



#### AMERICAN SOCIETY CIVIL ENGINEERS

VOL. 48 - No. 7

Our 63rd Year

APRIL - MAY, 1976

# APRIL JOINT MEETING

Philadelphia Section, American Society of Civil Engineers Philadelphia Post, Society of American Military Engineers

Sponsored by the Transportation and Urban Development Group

# TUESDAY, APRIL 13, 1976

Engineers' Club, 1317 Spruce Street, Philadelphia Dinner — 6:30

Cocktails - 5:30

Meeting - 7:30

SUBJECT:

#### RAILROAD GEOPOLITICS

SPEAKER:

DR. JOHN C. KOHL, Professor, Civil and Urban Engineering, University of Pennsylvania

PROGRAM HOST:

LOUIS W. PETULLA, Chairman, Transportation and Urban Development Group

On April 1, the Consolidated Railroad Corporation (ConRail) will assume operations of the bankrupt railroads in the northeast. The next couple of years will be critical to the survival of American railroads. There is no end to the questions and the answers have not yet begun to emerge.

Dr. Kohl is one of the most eminent spokesmen in the field of transportation. His biography reads like a member of Who's Who, of which he is a member. His experience includes the academic community, private industry, consulting engineering and government. His former positions and responsibilities are too lengthy to list completely. However, the most relevant are Vice Chairman of the Delaware Valley Regional Planning Commission, Commissioner of Transportation in the State of New Jersey and currently a member of the faculty at the University of Pennsylvania. He is also currently the Trustee of the Philadelphia, Baltimore and Washington Railroad, a leased line of Penn Central. Dr. Kohl's comments should be both topical and thought provoking.

#### SPECIAL FEATURE:

#### "Swarthmore College Night"

Honoring the ASCE Student Chapter, faculty and alumni of Swarthmore's Civil Engineering Department. All students, faculty and alumni are urged to attend.

# Free Beer and Refreshments at the Meeting

Mail Reservation Cards Immediately - Win a FREE DINNER!

STUDENTS - Plan to attend for Dinner (Half Price) or meeting after Dinner

Editorial:

#### THE KOERNER MAGIC

If one had to pick a single phase to depict his term as Section President, it would probably be either dynamic, or enthusiastic leadership.

From the outset, Bob Koerner made it his goal to increase communication among members. He continually emphasized that every member is an important part of Section operations. In his message as incoming President in October of 1975 he said, "Welcome is the key word which should always be on our minds in all of our activities. We welcome all to participate in the undertaking of the various activities of the Section." And welcome he did -- with enthusiasm.

Surely, much of the credit for the very successful year the Section has had should be shared with the various Officers, Directors, Technical Group Chairmen, and others who have contributed much toward our goal. But there is no way one can overlook the impact that Dr. Koerner's infectious enthusiasm and continuous activity have had upon all with whom he comes in contact. Because he demands so little and because he leads by example, he is able to extract maximum efforts from his asso-

Several very ambitious programs have been initiated this year under Dr. Koerner's lead,

\* The Continuing Education course offered by the Section drew an enrollment in excess of 30, and has proven itself a viable and needed service.

(continued on page 4)

Notice: If THE NEWS arrives late -please call the Engineers' Club, PE 5-5234 and leave word for Mr. DeKovacs, Exec. Mgr., to reserve a dinner plate.

#### IT'S THAT WONDERFUL TIME AGAIN

# !! The Annual Spring Social!!

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# SPECIAL MAY LUNCHEON - MEETING

Sponsored by the Associate Member Forum

TUESDAY, MAY 18, 1976

Engineers' Club, 1317 Spruce Street, Philadelphia Luncheon 12 Noon Meeting 12:45 P.M.

SUBJECT:

LEGISLATION AND ITS EFFECT ON THE CIVIL ENGINEERING PROFESSION

PANEL DISCUSSION:

SAMUEL S. BAXTER, PE. Consulting Engineer MATTHEW J. McTISH, PE, President, Matthew J. McTish & Associates GEORGE R. BEETLE, PE, Partner, Louis T. Klauder & Associates PROGRAM HOST:

## ERNEST G. BRIZELL, III, President, Associate Member Forum

To most members of the public, the workings of our legislative system remains a mystery. We are sometimes helped by the mass media in making us aware of potential rules that will have an effect on our lives. But what about legislation that will effect our profession?

That is what will be discussed at this meeting. The three panel members have all been involved in legislative actions at either the national, state or local

Samuel S. Baxter, PE, former Phila. Water Commissioner is currently a private engineering consultant in water resources and the environmental field. He is a graduate of Drexel University and also has been awarded an Honorary Doctorate from Drexel. Mr. Baxter is Past President of ASCE, AWWA and APWA,

Matthew J. McTish, PE, a C.E. graduate of the University of Pittsburgh, is President and Founder of M. J. McTish and Associates, Consulting Engineers. He is currently Co-ordinator of the District 4 Council Legislative Task Force which emcompasses Pennsylvania. He has been involved with engineering legislative matters for the past five years.

