

# the news



PHILADELPHIA SECTION  
AMERICAN SOCIETY OF CIVIL ENGINEERS  
1317 Spruce Street, Philadelphia, Pa. 19107

Non-Profit Org.  
U. S. POSTAGE  
**PAID**  
Philadelphia, Penna.  
Permit No. 1845

124634 04400  
Joseph R. Syrnick  
7022 Matthias St  
Philadelphia PA 19128

VOL. 54 - I

OUR 69th YEAR

October, 1981

## OCTOBER LUNCHEON MEETING

Philadelphia Section, American Society of Civil Engineers

**TUESDAY, OCTOBER 13, 1981**

### MEETING PLACE:

Project Office of the Center City Commuter Rail Connection  
917-19 Filbert Street, Philadelphia, Pennsylvania

### LUNCHEON MEETING:

**12:00 NOON SHARP.** Catered buffet luncheon will be served to those who reserve; otherwise, bring your own lunch bag — SEE BOX BELOW!

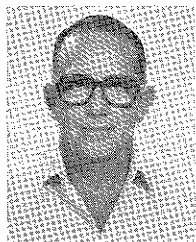
### SUBJECT:

**A FIELD STUDY TOUR  
OF THE CENTER CITY COMMUTER RAIL CONNECTION**

### SPEAKER:

**GENERAL W. T. MEREDITH**, Project Manager, Philadelphia Railway Consultants & President for Parsons Brinkerhoff Construction Services

**IMPORTANT NOTE:** Please call Ellie at (215) 265-7724 (at Ira Nelson Pierce Associates) to indicate whether or not you wish us to reserve a \$4.00 buffet luncheon. Please call in any case to enable our hosts to plan for your attendance during the tour.



The \$250 million construction project of a 1.7 mile, 4-track commuter rail connection is one of the most controversial, complex projects ever planned for Center City, Philadelphia. It involves cut and cover tunneling; modifications to existing subway and rail stations; construction of a new underground station; tunnel sections above an existing subway; underground pedestrian passageways; the underpinning of several major structures; and the permanent relocation of a major traffic artery.

General Meredith and his staff will describe the many challenges that are facing the engineering team as they burrow through our nation's most historic city, with its complex of utilities, major office towers, traffic, transit, and other facilities - - all of which must be secured and maintained.

General Meredith was formerly with the U. S. Army Corps of Engineers and the U. S. Air Force, from which he retired as Brigadier General. He attended the College of William & Mary in Virginia, Catholic University, and University of Maryland. General Meredith is married and is the father of four daughters.

**Students — Half Price for lunch.** Please call Ellie at the above-noted number and identify yourself as a student. The Phila. Section will pay ½ of your cost for the buffet luncheon.

## NEXT MONTH'S MEETING

### MARK YOUR CALENDAR

DINNER MEETING  
PHILA. SECTION, ASCE

Date: **Tuesday, November 10, 1981**

Engineers' Club—7:30 P.M.

Cocktails: 5:30 Dinner: 6:30

Subject: **Techniques in Construction Management**

Speaker: **John Ball**, President, R. M. Shoemaker Company

Villanova University Night

## TECHNICAL GROUP ACTIVITIES

### Geotechnical

Date: **Tuesday, October 20, 1981**

7 p.m. — Engineers' Club

Subject: **Overview of Waste Material Problem Areas and Related Detection Methods**

Speaker: **Dr. Robert M. Koerner**, Professor, Department of Civil Engineering, Drexel University, Philadelphia

Program Host: **Dr. Ziyad I. Husami**  
Chairman, Geotechnical Group

Refreshments are served

The temporary or permanent containment of waste materials in this first of a lecture series on "The Geotechnics of Waste Management," represents one of the most challenging tasks confronting our industrialized society today. Included are sanitary, chemical, hazardous, toxic and radio-active waste products. Needed to solve the various problems are the adaptation of existing technologies and the development and implementation of new technologies. Obviously, the solutions must be reached in an efficient and economic manner. While many different and diverse technologies relate to these

(continued on page 2)

### THE PRESIDENT'S MESSAGE

As we start our 69th year this October, we can look back to last year's activities with a comfortable feeling of accomplishment. The excellent and well attended Main Section monthly meetings, the activities of several of our Technical Groups, our Section's participation in and support of the activities of several of the other local technical societies, our close relationship with engineering students in our local universities, and our association with the Women's Auxiliary culminating in the May Social all contributed to a highly successful year. We were also able to take pride in the honors bestowed on two of our Past Presidents - the election of Robert Koerner as Engineer-of-the-Year and Celestino Pennoni as a National Director representing District 4.

