

the news

PHILADELPHIA SECTION
AMERICAN SOCIETY OF CIVIL ENGINEERS
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Our 66th Year

November, 1978

NOVEMBER MEETING

Philadelphia Section, American Society of Civil Engineers

TUESDAY, NOVEMBER 14, 1978

(Your program card has the wrong date for this meeting)

Engineers' Club, 1317 Spruce Street, Philadelphia

Cocktails — 5:30 P.M. Dinner — 6:30 P.M. Meeting — 7:30 P.M.

Happy Hour will be sponsored by **Wallace & Tiernan**, a Division of Pennwalt Corp., Phila., which specializes in water treatment chemicals and corrosion protection.

SUBJECT:

THE CONSULTING ENGINEER IN THE INTERNATIONAL MARKET

SPEAKER:

PAUL E. CONRAD, Executive Vice President, Wilbur Smith and Associates

PROGRAM HOST:

WILLIAM J. PARENTE, Chairman, Associate Member Forum

HONORED GUEST:

JOSEPH S. WARD, President-Elect, American Society of Civil Engineers



The challenges and opportunities for consulting engineers vary over a wide spectrum of projects and activities throughout the world. Mr. Conrad will present an overview of the professional, personal and political aspects of doing work overseas. Differences in philosophy, approach and conduct of the work will be discussed in the context of the worldwide activities of Wilbur Smith and Associates.

Paul E. Conrad received his B.S. in Civil Engineering from the University of Connecticut in 1949. He began his career with the Bureau of Public Roads and in 1955, joined the consulting engineering firm of Wilbur Smith and Associates.

He has coordinated and assumed overall responsibility for many of the firm's major projects, including comprehensive urban transportation studies, multi modal corridor analyses, traffic operations programs and economic and feasibility studies. In his present position, he is responsible for administration coordination and allocation of personnel to insure quality performance, and adherence to schedules and budgets. Most recently he has been involved in an Integrated River-Road Transport Study for the Republic of The Gambia as well as other projects in West Africa, the Middle East and the Far East.

SPECIAL FEATURE:

VILLANOVA NIGHT

The ASCE Student Chapter, faculty and alumni of the Civil Engineering Department of Villanova University will be honored at this meeting. All students, faculty and alumni are cordially invited to attend.

TECHNICAL GROUP ACTIVITIES

Geotechnical

Date: **Tuesday, November 21, 1978**

7:00 P.M. — Engineers' Club

Subject: **Rock Grouting**

Speaker: **Roman Lazor**

U. S. Army Corps of Engineers

Program Host: **Scott A. Fritzing**,
Chairman, Geotechnical Group

Rock grouting equipment and techniques will be discussed using recent Corps' experience on several projects.

Refreshments are served.

Structural

Date: **Wednesday, November 15, 1978**

Luncheon Meeting — Engineers' Club

12:00 Noon

Subject: **"Mock Trial" — ASCE's Efforts to enforce Ethics Code.**

Program Host: **Dr. Ish Ancja**,
Chairman, Structural Group

This Structural Group meeting will present a 50 minute video tape prepared by ASCE National, which presents the events in one engineer's professional career which led to a misconduct hearing before the ASCE Ethics Board.

READING BRANCH

The November meeting of the Reading Branch will be held on **Thursday, November 16, 1978**, at the Green Valley Country Club. **Dr. John W. Fisher**, Lehigh University, will speak on **Fractures in Bridge Structures**. Dinner will be at 6:30 P.M., the meeting at 7:30 P.M. Contact Ray Noll, Program Chairman at Gilbert Associates, Inc., P. O. Box 1498, Reading, Pa. 19603, 775-2600, Ext. 4893 for reservations. All Philadelphia Section members welcome.

Mail Reservation Cards Immediately or call Mr. deKovacs at the Engineers' Club — PE 5-5234
Win a FREE DINNER!

JOE WELSH IN NEW POST

It is with mixed emotions that THE NEWS reports to the Philadelphia Section Membership the resignation of First Vice President **Joseph P. Welsh**. Formerly Eastern District Manager, SOIL-TECH Dept., Raymond International, Inc., Pennsauken, N. J., Joe has moved to Odenton, Maryland, to assume his new job: Vice President, Sales and Engineering Hayward Baker Co., which specializes in Ground Modification Techniques. The Company also maintains offices in Washington, D.C.

In a letter to Publications Chairman Sid Robin, Joe extends his best wishes to the many friends he has made in his 23 years' affiliation with the Philadelphia Section, ASCE. The Section, of course, wishes Joe the best of good fortune and success in his new job. But we will be hard-pressed to find a replacement to fill the void he leaves in devoted service to ASCE and the professional community of the Delaware Valley.

