

PHILADELPHIA SECTION

AMERICAN SOCIETY OF CIVIL ENGINEERS

1317 Spruce Street, Philadelphia, PA 19107

VOL. 55 - I

OUR 70th YEAR

October, 1982

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

OCTOBER DINNER MEETING

Philadelphia Section, American Society of Civil Engineers

TUESDAY, OCTOBER 12, 1982

Engineers' Club, 1317 Spruce Street, Philadelphia

Cocktails - 5:30 P.M.

Dinner — 6:30 P.M.

Meeting — 7:30 P.M.

SUBJECT:

FUNDAMENTAL CONCEPTS IN THE MOVEMENT OF GROUNDWATER CONTAMINANTS

SPEAKER:

DR. GEORGE F. PINDER, Chairman, Department of Civil Engineering, RCA Professor of Energy Resources, Princeton University, Princeton, New Jersey



The problem of groundwater quality degradation poses great challenges to the engineering and scientific communities and to government and society at large.

Dr. George F. Pinder is an internationally recognized authority in groundwater hydrology and contaminant transport.

A native of Windsor, Ontario, Canada, he received his B.S. degree in geology at the University of Western Ontario in London and his Ph.D. in geology at the University of

Illinois at Urbana. After spending four years as a research hydrologist with the U.S. Geological Survey in Washington, he joined the Civil Engineering Department at Princeton University as an Associate Professor. He was promoted to full professor three years later and currently is Chairman of the department. He is also RCA Professor of Energy Resources at Princeton.

(continued on page 2)

NOVEMBER DINNER MEETING TUESDAY, NOVEMBER 9, 1982

Cocktails - 5:30 P.M.

Dinner - 6:30 P.M.

Meeting — 7:30 P.M.

SUBJECT:

THE HYATT-REGENCY WALKWAY COLLAPSE

SPEAKER:

DR. EDWARD O. PFRANG, Chief, Structures Division, National Bureau of Standards, Washington, D.C. The NBS investigation of the Kansas City Regency structural failure will be discussed.

The presentation includes a 16 mm film of the connections failure.

SPECIAL FEATURE:

VILLANOVA UNIVERSITY NIGHT

Please call Mr. deKovacs at the Engineers' Club immediately (215 735-5234), for reservations.

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

TECHNICAL GROUP ACTIVITIES

Construction

October Meeting

Date: Tuesday, October 26, 1982 Engineers' Club--7:30 P.M.

Subject: Financial and Tax Issues for Engineers and Contractors

Speaker: Peter L. Vice, CPA

Program Host: Fredrie L. Piotnick, Chairman, Construction Group Mr. Vico will discuss tax credits and devices of particular interest in con-

struction and financial issues confronting contractors in the present

economic environment.

Geotechnical

October Meeting

Date: Tuesday, October 12, 1982
Sponsoring Main Section Meeting.
See Page One.

November Meeting

Date: Tuesday, November 16, 1982 Engineers' Club---7:00 P.M.

Subject: Development of Ground-water Resources

Speaker: **Dr. J. Halepaska**, Chief, Water Resources Division, Woodward-Clyde Consultants, Englewood, Colorado.

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

Historically, ground water development has followed three distinct steps: exploration, evaluation, and production. Exploration data is generally available for much of the United States today. Therefore, development generally consists of the following steps: (a) data collection, (b) site-specific evaluation, and (c) design and implementation of a production system.

Site-specific evaluation considers: (a) quantity of water available, (b) rate available, (c) quality of water, (d) longevity, (e) competition for water, and (f) costs, initial and long-term.

(continued on page 2)

THE PRESIDENT'S MESSAGE

This year marks the 70th Anniversary for the Philadelphia Section of the American Society of Civil Engineers.

When you take on an office, such as this one, you are apprehensive. You want to maintain the standards previously set and you want to see growth during your term of office. Hopefully, both will occur. My apprehension has quickly turned to admiration for the quality of the people who are involved in the Philadelphia Section activities. I have been in this office since last May and they have made my task an easy one. It is a great pleasure for me to be associated with them and to represent you in this office.

Let me tell you a little about the organization of the Philadelphia Section. The Board of Directors is composed of 18 people. They meet each month prior to the Main Section meeting and review all of the current operations of the Section There are 28 standing Committees and 5 Technical Groups. These Committees and Groups report to the Board as often as they need. This year's Chairman for each of these units has already been appointed by the Board. However, there is ample opportunity for you to become involved as a Committee member and next year as a chairman of a Committee or Technical Group. Call me (215) 895-2364, or any other member of the Board to discuss Committee membership. Your talents, interests and participation are needed if we are to keep the Philadelphia Section viable and relevant to the needs of its membership.