George R. Beetle, PE, is a partner in the firm of Louis T. Klauder and Associates. He is currently Chairman of the Legislation, Registration and By-Laws Committee of the Philadelphia Section ASCE. George is active in keeping abreast of legislative actions at the local level as it effects civil engineers. He is a graduate of the Woodrow Wilson School of Public and International Affairs, Princeton, University.

#### LIFE MEMBERSHIPS AWARDED

A very pleasant Special Feature of the March 9th meeting was the awarding of ASCE Life Memberships, an annual event. It has been the Section's privilege almost every year in recent times to enjoy the presentations by one of our most distinguished and articulate members: Samuel S. Baxter, former Philadelphia Water Commissioner, Past President of National ASCE and Phila. Section.

Six Awards were made, including one posthumously to Earl J. Billingsley, who died two weeks before the March 9th meeting (see "In Memoriam" elsewhere in THE NEWS). Two members were present at the meeting and received their certificates in person. They were:

Stephen E. Butterfield Donald W. Orton

In addition to the posthumous award to Mr. Billingsley, Certificate Awards to three members who were unable to attend the meeting were read:

> George H. Dann John R. Grandinetti Walter S. MacLaughlin

Arrangements were made to mail the Certificates to these individuals.

## PHILADELPHIA SECTION AMERICAN SOCIETY OF CIVIL ENGINEERS

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## THE PRESIDENT'S MESSAGE

As the A.S.C.E. year draws to a close, I wish to take this opportunity to reflect a bit on the past year, with hopes that such reflection synthesizes the past and aids the new.

- Item—Wow! it went fast! Last year's Bala Social and installation of officers seems like yesterday, and here we are ready for the next slate of officers so ably put together by Al Quinn,
- Item—Technical content at Section and Group meetings was high! This is really the heart of our professional function and the fifty or so meetings we sponsored were informative, well presented and reasonably well attended. Oh sure, I would have liked more people at many of the meetings, but those in attendance were rewarded for their efforts, and that's what its all about. Good for them, and thanks to Joe Syrnick, Walt Clark, and all of the technical group officers for their efforts.
- Item—We extended ourselves into new or revised activities. Into Continuing Education thanks to Al Richie, into a soon-to-appear CE Hotline thanks to Lou Petulla, a joint Women's program thanks to Audrey Heiser, and the beginning of a new Wage and Salary Survey, thanks to Ernie Brizell. Speaking of beginnings, the Reading Branch, thanks to Fred Williams and his officers, appear to have a superb, well functioning organization which will be around for many years to come.
- Item—We continued many ongoing programs and activities. Publication of THE NEWS, where thanks go to Sid Robin, Joe Syrnick, John Spitko and Al Tantalla, an active legislative committee thanks to George Beetle, a long range planning committee under the able leadership of Will Heiser, a careful hawking of our Humphrey Fund by Bill Padlasky, a super treasurer by the name of Ted Davis, an excellent Secretary, Ira Pierce, a wonderfully cooperative Assistant Secretary, Joe Cervone, an active Membership program under Gerry McDonnell, a continuation into Career Guidance under Larry Moy and Walt Clark, and many more, too too numerous to name here, but my thanks go to all.
- Item—We're getting ready for a National Meeting. Under the tremendous drive and enthusiasm of Jim McPhillips we have a complete organizational structure too extensive to list here. Special kudos though are due to the finance group of the meeting, Joe Welsh, Bruno Talvacchia, and with deep regret at his passing, the late John Gallen.
- Item—We're getting ready for next year. In-coming President Will Heiser and his fellow officers are on stage and raring to go! Let's give him and them our best wishes, and help. I surely will and hope all of you will do so also.

In closing let me say that it was an honor to have served you, hope that the ship stayed affoat, and wish it smooth waters ahead.

Yours,

Bob Koerner

The Subscription Form for you participation in the Phila. Section's Commemorative Book: "The History of Civil Engineering and Construction in the Delaware Valley" is enclosed with the issue of THE NEWS.

Please send in your checks for the insertion of your choice — as soon as possible — to Mr. Talvacchia as noted on the form.

For technical publication information contact **Sidney Robin**, Chairman of Publications, Phila. Section ASCE, 4745 N. 12th St., Phila., Pa. 19141; (215) DA 9-4121.

This valuable publication is the chief fund-raiser for the 1976 ASCE National Convention and Exposition to be hosted by the Philadelphia Section September 27 - October 1, 1976.

Take part in the Convention. And contribute your share to the Commemorative Book. Please cooperate.

WE NEED YOUR HELP!!