An early issue of THE NEWS will feature a Profile on Mr. Welsh.

AMERICAN CONCRETE INSTITUTE

Delaware Valley Chapter

November Meeting

Date: November 16, 1978, 6:00 P.M.

Benetz Inn, Quakertown, Pa.

Subject: Latest Developments in Concrete Bearing Wall Construction

Speakers: Mark Morgan, NCMA, and Tony Fizzano, Fizzano Bros.

For reservations and further information, on all meetings, call or write Michael Boyle, Valley Forge Laboratories, 6 Berkley Road, Devon, Pa. 19333, Telephone: 688-8517.

WOMEN'S AUXILIARY

The regular monthly Luncheon-Meeting of the Section's Women's Auxiliary will take place at the Engineers' Club on **Wednesday, November 15th, 1978**. Mrs. Raymond Knauff will demonstrate: "Working with Natural Materials" dried flower arranging and pine-cone Christmas decorations.

Wives and guests of Phila. Section members are cordially invited to attend Women's Auxiliary Luncheon-Meetings and other functions. You may join at the November meeting; or call Membership Chairman **Marie (Mrs. Kenneth J.) Zitomer** — LI 8-5324.

THE IMPORTANCE OF YOUR DUES

When you pay your \$10.00 Phila. Section annual dues, you become a full Active Member and reap the benefits of the many professional services and prestige which such classification provides.

In addition, your payment of Section dues significantly helps the Section in its constant quest for revenues to finance its numerous activities. National ASCE allots \$3.00 for each member who pays the Philadelphia Section dues.

You received your Section dues bill recently. Please send in your check promptly, in the amount of \$10.00, payable to "The Phila. Section, ASCE" and mail to ASCE, Engineers' Club 1317 Spruce Street, Phila. 19107, attn. Theodore Davis, Treasurer.

YOU NEED THE PHILADELPHIA SECTION, ASCE FOR YOUR PROFESSIONAL FULFILLMENT. THE SECTION NEEDS YOUR SUPPORT NOW MORE THAN EVER.

Thank you for your cooperation, support and participation in all Philadelphia Section affairs.

... For more information

When you have questions about any program or agency of the Federal Government, you may want to call the Federal Information Center (FIC) nearest you. The FIC service helps consumers locate the right agency — usually Federal, but sometimes State or local — for help with problems.

In Philadelphia the telephone number is (215) 597-7042.

ENGINEER OF THE YEAR CANDIDATES SOUGHT

The planning for 1979 Engineers' Week February 16-24, 1979 is underway. The theme is "People Bringing Purpose to Progress." **H. Robert Sharbaugh**, Chairman of the Board, Sun Co., Radnor, Pa. is General Chairman. In Mr Sharbaugh's words: "... a successful Engineers' Week needs the support of the principal engineering societies in the area for both planning and participation ..."

The Phila. Section, ASCE intends to play a positive role in Engineers' Week planning and activities. The Section Membership is urged to submit names of possible candidates for Engineer of the Year in the Delaware Valley, or Outstanding Engineering Project to President **C. R. Pennoni**, Pennoni Asso-

ciates, Inc., 2006 Walnut St., Phila. 19103 (215) 561-0460; or Vice President **Kenneth J. Zitomer**, Phila. Water Dept., 1100 M.S.B., Phila. 19107, (215) 686-3898.

Names must be submitted to the Engineers' Week Committee by November 30, 1978.

PHILADELPHIA SECTION AMERICAN SOCIETY OF CIVIL ENGINEERS

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SEND COPY TO:

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OCTOBER MEETING

October 10, 1978 Engineers' Club

A gratifying turnout of about 150 members and guests of the Philadelphia Section, ASCE, attended the first gathering of the 1978-1979 season. It was a luncheon meeting, arranged by the Section's Construction Group. Capable Program Host was Group Chairman **Fred Plotnick**. The subject was: "The Center City Commuter Rail Connection." **Bernard Goldentyer**, Project Manager for the Department of Public Property, City of Philadelphia, was the principal speaker.

Temple Featured

Continuing its policy of honoring area college ASCE Student Chapters and Civil Engineering Departments, the meeting spotlighted Temple University College of Engineering Technology. Civil Engineering Department Chairman — and prominent Phila. Section member — **Dr. Robert J. (Jim) Stone** reviewed current developments at the school. The most prominent of these is that the new engineering building at 12th and Norris Streets is now in full operation. The Civil and Environmental Engineering Departments pursue the four-year E.C.P.D. — accredited degree courses and the two-year associate degree curricula in the new facility, together with the Schools of Architecture, Mechanical and Electrical Engineering.