That was last year. We must now look forward to this year not only to maintain our high level of excellence but, in fact, to increase our efforts and raise our standards even higher.

Happily we are off to an excellent start. Our Program Committee has formulated an exciting and stimulating program for our Main Section meetings starting with this month's tour of the Center City Commuter Tunnel construction.

In spite of our successes, there are, however, some areas which need strengthening and improving. As of this date, we are still lacking chairmen of the Construction Group and the Transportation and Urban Development Group. I should like to urge those members whose interests lie in these areas to step forward and accept the challenge of chairing these groups. As a former Chairman of the Structural Group, I can assure you that the rewards are well worth the efforts. If, you wish to serve as chairman or as a co-chairman of one of these groups, please contact me. I shall be most happy to assist you in setting up your programs.

In addition to serving as Group Chairmen, I should like to invite all members to contribute to the improvement of our Section by forwarding to me any suggestions you have to improve our programs or to initiate innovative activities.

Another area in which I should like to see improvement is that of membership. Of the 1,200 National members assigned to and eligible for membership in our Section, only 600 are Active dues-paying members. Let's go after those other 600! I urge all members to encourage their friends and colleagues to join the Section. Bring them to our meetings. Give them the opportunity to hear outstanding speakers, to meet their peers and to enjoy the camaraderie of old and new-found friends. I also urge all company owners, partners, chief engineers, etc. to encourage their employees to attend our meetings and participate in our activities.

In summary, we have two simple goals. One is to maintain our high level of excellence and activity. In addition we must broaden and increase the activities of all of our Technical Groups. The second goal is to increase our membership. Even a modest increase of 5 to 10 percent would be a step in the right direction. I urge you all to continue your enthusiastic participation in our programs and activities and to make this coming year even more successful than last year.

Sincerely yours, Frederic Roll

President, Philadelphia Section, ASCE

#### TECHNICAL GROUP ACTIVITIES

(continued from page 1)

problems, Geotechnical Engineering is especially suited to solve them.

Presented will be an overview of various problem areas dealing with sub-surface conditions, along with a number of potential detection and monitoring methods. Included will be standard geophysical methods, along with a wide assortment of nondestructive testing methods. A tentative ranking of methods versus specific problems will be presented.

—O—

#### Structural

Date: **Wednesday, October 21, 1981**  
Engineers's Club — Luncheon 12 noon  
Meeting 12:45 p.m., Ending 1:30 p.m.

Subject: **Dynamic Analysis of Machine Foundations**

Speaker: **Dr. Richard Toland**, United Engineers and Constructors

Program Host: **James Robinson**, Chairman, Structural Group

Conventional weight-ratio designs can be inadequate when the engineer is presented with a foundation design for multi or variable speed motors, strict sensitivity criteria by machine manufacturers, or poor soil conditions. Dr. Toland will present a discussion of this topic which is rapidly becoming an area of concern for the structural engineer. RSVP for luncheon (\$5.00) to James Robinson (215) 964-1300 ext. 281 by October 19, 1981.

### MEMBERS IN THE NEWS

Ira N. Pierce announces the formation of **Ira Nelson Pierce Associates**, specializing in Civil and Transportation Engineering for both the private and public sectors. The firm is located at Valley Forge Plaza, Suite 444, 1150 First Ave., King of Prussia, Pennsylvania 19406 (the office tower adjacent to the round Sheraton Hotel Tower); (215) 265-7724.

Best wishes of the Phila. Section are extended to Ira in his new venture. For many years he was Chief, Public Transportation Planning, Delaware Valley Regional Planning Commission.

—O—

**Brian J. Lewis**, Past President of the Phila. Section, ASCE (1977-1978) has joined the Coxe Group, Philadelphia, as a Senior Management Consultant with particular responsibility for working with consulting engineering firms in marketing and management areas.