# MARCH MEETING

March 9, 1976

#### The Ladies Join Us

In the face of a sudden and horrendous late-winter snowstorm, more than fifty hardy- and hearty- members of the Phila. Section, ASCE and its Women's Auxiliary assembled in their Second Annual Joint Meeting. The rewarding affair was co-hosted by Auxiliary President Audrey (Mrs. Will M.) Heiser and Section President Bob Koerner. Featured speaker was Mrs. Geraldine Galli Loose, Senior Editor, Engineering News-Record Magazine.

# A Common Bond with ASCE

In intrduction, Mrs. Loose called attention to an affinitive association with ASCE through her associate, Art Fox, Editor of E.N.R., and this year's National ASCE President.

Our speaker's topic was: "Construction — What's Ahead?" Through convincing statistics, she demonstrated the magnitude of the construction industry in the United States. Its volume of \$130 billion last year was larger than the automobile and steel manufacturing industries combined; as such it is of course a major segment of the nation's gross national product. Its total ancillary input into the economy is almost incalculable, because of the contributory manufacturing and buying generated by the creation of new buildings and facilities.

#### Short-term Prognosis

Mrs. Loose's forecasts were predicated on Engineering News-Record's shortterm and long-term projections. The major construction outlook elements for the near-term include:

- \* Dollar volume will increase about 5% in 1976. This translates into an actual decline, because of inflation.
- \* Financing costs will continue to be restrictive, as will be governmental retrenchment on public works projects as part of the federal battle against inflation.
- \* State and City construction is expected to be about 20% less this year. Wage increases will persist despite depressed volume of construction.
- \* General public construction also will be down from 1975. This will cause hardship on Consultant Engineers as well as Contractors. The "winners" will be those individuals and firms with the versatility to "go where the action is" petro-chemical industries, for example, in various parts of the world: Venezuela, Indo-China, Middle East, etc.

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#### MARCH MEETING

(continued from page 3)

\* By the end of 1976, modest improvement in residential construction is anticipated; not sufficient, however, to make an overall positive contribution unless there is an appreciable relaxation of money restrictions, labor and material costs.

In Mrs. Loose's view, the outlook for the near term is not encouraging.

#### Long-term Prospects

The E.N.R. projections for the year 2000 focus on "the life force." Our needs change, explained Mrs. Loose, as our numbers increase. Urban areas will require the bulk of attention because the populations will concentrate there. "Mega-structures" — inhabiting as many as 25,000 people (as large as complete small towns of today) are to be expected.

Lighter and recycled materials will play accelerating major roles in conserving resources. Solar energy research, nuclear fission development for electric power, exploitation of fossil fuels still available (coal, oil, gas), including sources from the sea-beds, will continue to expand in scope in the 21st century. The data gleaned from space exploration and technological analyses will be adapted to earth uses.

Building will be vertical in the future, predicts Mrs. Loose. 150-story structures will not be uncommon. The speculative prognostications of unusual structural framing systems and use of space, conservation of materials, examination and adaptation of geometric systems and design technology are fascinating to contemplate—especially as our speaker artfully enunciated them.

Almost to huge and complex to contemplate are the trillion-dollar metropolitan comprehensive developments in the E.N.R. long-term forecast. Public and private projects of this magnitude will be arduous to accomplish, not only in their intrinsic basic concepts. Developers will be further challenged by

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226 W. Rittenhouse Square Philadelphia, Pa. 19103 (215) 546-5504 strict municipal zoning restrictions and building regulations. Concomitant construction to accomodate such mammoth planning, evolution and growth will spawn burgeoning expressways, superjet airports, and massive public utilities expansion. The battle between the automobile and public transit will be joined, particularly in the older cities. Rail systems will be rehabilitated and expanded particularly intra-city, with major emphasis on underground rightsof-way. Also, many urban highway programs will be forced to relinquish appreciable priority to rural road improvement.

In an astute postscript to the construction forecasts, Mrs. Loose analyzed the historical metamorphosis from the architect as the "master designer" to a later period when technological specialists—the design engineers and exotic-systems technicians—came into prominence to reconcile the complex and growing professional design-service demands of manufacturers, industrialists, enterprisers and citizens.

# Educational Requirements Recognized

Significantly encompassed within the aura of this whirlwind of industrial and urban growth will be the educational institutions of our land. Their attributes and contributions will be—as they are today—essential to meet the curricula versatility and requirements of the new building era which approaches. Teaching technicques and philosophy will have to be enlarged, reoriented and adjusted to serve the varying and expanding needs of the industrial revolutionary explosions coming in the new decades.

Concluding on an encouraging note, Mrs. Loose was confident that the Civil Engineers—as the vital key to the planning process—will be equipped to face the almost endless and staggering plethora of hopes and expectations of the 21st century.