During the summer, the Board of Directors had two meetings. The new Chairmen were appointed and the Main Section programs for the coming year were finalized. The Technical Groups are still in the selection process with about 50 percent of their programs formulated. The participation of Delaware Valley organizations in making presentations at the Main Meeting or the Technical Group meetings is being encouraged. If you or your organization has a topic that would be of interest to our membership, please call me and I will arrange a mutually satisfactory meeting date.

Our major goal for this year then is a broader participation by you and your employer in the activities of the Section. One of the stated goals of ASCE is education. All of the members of the Section can share in your experience if you will call us and participate in a meeting.

One of the advantages of living in a modern convention city area is that on a 7 to 10 year cycle we host one of the two annual National ASCE meetings. Next year, Philadelphia is the host section for the 1983 Spring Meeting of ASCE. It will be held at the Franklin Plaza Hotel from May 16 to May 19

In the Winter of 1981, the local committee in charge of planning this meeting was formed. The chairpersons are Lec O'Connor, General Chairman; Richard Woodring, Program; Lewis Caccese, Exhibit; Joseph Syrnick, Activities; Sidney Robin, Attendance Promotion and Paula Koerner, Spouse Committee. I have been sitting in on the committee meetings and I want officially to thank all of the Committee Chairmen and members for their fine efforts and dedication. I know that the Section's next president, who will be the official host for the ASCE Spring Meeting, will also be very appreciative of the excellent work of the Committee.

In retrospect you can see that the Sections main planning and organization changes took place during the summer. We hope that you find this year's programs current, interesting and educational and that you will reward them with your attendance. Sincerely,

> BERNARD M. McNAMEE, President Philadelphia Section, ASCE

OCTOBER DINNER MEETING

(continued from page 1)

Dr. Pinder has been a consultant in groundwater hydrology and contaminant transport for several organizations including Dupont, IBM, Battelle, Arthur D. Little, the states of New York and Florida, and the U.S. Justice Department.

The American Geophysical Union presented their Horton Award to Dr. Pinder in 1969 for an outstanding paper on hydology. In 1975, the Geological Society of America presented him with the O. E. Meinzer Award for an outstanding contribution to the field of hydrogeology.

SPECIAL FEATURE:

WIDENER COLLEGE AND SPRING GARDEN COLLEGE NIGHT

The ASCE Student Chapters, Faculty and Alumni of the Civil Engineering Departments will be honored at this meeting. All students, faculty and alumni are cordially invited to attend.

TECHNICAL GROUP ACTIVITIES

(continued from page 1)

Design and implementation considers: (a) individual well designs, (b) design of multiple well systems, (c) protection of well or well system longevity in terms of rate and quality, and (d) economics.

Dr. J. C. Halepaska, an Associate of Woodward-Clyde Consultants, is Chief of the Water Resources Division in Denver. Since receiving his Ph.D. in Ground Water Hydrology from the New Mexico Institute of Mining and Technology in 1970, he has been involved in extensive research and applied ground water hydrology. Dr. Halepaska is a registered professional engineer.

A Woodward-Clyde Consultants, he has supervised numerous water resource projects, including water supply, retention, and impacts related to planning and

(continued on page 3)

PHILA. SECTION, ASCE OFFICERS 1982 - 1983

PRESIDENT

Bernard M. McNamee

VICE PRESIDENTS

William M. Malarkey John E. Durrant

SECRETARY

Albert M. Tantala

ASSISTANT SECRETARY

Edward Lutz

TREASURER

Charles J. Denny

TREASURER EMERITUS Theodore Davis

MEMBERSHIP SECRETARY

David M. Barr, III

DIRECTORS

Francis J. Depman, Jr. Thomas J. Lauer

Klaus Fuelleborn Dennis Mohan

Charlene O'Connor

Ira N. Pierce

Carl A. Vath, Jr. (Reading Branch)

PAST PRESIDENTS

Kenneth J. Zitomer Joseph R. Syrnick

Frederic Roll

PUBLICATIONS COMMITTEE

Sidney Robin

Chairman and Editor of THE NEWS

Joseph R. Syrnick

Assistant Chairman and Associate Editor

Staff Writer

John E. Spitko, Jr.