### PHILADELPHIA SECTION AMERICAN SOCIETY OF CIVIL ENGINEERS

#### OFFICERS 1981 - 1982

##### PRESIDENT

Frederic Roll

##### VICE PRESIDENTS

Bernard M. McNamee William M. Malarkey

##### SECRETARY

Albert M. Tantal

##### ASSISTANT SECRETARY

Judy Y. Longfield

##### TREASURER

Charles J. Denny

##### TREASURER EMERITUS

Theodore Davis

##### MEMBERSHIP SECRETARY

David M. Barr, III

##### DIRECTORS

Ish K. Aneja Francis J. Depman, Jr.

Harold G. Byers Thomas J. Lauer

John E. Durrant Charlene O'Connor

Robert B. Ludgate

(Reading Branch)

##### PAST PRESIDENTS

Celestino E. Pennoni Kenneth J. Zitomer

Joseph R. Szyrnick

#### PUBLICATIONS COMMITTEE

Sidney Robin

Chairman and Editor of THE NEWS

Joseph R. Szyrnick

Assistant Chairman and Associate Editor

Staff Writer

John E. Spitko, Jr.

Publications Coordinator

Albert M. Tantal

#### SEND COPY TO:

Sidney Robin  
64 Nancy Drive  
Richboro, Pennsylvania 18954  
Phone: (215) 322-7464

**COPY DEADLINE FOR  
NOVEMBER, 1981 ISSUE  
OCTOBER 13, 1981**

## STUDENT CHAPTER CONVENTION

The 1981 Student Chapter Convention - the first conclave of its kind since the recent incumbency of the Phila. Section's dynamic Director and Chairman of Student Chapters, **John E. Durrant** - was hosted by the Phila. Section last Spring.

Friday, April 24, 1981 - **The 43rd Annual Pa.-Delaware Student Paper Competition Conference** - held at Drexel University.

Saturday Morning, April 25, 1981 - The Phila. sponsored **9th Annual Student Chapter Concrete Canoe Race** - run on the Schuylkill River rowing course near Peter's Island along the East River Drive.

### Seven Papers Presented at Conference

The Student Paper Competition Conference was established by the Phila. Section in 1926 to indoctrinate authors to make oral presentations - to audiences of their peers - of original compositions on diverse topics of Civil Engineering interest. Representatives of six schools in the Pennsylvania-Delaware District comprised the well-attended Conference. Seven papers, authored by male and female students from Villanova University, Swarthmore College, Drexel University (two papers), Widener University, Lafayette College, and Lehigh University, were presented.

The papers are classified into two categories: Group A, which involves laboratory testing and experimentation as well as investigative research; and Group B, which requires no lab work, but focuses on literary research and analysis. In some cases, two or more authors collaborate on the composition of the paper, and one of them delivers the oral presentation at the Conference. The papers are judged for awards on the basis of content, presentation and professional quality.

The judges were: perennial Chairman **Sidney Robin**, Past President of the Phila. Section and Chairman of Publications; **James L. Harris**, an official of Gilbert Associates, Reading, Pa. and a member of the Reading Branch of the Phila. Section; and **M. E. (Kelly) Hillman**, Design Manager, E. I. duPont de Nemours & Co., Wilmington and a member of the Delaware Section.

### Papers Are Excellent - Awards Given

The papers were outstanding in preparation and were delivered with confidence and astuteness by the students. Included in each was a brief discussion period in which members of the audience questioned the speakers relevant to the papers.

Special Certificates of Honorable Men-

tion were awarded to all authors and speakers. (Included in the prize awards listed below was a generous assortment of technical textbooks contributed by ASCE National Headquarters):

**First Prize - Group A (\$35.00)** - "The Use of Geotextiles to Improve Soil Strength," by **Wayne Ferguson**, Drexel University.

**First Prize - Group B (\$35.00)** - "Seismic Design Parameters and Seismicity of the Philadelphia Area," by **Roman Hryciw**, Drexel University.

**Second Prize - (Tie) (\$25.00)** - "Failure of Beams with Unreinforced Eccentric Holes" (a Group A paper), by **Paul Leander**, Widener University.

**Second Prize - (Tie) (\$25.00)** - "Nancy Run Flood Study" (a Group B paper), by **Sabrina Watkins**, Lehigh University.

**Third Prize - (\$15.00)** - "Preliminary Discussion of a Floating Disc Solar Collection System," by **Barbara A. Cooke**, Swarthmore College.

(Second and Third Prizes were awarded irrespective of Group category).