### Question and Answer Period

In a discussion period following Mrs. Loose's talk, diversified and penetrating questions were directed to her on many phases of urban needs and planning—present and future. The dialogue examined and dissected public attitudes and willingness to face the costs of the future. It was a fine presentation—by a competent, articulate and charming lady. The Section is indebted to President Audrey Heiser and her Auxiliary assistants for arranging this excellent, enjoyable meeting.

President Koerner presented Mrs. Loose the Section's Certificate of Appreciation for her generous presence and outstanding talk.

#### THE ROERNER MAGIC

(continued from page 1)

- \* The Bicentennial and Convention Committees have shifted into high gear.
- \* A "C.E. Hotline" has been developed, which will serve as an information and referral service to visiting Civil Engineers and their families. Significant items of interest will be described and a telephone contact system will be instituted.
- \* The formation of the Reading Branch came off without a hitch. Reading has had a full slate of activities with good participation.
- \* An updated salary survey was initiated.
- \* The Student Chapters have firmly established themselves as mainstays of the Section. ("Doc" Koerner has long been the faculty Advisor for the Drexel University Student Chapter and has always considered the student viewpoint when deciding important issues.)

But these things just don't happen by themselves—people make them happen—capable people, people who care. Bob Koerner cares, and it is the "Koerner Magic" which has been the secret ingredient—the seasoning if you will, for that special touch.

Bob Koerner "did a job" for us this year, and we're sorry to see his administration end. We take consolation, however, in knowing that he will continue to work for the Society in some capacity.

And now comes Will M. Heiser, who will ascend to the Section Presidency at the Spring Social at the Bala Golf Club on Saturday, May 1, 1976. We "welcome" Will and know that he will continue the chain of leadership which has long characterized the Office of the President. Will has held many other Section offices, and we're confident that his preparation has been thorough and complete. Nevertheless, it wouldn't hurt any if he found a sack or two of "Koerner Magic" around.



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# TECHNICAL GROUP ACTIVITIES

Construction

Date: Tuesday, May 4, 1976 Engineers' Club - 7:00 P.M.

Subject: "What do Specifications Really Mean?"

Speakers: To be announced.

Program Host: Fred Pictoick, Chairman

Construction Group

#### Geotechnical

All Group Activities take place at the Engineers' Club and the Program Host is **Dr. Sreenivasan V. Nathan** of Woodward-Clyde Consultants, Chairman, Geotechnical Group.

#### April Meeting

Date: Tuesday, April 20, 1976; 7:00 P.M. Subject: "Environmental Aspects of Geotechnical Engineering"

Speakers: Mr. Ted Russell, Chief Engineer, R. F. Harsch & Associates

Dr. Aslam Shah, Department of Environmental Resources

Mr. John Spitko, Chief Engineer, Delaware County Regional Water Quality Control Authority

#### April Meeting (Special)

Mr. John Dunnicliff of Goldberg-Zoino & Associates, Inc. (Mass.) will be the Group's Guest Speaker on "Soil and Rock Instrumentation — A-State-of-the-Art". Further details will be announced through the regular Geotechnical Newsletter as soon as Mr. Dunnicliff's schedule is known.

#### May Meeting

Date: Tuesday, May 18, 1976; 7:00 P.M. Subject: Panel Discussion: General Geotechnical Problems

Panel Members: Robert B. Howard, Jr., Senior Design Consultant, E.I.duPont de Nemours & Co., Inc., Wilmington, Del.; Frank S. Waller, Managing Principal, Woodward-Clyde Consultants, Plymouth Meeting, Pa.; Nick Gianopolus, Partner, Keast & Hood, Phila., Pa.; Bernard Schwartz, President, Bernard Schwartz & Associates, Plymouth Meeting, Pa.; Joseph Welsh, Eastern District Manager, Raymond International, Inc. SoilTech Division, Cherry Hill, N.J.; Walter Clark, Chief (Construction, Phila. Water Dept., Phila.

Discusser-at-Large

Dr. Robert M. Koerner, Professor of Civil Engineering, Drexel University, Phila., Pa.; President, Phila. Section, ASCE

#### March Meeting

The Group's monthly meeting was held on March 16, 1976. Professor Adrian Richards and Professor Terence Hirst of Lehigh University spoke on "Geotechnical Problems in Soft Sea-Floor Soils".

The unique geotechnical requirements associated with sitting large off-shore structures on soft sea-floor soils around the world was the subject of the presentation. Special design considerations such as those associated with cyclic wave loading were discussed in detail. A number of foundation case studies from the North Sea and the Mississippi Delta were presented, effectively illustrated with slides. Finally, the highly specialized marine sampling and in-situ testing backed up by current on-going laboratory research projects, were presented. The Group's certificates of appreciation were presented to the two eminent guest speakers.