Dr. Stone described faculty expansion — particularly in surveying and environmental specialties; and student activities, technical and athletic. Student Chapter President **Michael Brownholtz** introduced officers and members, faculty and alumni in attendance at the meeting.

Lewis Receives Award

President **Chuck Pennoni**, presiding at his first Section meeting, presented a special National Society award to last year's President, **Brian J. Lewis**. It was a Certificate of Appreciation commending Mr. Lewis for his work and accomplishments as 1977-1978 Chairman of the National ASCE Committee on Public Affairs and Legislation.

Mr. Goldentyer and the Rail Connection

Basically, the Center City Commuter Rail Connection (CCCR) is a plan whereby the former Penn Central commuter lines which presently terminate at Penn Center will be connected to the former Reading commuter lines, which presently terminate at Reading Terminal at 12th and Market Streets. Mr. Goldentyer began his presentation by providing a concise rundown of the history of transportation planning in the Philadelphia metropolitan region. Dis-

ussion concerning the commuter line routes and possible connections can be traced back to 1909. Interest and concern increased in the early 1930's with the construction of the Suburban Station. But it wasn't until the early 1960's that preliminary engineering plans were prepared. The CCCRC was one of the first applications for funds received by the newly formed Urban Mass Transportation Administration (UMTA) and in 1965, UMTA committed itself to funding a large portion of the proposed \$300 million connection cost. However, the road was not yet clear of obstacles as many approvals were needed (EIS, PUC, etc.) and public hearings held. When all of this was accomplished it was already 1977, the year that property acquisition was begun.

The CCCRC actually will resemble cut and cover subway construction, as much of the 1.75 mile long project will be below grade. The new tunnel will connect the existing Reading Co. tracks approaching from the north and carry them under ground parallel to Ninth St. and curving 90 degrees right under Filbert St. and west to the Suburban Station. The new station to replace the ancient Reading Terminal will possess four times the amount of waiting area of the old station. Among the major reasons necessitating the CCCRC are:

1. unites 554 route miles and 198 stations into one transportation system.
2. existing stub-end terminals are terribly inefficient.
3. provide access from all commuter rail stations to the future high speed line to Philadelphia International Airport.

As Project Manager, Mr. Goldentyer will address the gargantuan problems of utility relocations, maintenance of auto and rail traffic, underpinning of buildings, drainage problems, as well as coordination of the myriad of agencies involved.

At the conclusion, our gracious speaker entertained questions from the audience. One of the most interesting questions was with regard to the diesel rail cars presently in operation on some of the Reading Lines. Mr. Goldentyer pointed out that obviously these would be objectionable to use in a tunnel and that either a transfer will be required or possibly the introduction of 'hybrid cars' presently under development which can operate under diesel or electric power.

At the conclusion of the excellent address and floor discussion President Pennoni presented Mr. Goldentyer the

1979 Daniel W. Mead CONTEST

FOR ASSOCIATE MEMBERS

The Daniel W. Mead Prize for Associate Members was established in 1939 to honor the memory and accomplishments of the 67th President of the American Society of Civil Engineers. The talents of many of the leaders of the profession were first recognized in previous contests for this significant professional honor. The current contest provides another opportunity for alert young civil engineers to further their professional development and gain national attention.

Rules

Papers are to be written on "SHOULD AN ENGINEER BE ALLOWED TO 'MOONLIGHT' AFTER HOURS?" This can be annotated as follows: What are the ramifications of working on other projects after hours? Is an engineer competing with his employer? Eventually telephone calls and "thinking" will be done on company time. Is this fair to the employer? Once a license is obtained, the temptation is increasingly great to work on the side and seal drawings. Perhaps the employer, as well as the client, will lose by not getting a complete job and/or attention.

Authors must be Associate Members of the Society.

Only one person can write each paper. Each Section can submit only one paper.

Papers must contain no more than 2,000 words.

One winner will be selected from each of the Society's four zones.

The national winner, selected from the zone winners, will receive a wall plaque and a certificate.

The paper by the national winner will be published in CIVIL ENGINEERING or ISSUES IN ENGINEERING.

By May 1, 1979 seven copies of each paper must be submitted through Section Secretary **Albert M. Tantala** to AMERICAN SOCIETY OF CIVIL ENGINEERS — United Engineering Center 345 East 47th Street — New York, New York 10017.

Phila. Section Associate Members are urged to get to work on the Mead Competition. We are proud of our past winners and want to continue to be in the forefront.

Section's Certificate of Appreciation and a copy of the Section-authored Bicentennial Book: "History of Civil Engineering and Construction in the Delaware Valley".