A special treat of the Conference - after Luncheon - was an extremely interesting illustrated talk on the topic: "Dam Failures." Speaker was the Phila. Section's distinguished Past President, **Dr. Robert M. Koerner**, Professor of Civil Engineering, Drexel University and 1981 Delaware Valley Engineer-of-the-Year. Bob's subject was one to which he has devoted extensive research and technical writing, including authorship of several books.

Highest compliments for the success of the Conference are extended to Student Chapter Committee Chairman **John Durrant**, whose guidance and ingenuity generated renewed planning, participation and enthusiasm among the students; **Richard E. Murphy**, President of Drexel's ASCE Student Chapter, who presided cooperatively with **James A. Mott**, Drexel Chapter Treasurer; Faculty Advisor **Dr. Eugene Parkin**; **Dr. Bernard M. McNamee**, Chairman of the Civil Engineering Department (and Vice President of the Phila. Section) and **Dr. Richard E. Woodring**, Dean of the College of Engineering at Drexel, and active Phila. Section, ASCE member.

### The 1981 Concrete Canoe Race

This year's annual Concrete Canoe Race was held Saturday, April 25, 1981 on the Schuylkill River. As in past years the event provided a great day of racing and fun. Participating schools included Drexel, Lehigh, Spring Garden, Temple, Penn, Villanova, and Widener.

Highlights for the day included strong

all-around performances from the Penn and Temple teams, with the high-powered Drexel women taking first place for the second year in a row. Somehow the Spring Garden team managed to start each race but never finished and unfortunately, Widener developed a crack in its canoe, forcing the team to withdraw for the day. From the morning swamp test to the traditional afternoon barbecues a fun day was enjoyed by all.

Results for the day:

Best Constructed Canoe

1st - Penn, 2nd - Temple

Best Decorated Canoe

1st - Temple, 2nd - Villanova

Men's Race

1st - Penn, 2nd - Villanova

Women's Race

1st - Drexel, 2nd - Temple

Faculty Race

1st - Lehigh, 2nd - Penn

Mixed Race

1st - Temple, 2nd - Penn

A large measure of recognition is due the race judges; **Dr. Ralph Koler** of Villanova, **Dean Richard Woodring** of Drexel, **Randy Cronin** of the PCA, **Branco Galunic** of Temple; and to **Tom Dowd** of the Schuylkill Navy for his assistance on the river. A special thanks is also due **Tom Brady**, who supplied and piloted the starter's boat.

## LECTURE SERIES ON WASTE MANAGEMENT

The Geotechnical Group of the Philadelphia Section, ASCE is sponsoring a series of lectures on the Geotechnics of Waste Management between October 1981 and April 1982. The lectures in this series will highlight the role of the geotechnical disciplines in waste management projects. Among the topics covered are detection methods, the regulatory milieu, the design of hazardous waste disposal facilities, nuclear waste disposal in geologic repositories, hydrogeologic aspects of hazardous waste disposal, remedial measures, and tailings dams.

You are cordially invited to attend. Should you have any questions, require further information, or wish to have your name added to our mailing list, please call or write to: **Dr. Ziyad I. Husami**, Chairman, Geotechnical Group, Philadelphia Section, ASCE, c/o Stone & Webster Engineering Corporation, P. O. Box 5200, Cherry Hill, NJ 08034, (609) 482-3889.

**Editor's Note:** All Geotechnical Group Meetings on the Lecture Series will be announced in advance in THE NEWS.

**WOMEN'S AUXILIARY**

Officers 1981 - 1982

President —

Mrs. Robert M. (Paula) Koerner

Vice President —

Mrs. Francis J. (Ruth) Depman, Jr.

Recording Secretary —

Mrs. Edwyn L. (Mary) Shoemaker, Jr.

Corresponding Secretary —

Mrs. Peter C. (Diane) Johnson

Treasurer —

Mrs. William (Natalie) Clayton

Past President —

Mrs. James D. (Ann) Leisure

**September Meeting**

The first Luncheon-Meeting of the 1981 - 1982 season was held at the Engineers' Club on Wednesday, September 16, 1981. Ms. Joan Pierce an active member of the Women's Auxiliary presented a very interesting talk and demonstration on Hypnosis.