#### 1976 Proceedings

The proceedings of the 1975-76 lecture series is scheduled to be compiled into a 200-page bound volume entitled "Geotechnics: A Bicentennial State-of-the-Art. 1976". This volume, covering almost every facet of Geotechnical Engineering and including ten different topics, illustrated with case-histories, is tentatively priced at \$15.00 per copy and will be available for sale around September, 1976. In order to pre-plan the tremendous work to be done in bringing out this publication, please inform the Chairman of the Group about your interest in the proceedings at the following address: Dr. S. V. Nathan, Geotechnical Group, ASCE, Woodward-Clyde Consultants, 5120 Butler Pike, Plymouth Meeting, Pennsylvania 19462, or his Secretary at 215/825-3000.

#### Hydraulics and Sanitary

Date: Thursday, April 8, 1976 —

Luncheon Meeting

Location: Engineers' Club — 12:00 noon Subject: Stormwater Pollution Control Speaker: Richard Field.

USEPA Region II

Program Host: Michael D. Nelson, Vice Chair., Hydraulics and Sanitary Group

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Mr. Field will discuss "Stormwater Pollution Control" in the United States; based upon projects sponsored by the EPA. The major portion of the presentation will be a film,

Date: Thursday, May 13, 1976

Luncheon Meeting

Engineers' Club -- 12:00 noon

Subject: Wastewater Treatment in the Oil Refining Industry

Speaker: Richard W. Ladd, Specialist, Air and Water Conservation, Getty Oil Company, Inc.

Program Host: Harold D. Gilman, Secretary-Treasurer, Hydraulics and Sanitary Group

Mr Ladd will discuss wastewater treatment in the oil refining industry and the technology of the unit processes. He will describe problems faced by the industry under the stringent requirements of regulatory agencies, in particular, the guidelines published by EPA and the requirements of the National Pollutant Discharge Elimination System.

#### Structural

Date: Thursday, April 22, 1976 Luncheon Meeting 12:00 noon

Engineers' Club

Speaker: Professor David Van Horn Chairman, Dept. of Civil Engineering Lehigh University

Subject: From Research to Design Specifications

Program Host: Professor Frederic Roll, Chairman, Structural Group

Please call Professor Roll at 243-8347 for luncheon reservations.

The Structural Group is privileged to have as its speaker, Professor Van Horn who will discuss field tests conducted by the Department of Civil Engineering of Lehigh University on recently constructed highway bridges. The test data was analyzed and used to propose practical revisions of design specifications incorporating realistic conditions and behavior of such structures.

Dr. Van Horn is an interesting and dynamic speaker who will augment his lecture with numerous slides. All members of the Structural Group and their colleagues are urged to attend this the last meeting of the 1975-76 year.

THE NEWS, on behalf of the officers and Board of Directors, extends to the Philadelphia Section Membership best wishes for a pleasant summer. AND WE'LL SEE YOU ALL AT THE SEPTEMBER 14th MEETING.



# "COUNTDOWN TO CONVENTION"

The 1976 ASCE National Convention and Exposition

September 27 — October 1, 1976 Sheraton Hotel, Philadelphia, Penna.

Theme: "American Civil Engineering —
A Bicentennial of Public Service"

# PHILADELPHIA SECTION MEMBERS — IT'S UP TO YOU!!!

To make this Convention a success, START "TALKING IT UP" NOW.... in your office and among your associates.... and make arrangements early with your employer (or your employees) to schedule optimum attendance at ASCE CONVENTION WEEK AT THE SHERATON HOTEL, SEPTEMBER 27 to OCTOBER 1, 1976!!

An outstanding, comprehensive Convention Program has been arranged by the dedicated, hard-working Committee under the incomparable leadership of General Chairman James W. McPhillips. They have toiled tirelessly on the endless details of professional, technical, social activities and student programs; as well as field trips, excursions, luncheons, banquets, public information and attendance promotion.

SEE THE JULY, 1976 ISSUE OF CIVIL ENGINEERING MAGAZINE FOR THE COMPLETE PROGRAM AND SCHEDULE OF EVENTS.

# SPECIFICATIONS WRITERS COURSE

The Specification Writers School Philadelphia Chapter, affiliated with the Construction Specifications Institute (CSI), announces a new advanced course, particularly designed as a refresher for engineers in Construction, Contractors and their estimators, and Architect/Engineer Firm principals. The course is different from the highly successful previous ones in Specifications Basics presented in 1974 and 1975. Participation by officials of agencies in Federal, State and Municipal projects is being solicited in order to establish a basis for meaningful discussion during the

A prime objective in this Advanced Course is to assist the appropriate Construction Industry personnel to review contract documents prepared by others. Major areas to be covered include:

Role of the A/E as Professional.

There will be a special Philadelphia Section meeting on TUESDAY, SEP-TEMBER 14, 1976 at the Engineers' Club—in lieu of the usual October meeting.