DAM SAFETY BOOK AVAILABLE

A new publication, "The Evaluation of Dam Safety," is now available from ASCE Headquarters.

This timely 523-page book contains the papers given at the Engineering Foundation Conference in late 1976 in Pacific Grove, California. Papers are presented by the leading names in the construction and maintenance of dams, and include engineers from government, universities and consulting engineering firms.

Papers are grouped under the following session topics: Status of Dam Safety; Failure and Near Failure; Safety Inspections; Evaluation of Static Stability; Evaluation of Seismic Stability; Evaluation of Hydrologic and Hydraulic Conditions; The Role of Engineering Firms in a National Dam Safety Program.

Copies of the book are available from the American Society of Civil Engineers, 345 East 47th Street, New York, N. Y. 10017, at \$16.00; \$12.80 to libraries and \$8.00 to ASCE Members.

7th CONFERENCE ON ELECTRONIC COMPUTATION

August 6 - 8, 1979

Washington University, St. Louis, Mo.

The conference is sponsored by the Committee on Electronic Computation of the Structural Division of the American Society of Civil Engineers. Co-sponsors are The St. Louis Section of ASCE, the Technical Council on Computer Practices of ASCE, and the Washington University Civil Engineering Department.

The conference is expected to have ten sessions including more than 40 papers and a Tutorial on Computing Technology. A wide variety of engineering computing topics will be covered, including:

Minicomputer applications; Microprocessors and "smart" terminals; Distributed computing; Interactive graphics; Structural dynamics analysis methods; Non-finite element methods; Finite element idealization studies; Large scale linear equation solvers, eigensolvers, ordinary differential equation solvers, and non-linear methods; Interactive analysis and design; Super-computers and applications; Computer-assisted project manage-

PHILADELPHIA SECTION NATIONAL ASCE AWARD WINNERS

EDITOR'S NOTE: The following list is of interest to the Phila. Section Membership. We are grateful to Carl E. Nelson, Manager, Field Services at New York Headquarters, for compiling the list and sending it the THE NEWS for publication.

1935	The Arthur M. Wellington Prize	Hawley S. Simpson
1966	The Karl Emil Hilgarde Hydraulic Prize	Sam Shulits
1944	The J. C. Stevens Award	Nicholas V. Feodoroff
1968	The Construction Engineering Prize A. P. Greensfelder	J. A. Sterner
1956	The Daniel W. Mead Prize for Students	James Moser Anderson
1915	The Collingwood Prize	George Schobinger
1942	The Collingwood Prize	John F. Curtin
1965	Edmund Friedman Professional Recognition Award	Harold T. Larsen
1969	ASCE State-of-the-Art of Civil Engineering Award	Robert H. Scanlan
1967	ASCE Fellowships in Civil Engineering Management	Michael Gruby
1971	ASCE Fellowships in Civil Engineering Management	William J. Parente
1968	ASCE Fellowships in Civil Engineering Management	Kenneth Johnson
1969	ASCE Fellowships in Civil Engineering Management	Leon Heron
1970	ASCE Fellowships in Civil Engineering Management	William Kehoe
1973	The Thomas A. Middlebrooks Award	William S. Gardner
1973	Surveying and Mapping Award	Philip Kissam
1974	State-of-the-art of Civil Engineering Award	Frederic Roll
1974	Daniel W. Mead Prize for Associate Members	John E. Spitko
1976	Rudolph Hering Medal	Carmen F. Guarino
1976	Rudolph Hering Medal	Michael D. Nelson
1977	Collingwood Prize	Ronald S. Steiner
1977	Arthur M. Wellington Prize	Graeme D. Weaver
1977	Daniel W. Mead Prize (Zone I)	Joseph R. Synchron
1978	Daniel W. Mead Prize (Zone I)	David Shaw
1978	Royce J. Tipton Award	Elmer W. Gain

ment (PERT, CPM, etc.); Application of computing in small offices.

The organizing committee is calling for abstracts of approximately 500 words on topics suitable for the conference. All abstracts must be received no later than January 3, 1979. Notification of acceptance will be made by February 7, 1979. The final manuscripts will be due May 1, 1979. A bound volume of the manuscripts will be distributed at the conference.

Abstracts should be sent to:

Dr. James L. Tocher
Boeing Computer Services
Mail Stop 9C-02, P.O. Box 24346
Seattle, Washington 98124
Telephone: (206) 576-5151

For further information on the conference, please contact:

Dr. C. Wayne Martin
212 Bancroft Building
University of Nebraska
Lincoln, Nebraska 68588

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