Publications Coordinator

Albert M. Tantala

SEND COPY TO:

Sidney Robin 64 Nancy Drive

Richboro, Pennsylvania 18954 Phone: (215) 322-7464

COPY DEADLINE FOR NOVEMBER, 1982 ISSUE OCTOBER 12, 1982

TECHNICAL GROUP ACTIVITIES

(continued from page 2)

development of mining, milling, and nuclear power projects.

Refreshments are served

Structural

Failures

October Dinner Meeting — Joint Meeting with Delaware Valley Chapter, ACI

Date: Thursday, October 28, 1982 Engineers' Club

Dinner 6:30 P.M.—Meeting 7:30 P.M. Subject: Structural and Foundation

Speaker: Sidney M. Johnson, Consulting Engineer, Union City, N. J.

Sid Johnson has specialized for more than 30 years in the design and solution of problems associated with deterioration or failure of structures and foundations on over 1,000 projects world-wide. He is a prominent author of two books, technical papers and articles on his specialty.

Program Host: Stephen H. Golden, Chairman, Structural Group.

For further details and dinner reservations, please call Mr. Golden, c/o Pennoni Associates, (215) 561-0460.

Transportation & Urban Development

Date: Thursday, September 23, 1982 Engineers' Club—Cocktails—5:30 p.m. Dinner: 6:30 p.m.—Meeting: 7:15 p.m.

Subject: "Modern Concepts in Urban Transportation: How Can Philadelphia Use Them?"

Speaker: Dr. Vucan Vuchic, of The University of Pennsylvania

Contact Anne Marie Collins at (215) 988-0696 (Mr. Novick's office) for information and reservations.

Program Host: David Novick, Chairman, T & UD Group

GEOTECHNICAL GROUP LECTURE SERIES

Hydrogeology in Energy, Waste Disposal, and Civil Works Projects

Ground water accounts for nearly 95 percent of the freshwater resources of the world. Population growth, economic development, and the attendant energy, industrial, and agricultural requirements have the twofold effect of increasing the need to develop ground-water resources and to protect them from subsurface contamination. Ground-water hydrology plays a key role in the development and protection of ground-water resources.

The Geotechnical Group of the Philadelphia Section is sponsoring a series of lectures on Hydrogeology in energy, waste disposal, and Civil works pro-

jects between October 1982 and May 1983. Among the topics covered are development of ground-water resources, fundamental concepts in contaminant flow in the subsurface, dewatering and ground-water control for construction, numerical modeling of mining and construction dewatering, ground-water flow modeling, solute transport modeling, ground-water monitoring, and quantitative evaluation of remedial measures for contaminated aquifers.

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. Z. 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.

LIFE MEMBERSHIPS AWARDED

A Special Event at the April 13, 1982 Joint Section Meeting with SAME was the awarding of Certificates of Life Membership in ASCE to Section members. As our distinguished District 4 Director, Chuck Pennoni explained in making the presentations: "... the extraordinary eligibility requirements for this honor consist in the members having achieved the age of at least 65, and that the sum of age and the number of years in good standing in ASCE total at least 95...." They also reap the reward of no longer having to pay National or Local Section dues.

A total of seven Certificates were awarded. Six new Life Members were in attendance and received their certificates in person from Mr. Pennoni, who recited brief biographies of each as he appeared. They were:

Robert O. Imhoff William Padlasky Paul W. Purdom Sidney Robin Milton Rothbaum M. Joseph Willis

Joseph M. Steele was not at the meeting, and his Certificate was mailed to him.

The Phila. Section congratulates its newly installed Life Members and wishes them good health and continued active participation in National and Local ASCE affairs.

ASCE DUES BILL AND TECHNICAL GROUP DETAILS

Section members will notice in the 1983 dues bill from National ASCE Headquarters, that the PHILADEL-PHIA (SECTION) DUES is itemized as \$11.00. This amount includes a \$1 assessment for membership in one Phila. Section Technical Group of your choice. If you choose to be a member of more than one Group, please add \$1.00 for each Group.

Also, because National's bill did not list the Technical Groups to which your \$1.00 payments were to be applied, you are requested to get in touch with the Chairmen of the Technical Groups of your preference, so that their membership lists can be classified.