- \* This meeting will focus on the allout effort on behalf of the Convention which, at that time, will be only two weeks away.
- \* It will be a combination of social gathering (the ladies will join with us) and discussion of the Convention plans. There will be light entertainment after dinner. And minimum technical colloquy.
- \* Principals of the Convention Committee will explain how—by a concentrated effort—we can make the 1976 ASCE National Convention the most memorable professional event and social achievement of the Bicentennial Year in Philadelphia.

FOR A REMINDER OF THIS IMPORTANT SEPTEMBER 14, 1976 SECTION MEETING, THERE WILL BE A SPECIAL SUMMER EDITION OF "THE NEWS". YOU WILL RECEIVE IT IN THE MAIL EARLY IN SEPTEMBER. WATCH FOR IT:

Role of the Contractor.

Specifications as Related to Single and Multiple Contract Work and Construction Management.

Development of "Standard" Specifications.

Materials Evaluation.

Correlation of Shop Drawings with Contract Documents.

Evolving Effects of Codes on Specifications.

Effects of Governmental Regulations on Specifications Methods.

Place — The Engineers' Club, 1317 Spruce St., Phila.

Dates — Tuesdays, March 23 to May 25, 1976 — 6:00 to 9:00 P.M.

 $\mathrm{Fee} - \$50.00$ 

For full details and applications, contact Harry F. Schwenk, Jr., Secretary, C.S.I., 751 Mancill Road, Wayne, Pa. 19087 — Phone: (215) 687-1492.

# ASSOCIATE MEMBER FORUM

# A. M. F. Questionnaire

The Associate Member Forum is conducting a Salary and Benefits Survey of all members of the Phila. Section, ASCE. A questionnaire for this purpose was mailed to you recently under separate cover.

Your cooperation in providing all the information on the form is urgently requested, and also that you return the filled-in questionnaire as soon as possible. The data will be assimilated and tabulated, and a comprehensive report will be published.

New Arrivals

Mr. and Mrs. Dennis Mohan and Mr. and Mrs. Joseph Lenahan respectively announced the birth of a daughter (Megan Elizabeth) and a son (Kevin Joseph). The proud fathers are both members of the Philadelphia Section Associate Member Forum. Dennis is employed by United Engineers and Constructors and Joe is with the U.S. Army Corps of Engineers.

# Fort Delaware Restoration

As part of the State of Delaware's Bicentennial celebration, the Department of Natural Resources and Environmental Control is improving and restoring Pea Patch Island, the site of historic Fort Delaware. In addition, improvements will be made on the canal locks and docking facilities of Delaware City where a visitors information center will be provided. Cost of the project is estimated at approximately \$2 million.

Engineering for dock, visitors shelters, walkways, water supply and waste disposal and restoration will be performed by Edward H. Richardson Association, Newark, Del. with cooperation from Richard Phillips Fox Architects, also of Newark.

#### **Bucknell Students Seek Jobs**

The Bucknell University ASCE Student Chapter appeals to the Phila. Section Membership, for leads on consulting firms, contractors, government agencies, etc., who might employ students during the summer. Please contact Jay Stateler Secretary, Dana Engineering Building, Bucknell Univ. Lewisburg, Pa. 17837.

#### Section Members!

Please Take THE NEWS Home. Your Wife Wants to Read The Women's Auxiliary Items AND take her to the Bala Social May 1st!



# LEGISLATIVE CORNER

by John E. Spitko

### Land Surveyors Propose Amendments to PE Law

George Beetle, Chairman of the Philadelphia Section Legislative Committee, has acted in response to proposed amendments to a law regulating registration of professional engineers. He has submitted the following report to us for publication,

The Pennsylvania Society of Land Surveyors has drafted several proposed amendments to the Professional Engineers Registration Law in Pennsylvania.

In general, the proposed amendments would:

- Establish a requirement for license as a professional Land Surveyor in order to perform land surveying in the Commonwealth.
- Strengthen the educational requirements for qualification as a professional Land Surveyor.
- Exclude surveying from the definition of professional engineering practice used in the Law.
- 4) Introduce a new definition of engineering surveys into the Law, which would include design of street and sewer improvements in subdivisions and preparation of plans and specifications.
- Authorize licensed Land Surveyors to perform engineering surveys, as defined.

The Philadelphia Section has responded in writing to these proposals, supporting the first two of them but objecting to the latter three.

Representatives of the Section have discussed the Section's objections with members of the Pennsylvania Society of Land Surveyors, including an appearance at a state meeting of the Society in Philadelphia on March 19th.

An invitation is also being extended to the Pennsylvania Society of Land Surveyors to have a representative attend the monthly Section meeting in May, to explain the purpose of the proposed amendments

We will have monthly up dates on this report topic since it affects a great many consulting engineers in the State. Any comments or response to these proposed amendments can be sent either to George Beetle, of Lewis T. Klauder & Associates, or this column.