**October Meeting**

The next regular monthly Luncheon-Meeting will be a visit to the **Buten Museum of Wedgewood, Bala Cynwyd**, on Wednesday, October 21, 1981. Luncheon preceding the visit to the Museum will be at 12:00 Noon at the **General Wayne Inn, 625 Montgomery Avenue, Merion, PA**. The Museum is located at 246 N. Bowman Avenue, Merion. Full information, directions and reservations may be obtained by calling **Mary Ellen (Mrs. Warren) Van De Vort - (215) 483-0714**; or **Libby (Mrs. Harry F.) Irwin - (215) 446-1765**.

Auxiliary members and guests are

cordially invited to attend all Luncheon-Meetings and other functions arranged and sponsored by the Auxiliary. **New members are always welcome to join.** Please call Membership Secretary **Marie (Mrs. Kenneth J.) Zitomer - (215) 548-5324**.

**OBITUARIES****DALE T. HARROUN**

Dr. Dale T. Harroun, long a distinguished member of the Phila. Section, ASCE, and a nationally recognized expert in the Civil Engineering branch of Soil Mechanics and Foundation Engineering, died suddenly at a jobsite on April 24, 1981.

Dr. Harroun was a Professor of Civil Engineering in his specialty at the University of Pennsylvania. During his tenure and after his retirement from teaching at the University, he maintained an elaborately equipped soil-analysis laboratory on the grounds of his residence in Media, Pa. Here he conducted a consulting and soil analysis practice for major construction projects, contractors and developer-clients in Pennsylvania and other States. Many of his former students assisted him in his laboratory work.

Dr. Harroun was active in National ASCE and Phila. Section affairs for many years. His widow, **Ruth G. Harroun**, has been a member of the Section's Women's Auxiliary since its establishment in 1957, and served as its

President for two terms (1961-62 and 1962-63).

Contributions in Dr. Harroun's memory may be made to the **Heart Fund**, 333 W. State St., Media, PA 19063.

—o—

**SIDNEY SHORE**

**Editor's Note:** An autobiographical Section Profile of Dr. Shore appeared in the April-May, 1974 issue of THE NEWS. A more recent article, describing Dr. Shore's talents as a sculptor, was published in the March, 1981 issue. The Section Membership is respectfully referred to these deep insights into Sid Shore's character and abilities.

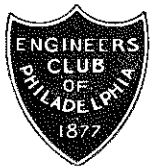
Dr. Sidney Shore, a very active member of the Phila. Section, died at his Penn Valley home on May 19, 1981, after a long illness. He was a pioneer in the use of computers in structural analysis and building design. A Professor of Civil and Urban Engineering at the University of Pennsylvania, he was Head of that Department from 1973 to 1978.

Dr. Shore had an international reputation for innovative research in solar energy and new concepts in housing structural systems. He had received many honors for teaching excellence, and was a guest lecturer at schools in the United States, Canada, Japan and Europe. He was a Fulbright Scholar, and served as a visiting Professor of Structural Mechanics at the Royal Institute of Technology in Sweden. He had also taught at Princeton University, Swarthmore College and Rutgers University. As a registered Professional Engineer, Sid practiced as a consultant to government and private industry, as well as an associate of major Consulting Engineering firms on large building projects.

Contributions in Dr. Shore's memory may be made to the **Sidney Shore Memorial Prize**, c/o Dept. of Civil and Urban Engineering, College of Engineering and Applied Science, Room 113, Towne Building/D3, University of Pennsylvania, Philadelphia, PA 19104.

**BE A WATCHDOG**

Every ASCE member should become a legislative watchdog. You are asked to pass to the Section any information on legislation of interest to civil engineers currently being introduced. Together we can better serve the public!

**Seal of the Professionals****Engineers and Engineering**

Members of The Engineers' Club represent a group of men and women outstanding in engineering, the sciences and management. They must be specialists by education, active interests and/or job function to qualify for membership. This unique difference between The Engineers' Club attracts qualified applicants.

There are many reasons why you should consider your qualifications for Club membership: A continuous schedule of technical meetings during the winter season; refresher and advanced courses that might be helpful in your job; many beautiful dining rooms in which you and your family, friends or clients can enjoy a quiet luncheon or dinner; and, even a few social events during the year.

You'll enjoy the atmosphere and association with your peers. Why not call 735-5234 and ask for Mr. deKovacs, our Executive Manager.

**THE ENGINEERS' CLUB OF PHILADELPHIA**

1317 Spruce Street

Phila., PA 19107