The appropriate individuals to contact are the following:

Technical Group Liaison John E. Durrant

(Section Vice President)
Phila. Water Department
Materials Testing Laboratory
7th St. & Lehigh Ave.
Philadelphia, PA 19133
(215) 686-1776 Ext. 23-246

Associate Member Forum Margaret Yevics, President

215 S. 22nd St. Phila., PA 19103 (215) 732-4218

Construction Group

Fredric L. Plotnick, Chairman 806 Hillton Lane Elkins Park, PA 19117 (215) 487-1443 or (215) 843-7310

Geotechnical Group

Dr. Ziyad I. Husami, Chairman
Stone & Webster Engineering Corp.
3 Executive Campus, P.O. Box 5200
Cherry Hill, NJ 08034
(609) 482-3889

Hydraulics & Sanitary Group Darlene McKinney, Chairman

O'Brien & Gere Engineers 1617 J. F. K. Blvd. Philadelphia, PA 19103 (215) 564-4282

Structural Group

Stephen H. Golden, Chairman Pennoni Associates, Inc. 1911 Arch St. Philadelphia, PA 19103 (215) 561-0460

Transportation & Urban Development Group

David A. Novick, Chairman Parsons, Brinckerhoff, Quade & Douglas, Inc. 1500 Chestnut St. Philadelphia, PA 19102 (215) 963-0132

WOMEN'S AUXILIARY

Officers 1982 - 1983

President-

Mrs. Francis J. (Ruth) Depman, Jr. Vice President—

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

Recording Secretary-

Mrs, Charles E. (Claire) Roller

Corresponding Secretary-

Mrs. Peter C. (Diane) Johnson

Treasurer-

Mrs. William (Natalie) Clayton Past President—

Mrs. Robert M. (Paula) Koerner

September Meeting

In celebration of its Silver Anniversary, the Phila. Section, ASCE Women's Auxiliary enjoyed a special party at its first Luncheon-Meeting of the 1982-1983 season at the Engineers' Club on Wednesday, September 15, 1982. High praise for arrangements of the affair is extended to Annette (Mrs. "Chuck") Pennoni. Featured entertainers were the famous singing group, "Sweet Adelines", Valley Forge Chapter.

October Meeting

The next regular Luncheon-Meeting will be held on WEDNESDAY, October 20, 1982, 12:00 noon. It will be a tour and luncheon at the Camden County Historical Society, Pomona Hall, Park Blvd. and Euclid Ave., Camden, NJ 08103. Arrangements for this meeting were made by Auxiliary Vice-President Mary E. Shoemaker.

Pomona Hall and Museum is the criginal 18th Century home of the historically eminent Cooper Family of Camden. In addition to a tour of the museum, there will be an open-hearth cooking demonstration. Lunch will consist of authentic colonial dishes prepared over the open fire in the kitchen of Pomona Hall. The complete cost for the tour and lunch is \$10.00 per person. Checks should be made payable to Mary E. Shoemaker and mailed to her by October 6, 1982, at 451 Gladstone Ave., Haddonfield, NJ 08033.

For directions and full details, please call Mrs. Shoemaker at 1 (609) 429-1457.

Wives of Phila. Section members are cordially invited to join the Women's Auxiliary, to attend all luncheon meetings and other functions arranged and sponsored by the Auxiliary, and to bring guests. For full particulars about joining the organization, please call Membership Secretary Marie (Mrs. Kenneth J.) Zitomer at (215) 548-5324.

THE WILL M. HEISERS HONORED ON RETIREMENT

A dinner in honor of Mr. and Mrs. Will M. Heiser, celebrating Mr. Heiser's retirement, sponsored by his firm, O'Brien and Gere Engineers, Inc., was held at the Barclay Hotel, Philadelphia, on June 3, 1982.

Will and Audrey Heiser have been for many years very active in the Philadelphia Section, ASCE. Will is a Past President of the Section, and Audrey is a Past President of the Women's Auxiliary.

More than 300 professional associates and friends of the Heisers enjoyed the gala affair and joined in wishing them well in retirement at their brand new home in North Carolina. Among the many gifts presented to the Heisers was a beautiful Philadelphia Bowl from a group of Philadelphia Section members who attended the celebration.

MEMBERS IN THE NEWS

Lewis A. Caccese has been honored by the South Jersey Branch of the New Jersey Section, ASCE, with the 1982 Distinguished Civil Engineer Award, in recognition of his 45 years of outstanding service to the profession. A Registered Engineer in both New Jersey and Pennsylvania, Mr. Caccese is President of his own firm: Construction Claims Consultants, Inc., and a Vice President of S. T. Hudson Engineers, Inc., both of Philadelphia.