### Legislators Urged to Support Flood Plains Bill

In the December, 1975 issue of THE

NEWS, we discussed Senate Bill No. 1—The Flood Disaster Act. To recap, the bill was adopted by the Senate on November 25 of last year, by a vote of 31 to 17. It remains for action on the House calendar however. On March 10, George Beetle sent out a letter to 70 Philadelphia area legislators urging their support for SB 1, along with the Sections resolution on the proposed legislation, The legislators were also asked for any weaknesses that they had found in the bill; ASCE's assistance was also offered to the legislators.

#### WOMEN'S AUXILIARY

As the 1975-1976 season of the Philadelphia Section Women's Auxiliary enters the home stretch, three important events are "musts" for your calendar. In the spotlight, of course, is the Auxiliary-sponsored and arranged Annual Spring Social at Bala May 1, 1976 (see page two for details).

The April monthly Luncheon-Meeting will be a unique experience for the ladies. On Wednesday, April 21, 1976 they will convene for lunch at the new and picturesque Rusty Scupper Restaurant at Front and Pine Streets, in the heart of the newly-restored Society Hill and "Old Philadelphia" Section, overlooking Penn's Landing and a striking Delaware River panoramic view at the City's eastern waterfront. After luncheon, you will be free to explore the abundantly interesting area: Head House Square, quaint shops, historic buildings, restored houses, etc. This will be a real treat for you, girls - DON'T MISS IT! Program Hostess Betty (Mrs. Sidney) Robin urges you to be at the Rusty Scupper entrance door promptly at 11:30 A.M. to ensure group seating arrangements. Remember the date - Wednesday, April 21, 1976. Your friends are welcome. (A parking garage is available on Front Street at the lower level of the restaurant).

The final Wednesday Luncheon-Meeting of the current season is the always popular affair at the beautiful Whitemarsh Country Club, Lafayette Hill, Pa. The date is Wednesday, May 19, 1976, 12:00 noon. New officers for 1976-1977 will be installed and—as is customary—good fin and fellowship will meet you at every turn. All Auxiliary members are urged to attend. You are also asked to prevail upon wives of Section members who have not yet joined the Auxiliary to apply NOW for membership in this splendid group.

## ITEMS OF INTEREST

#### Pennoni Firm Celebrates Birthday

On March 1, 1966, Celestino R. ("Chuck") Pennoni — with the assistance of two engineering-student employees — founded a firm to provide engineering services for residential, industrial and commercial development. They occupied a one-room office in West Philadelphia.

Today, ten years later, Pennoni Associates, Inc. — with Chuck as President and Chairman of the Board, has grown to become a multi-disciplined organization, including a staff ranging as high as 73 employees. It is structured to provide engineering and planning services for projects of varied scope and magnitude, within the United States and abroad. In the first ten years, over 900 projects, representing more than \$150 million, have been engineered by the firm. Their offices are at 1920 Chestnut Street, Philadelphia.

Mr. Pennoni and his wife Annette hosted a magnificent Tenth Birthday party for the firm at the Marriott Motor Inn on February 29, 1976. More than 550 friends and associates assembled to pay their compliments and to enjoy cocktails and hors d'ouvres at the splendid affair.

The Philadelphia Section joins all of the firm's friends in congratulating Chuck Pennoni for his outstanding professional and civic achievements, and in wishing Pennoni Associates, Inc. "Happy Birthday." We are very proud and fortunate, too, that Chuck will be the Section's 2nd Vice President in 1976-1977. He was formerly Secretary for many years, and is a Past President of the Section's Associate Member Forum. A "Section Profile" of Mr. Pennoni appeared in the February, 1974 issue of THE NEWS.

#### Dr. Shore Spearheads Solar Heat Research

Dr. Sidney Shore, prominent Phila. Section member and Chairman of the Civil and Urban Engineering Department of the University of Pennsylvania, has organized a team of Penn students and faculty members to install and research a solar heating system in an old 3-story rowhouse near the campus, which was donated by the University. The project was begun in August, 1975. Leading the team is Dr. John A. Lepore, also a Phila. Section member.

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#### ITEMS OF INTEREST

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The team hopes to establish technical and economic criteria to augment heating facilities of attached dwellings in dense urban areas. Heretofore, most solar heating projects have been oriented to higher-priced single homes. Drs. Shore and Lepore predict that ultimately a saving of 40 to 50% will be achieved in heating costs by the installation of solar collection panels on the roof, and thermal storage panels in the basement.

Cost of the project, including \$2,000 for sophisticated special scientific instruments (a non-recurring expense not required in normal installations) is expected to be about \$13,000. The program is being financed by a \$114,000 fund contributed by private science and engineering foundations, solar equipment manufacturers, the U.S. Dept. of Housing and Urban Development (H.U.D.) and the University of Pa.

