting of the Society.

### RULES

- The evaluation process involves scoring of nomination documents submitted by Younger Member Groups. The nomination documents should list professional, technical, social and special activities sponsored by the Younger Member Group for the preceding calendar year.
- Younger Member Groups may submit written nomination forms which are available from ASCE at the address below.
- Previous award recipients are eligible to reapply.
- By February 1, 1993 seven copies of the nomination should be submitted through the Section or Branch Secretary to: ASCE Awards Department, 1015 15th St. NW, Suite 600, Washington, DC 20005.

## Section Co-Sponsors Conference

(Continued from Page 3)

L. Mersky, Widener University – both men are distinguished members of the Philadelphia Section, ASCE.

The previous Conferences in this series were held in Philadelphia and New York since 1981 to bring together experts from government, business and academia to examine issues related to various fields of solid wastes/resources management and technology. Over the years, it has been seen how the proper management of solid wastes has changed from a routine engineering and public works function into a difficult and costly operation that severely strains the resources of many communities. As research and development activity has increased, the inter-disciplinary nature of the solid waste field has become more apparent. The reason for this Conference is to present the latest advances in their respective fields, to learn from each other's experiences.

For full details and reservation information, telephone inquiries should be made to: (215) 898-7106; Fax: (215) 573-2065.

## 1993 EDMUND FRIEDMAN YOUNG ENGINEER AWARD

To recognize professional contributions of younger members of the Society, Edmund Friedman, Past President of ASCE contributed funds to establish the Edmund Friedman Young Engineer Award for Professional Achievement. The award was officially instituted by action of the Board of Direction in October 1972.

This recognition is awarded annually to members of the American Society of Civil Engineers who are 32 years of age or less on February 1 in the year of the award, and who are judged to have attained significant professional achievement, by the degree to which the candidates have shown:

- Service to the advancement of the profession;
- Evidence of technical competence, high character and integrity;
- Leadership in the development of younger member attitudes towards the profession;
- Contributions to public service outside of their professional career;
- Other evidence of merit, which has advanced the Society's objectives.

### RULES

- The award may be made each year to as many as five recipients. No recipient may receive the award more than once.
- An individual or group may submit written nomination forms which are available from ASCE at the address below.
- A nominee not selected one year may be renominated in a subsequent year, provided he/she is eligible under the above stipulations. Meritorious nominees, not selected in a given year, may be held over by CYM for consideration in the competition of the following year.
- Deceased persons are not eligible for nomination for the award, although an award can be made posthumously to a nominee whose petition had reached the award committee during his/her lifetime.
- The award shall consist of a framed certificate inscribed with the name of the recipient and his/her exceptional achievements, to be presented at the 1993 ASCE National Convention.

By February 1, 1993, seven copies of the nomination should be submitted to: ASCE Awards Department, 1015 15th St. NW, Suite 600, Washington, DC 20005.



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## Slide Rule Now Relic in Capsule

Sometime in the future, when yet-unborn statisticians open a time capsule in Alexandria, VA., they will confront a slick wooden ruler-like stick coated with tiny numbers and lines.

It is a slide rule, as anyone who had not made it to high school physics or chemistry, by, say, the mid-1960s might not know.

A slide rule, says the Encyclopedia Americana, is "a mechanical device for making rapid mathematical calculations accurate to several significant figures."

To the American Statistical Association, marking its 150th Anniversary, the slide rule was the perfect mathematical relic to symbolize the past. A fancy solar calculator was encapsulated to represent the present and a computer chip to stand for the future.

The slide rule, invented in the 1620s or 1630s by an English mathematician, was nearly universally replaced by the calculator around 20 years ago. Has society lost something in the transition?

"No," says William Eddy, professor of statistics at Pittsburgh's Carnegie-Mellon University. "Slide rules are inherently slower and more painful to use. They're less accurate, too, because they're analog as opposed to digital. Of all the things in the capsule, it is the least statistical."

Eddy was a member of the committee that chose what went into the time capsule, which was implanted in a column in the ASA's headquarters in Alexandria, a Washington suburb. The capsule is to be opened in 50 years or a century — that decision to be left to the statisticians of the future.

**FREDRIC L. PLOTNICK, ESQ., P.E.**  
CONSTRUCTION CONSULTANT  
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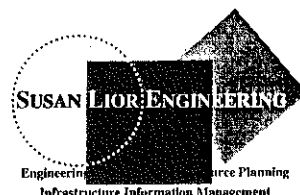
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## IMPORTANT! 1992-1993 MEETING NOTICES

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, January 20, 1993 - NOTE CHANGE IN DATE -

Dinner Meeting - King of Prussia Holiday Inn  
Joint Meeting with ASHE & Reading Branch  
Subject: To be announced  
Speaker: **Tom Larson** (Arranged by **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

Spring/Summer Picnic - Phila./Reading Branch & South Jersey Sections Informal Family-Oriented Picnic

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