Before the establishment of the New Jersey Section, Lew was a prominent and active member of the Philadelphia Section, ASCE. He occupied official positions on the Board of Directors and numerous important Committee posts. He is a former Delaware Valley Engineer of the Year.

Donald D. Meisel, Engineer with Ambric Testing and Engineering Associates, Inc., Media, Pa., was recently named President of the Construction Specifications Institute, a National Technical Society based in Washington, D. C.

--0----

····O----

Dr. Frederick B. Higgins, who has served as Acting Dean of Temple University College of Engineering Technology since last September, has been named Dean. A specialist in environmental engineering, Dr. Higgins has been a member of the Temple faculty since 1973 and served as Department Chairman from 1973 to 1978.

Dr. Iraj Zandi, Professor of Civil and Urban Engineering, Univ. of Pa., has been named National Center Professor for Resource Recovery and Management. The Chair is sponsored by the National Center for Resource Recovery, which is supported by 40 companies, and is moving from Washington, D. C. to be housed at the University of Pennsylvania.

MASONRY COURSE ANNOUNCED

The Pennsylvania Concrete Masonry Association and the Delaware Valley Masonry Institute jointly announce a 2-Day Practice Oriented short course on

ENGINEERED MASONRY for Engineers, Architects, Builders, Designers and Building Officials

Location:

Holiday Inn, University City, 36th & Chestnut Streets, Philadelphia, Pa.

Date:

October 13 - 14, 1982

Session Topics:

Day 1 ---

Masonry Materials and Strength, Codes and Design Philosophy, Structural Performance of Loadbearing Structures, Selected Construction Topics: Cladding, Connectors, Winter Construction, Moisture Problems, Workmanship and Inspection and Insulation and Energy Conservation.

Day 2 ---

Mechanics and Strength Characteristics, Wall Analysis and Design, Performance under Seismic Loading, Building Design Examples: Low-Rise Industrial Building and Multi-Storey Residential Building.

Registration and Fees

Could be for one day or two days. The first day topics are practice and construction oriented topics. Second day topics are analysis and design oriented ones. Registration fees are \$125/day and \$200/two days. Included are lecture notes, inter-session refreshments and lunch.

Make checks payable to ENGINEERED MASONRY COURSE and send before September 17, 1982 to: Dr. Ahmad A. Hamid, Civil Eng. Dept., Drexel University, 32nd & Chestnut Streets, Philadelphia, PA 19104. For more information contact Dr. Hamid (215) 895-2355.

Lecturers:

Dr. Ahmad A. Hamid, Drexel Univ., Philadelphia, Pennsylvania

Dr. Harry G. Harris, Drexel Univ., Philadelphia, Pennsylvania

Dr. Robert G. Drysdale, McMaster Univ., Hamilton, Canada

Dr. Gary T. Suter, Carleton Univ., Ottawa, Canada. Spring Reviews

MARCH SECTION MEETING

March 9, 1982

Engineers' Club

The well-attended meeting experienced a splendid presentation, employing an exotic and unique visual bank of sixteen slide projectors, operating in tandem synchronization, producing an exciting effect, accompained by an excellent sound tape. The subject was: "The Interstate Success Story—Highway Planning in the City of Baltimore," and the speaker was William K. Hellman, P.E., Mayor's Transportation Coordinator.

Univ. of Pa. Night

In keeping with the Section's established policy of recognizing Civil Engineering schools in the area, the meeting honored the ASCE Student Chapter, alumni and faculty of the Department of Civil and Urban Engineering, University of Pennsylvania, A delegation of more than 30 U. of Pa.'s Civil Engineering school representatives attended.

Student Chapter officers included: President Brent Senseny, Vice Pres. Madelin Salamon, Treasurer David Brill, Secretary Jane Maier, Senior Class Rep. Chris Schmidt, Junior Class Rep. John Koury. Also, Faculty Rep. Chris Johnson, and new Faculty member Dr. Joy Pauschke, the first woman professor installed in the Penn Engineering faculty. Dr. Pauschke's specialties are structural and earthquake stresses.

Dr. Lepore Acknowledges Section Courtesies

Civil and Urban Engineering Department Chairman, Dr. John Lepore, described appreciable enrollment growth (it has quadrupled in engineering in the last 5 years, exceeding the National average in minorities and women); progress in the School of Engineering and Applied Science, where the Standard Aptitude Test (S.A.T.) is above 1330, indicating high scholastic capabilities. He is happy to report a successful fundraising campaign to finance new engineering buildings for classroom facilities and research laboratories. Environmental and Resources Management areas are making giant strides, he said.