THE NEWS will publish progress reports on this important and timely project as they become available.

John E. Spitko, former Special Assistant to the Office of the Deputy Commissioner for Engineering, Phila. Water Department, recently has been engaged as Chief Engineer of the Delaware County Regional Water Quality Control Authority (DELCORA). John is a Staff Writer for THE NEWS and coordinates, with George Beetle, the monthly column "Legislative Corner".

The Philadelphia Section extends to Mr. Spitko its heartiest congratulations and best wishes for success in his new job.

On behalf of The Phila. Section, THE NEWS extends felicitations to its esteemed Publications Coordinator, Albert M. Tantala, and his wife, Genevieve, on the recent birth of their third son, Michael W. The baby arrived to greet his parents; his brothers Peterjohn, 6 and Albert M., Jr., 5; and the rest of the world on March 11th.

Al will be installed as 1976-1977 Assistant Secretary of the Section at the Bala Social May 1, 1976. Now, Al and Genevieve—we'll all join forces and THINK PINK!

# MET SECTION CONSTRUCTION SEMINAR

On May 12, 1976, from 6 P.M. to 9 P.M. at the United Engineering Center, New York City, the Construction Group, Metropolitan Section, ASCE will present a seminar entitled "BETTER CONTRACTING PRACTICES FOR CONSTRUCTION" to explain the recommendations of Standing Sub-committee No. 4 - Contracting Practices U.S. National Committee on Tunneling Technology, National Academy of Sciences and National Academy of Engineering - and to discuss its applicability to construction practices in New York. Policy makers from both the public and private spheres will be invited to attend and there will be ample opportunity for questions and discussion from the floor. Dinner will be served at 5:00 P.M. Student members of ASCE are invited - at no charge for dinner.

The discussion—by a panel of experts, including Municipal Services officials and principals of major industrial, contracting and consulting engineering firms—will have broad application on all aspects of construction.

For reservations (@ \$6.00 each) and further information, make check payable to: **MET SECTION**, **ASCE**, c/o Otto Maatsch, Westvaco Corp., 299 Park Ave., New York, N.Y. 10017.

# IN MEMORIAM

BILLINGSLEY, EARL J.—The Philadelphia Section, ASCE is saddened by the death, on February 28, 1976, of one of its most dedicated and long-time members. Mr. Billingsley was scheduled to be awarded his Certificate of ASCE Life Membership at the Section's March 9, 1976 meeting. The award was made posthumously by Past President Samuel S. Baxter (see separate article in this issue of THE NEWS).

Earl became a member of ASCE in 1934, upon his graduation with a B.S.C. E. from Drexel University. He immediately became active in all of the major functions and affairs of the Philadelphia

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Section, and he served a two-year term as Director in 1955 and 1956. Illness incapacitated him from attendance and full participation during the past decade.

Mr. Billingsley served for many years as an engineering official for Acme Markets, Philadelphia, and retired on disability in 1969. He lived at 121 Cedar Hollow Road, Paoli, with his wife, Annabel who, with their son, Craig, survives him.

The sincere sympathies of the Section are extended to Mrs. Billingsley and Craig.

PADULA, GEORGE W., long time friend and advocate of the engineering community in the Delaware Valley area, passed away on February 3, 1976 at age 62.

Mr. Padula, as the traditional Secretary-Treasurer of the Philadelphia Post, Society of American Military Engineers, was best known to our Philadelphia Section as the promoter of the joint meetings of S.A.M.E. and Philadelphia Section A.S.C.E. which have now become a regular annual meeting between these two great organizations each year. This tradition of a joint meeting continues this year for our April 13, 1976 meeting. George Padula's presence will be sorely missed.

The support and warmth which George had for the engineering profession, although not an Engineer himself, was expressed by the support and work he so effectively did each year for the ENGINEERS' WEEK Committee. Mr. Padula worked for the Philadelphia Engineer District for 46 years. His passing is mourned by his many friends and associates.

LOVELL, CAPT. KENNETH C., USNR, former Chief Engineer and Director of Engineering and Construction, The Phila. Port Corp., died March 12, 1976 at age 62, in El Reno, Okła., where he lived in retirement. Capt. Lovell formerly resided in Bryn Mawr, Pa. A 1936 graduate of the U.S. Naval Academy, he served in the Navy from 1936-1965, primarily in the Civil Engineering Corps. From 1960-1965 he was assistant to the Secretary of the Navy as director of naval petroleum and oil shale reserves, including Alaska's Artic Slope. In addition to ASCE, Capt. Lovell was a member of S.A.M.E. and other technical societies.

The Philadelphia Section extends its sincere sympathies to the survivors of its distinguished member: Capt. Lovell's wife, Maxine; two daughters; and his mother, Mrs. Zoe Lovell.