President Senseny Reviews Chapter Activities

ASCE Student Chapter President Brent Senseny described the busy schedule, including the engagement of noted speakers at Chapter meetings, and special projects such as participation in the University's recent new Presidential inauguration ceremonies; the concrete cance race; the famous kite-flying contest victory, and many others.

Public Works Progress in Baltimore

Mr. Hellman stressed the cooperation amongst the Mayor, City officials, engineering designers, and the community in planning and executing programs in transportation environmental enhancement and urban development. The spectacular film presentations featured sixteen slide projectors activated in tandem sequence, and "3-D sound". films depicted the comprehensive highway planning, including interstate; mass transit; in-house planning by City and State coordinating committees, comprising multi-disciplinary departments and bureaus, for tunnels, bridges, by-passes to feed downtown arteries and suburban access routes; rehabilitation of declining neighborhoods, including homesteading programs.

Through public hearings and outstanding multi-media relationships, the programs are responsive to the social, esthetic and economic needs of the community.

The films and commentary were brilliant and unique, full of life and innovative projection techniques.

Following a spirited question and answer period, President Frederic Roll presented Mr. Hellman the Section's Certificate of Appreciation for his superb presentation; and also, a copy of the Philadelphia Section's Bicentennial celebration Book: "The History of Civil Engineering and Construction in the Delaware Valley".

APRIL JOINT DINNER MEETING

Philadelphia Section, ASCE Philadelphia Post, Society of Military Engineers

April 13, 1982

Engineers' Club

Editor's Note: As announced elsewhere in this issue of THE NEWS, Dr. George N. Bathish, Faculty Advisor of the Widener College, ASCE Student Chapter, whose remarks at the meeting are recorded in the following article, died suddenly on June 21, 1982.

More than 150 members and guests of host ASCE and SAME enjoyed the annual joint meeting. Phila. Section President Frederic Roll introduced SAME Officers, who graciously acknowledged the Section's hospitality.

The Memberships were privileged to hear a talk on the subject: Trident Base Construction, by Captain James M. Greenwald, Deputy Officer in charge of construction, Trident, Kings Bay Submarine Support Base, United States Navy.

Widener and Spring Garden College Night

The meeting honored the ASCE Student Chapters and Civil Engineering Departments of Widener and Spring Garden Colleges. For Widener, Faculty Advisor Prof. George N. Bathish announced that the College will soon achieve University status. He reviewed new and expanding C. E. facilities and programs, Dr. Bathish introduced the ASCE Student Chapter officers: President Jose Mediavilla, and Treasurer James Buttafuoco; and facility members in attendance including the new Faculty Advisor for next year, Dr. Balaur Dhillon,

Captain Greenwald on Trident

Phila. Section Program Co-Chairman Charlene O'Connor introduced the principal speaker, Captain James M. Greenwald. He outlined a historical review of the missile deterrent program up to the modern Trident, which now occupies submarine support bases on the west and east coast of the United States. The missile displaces more weight than World War I light cruisers — an almost incredible statistic.

The Trident Program is built around more than just submarine support, said Capt, Greenwald. It also includes missiles operation. Our speaker described operational cycles, patrol period on base, versatility of base locations, and facilities for refit and drydock maintenance. The bases take into account all environmental constraints, including fish migrations and nesting areas. Captain Greenwald illustrated the principal components of several bases — strategic weapons storage and support elements, recreational and community facilities, libraries, housing, etc. -- on both coasts of the United States, as well as in Spain and other friendly ports of the World.

(continued on page 6)

CONCRETE BRIDGES LECTURE

The Department of Civil Engineering, Drexel University, is sponsoring an Important Public Lecture by Dr. Christinan Mean, Prof. of Structural Engineering, Federal Technical University, Zurich, Switzerland, on

"DEVELOPMENT OF NEW FORMS IN CONCRETE BRIDGES"

Tuesday, October 12, 1982, 1:30 P.M. at Curtis Hall, Room 3-340, Department of Civil Engineering, Drexel University, 32nd and Chestnut Sts., Philadelphia, PA 19104.

For more information contact Prof. Harry G, Harris at (215) 895-2368,

APRIL JOINT MEETING

(continued from page 5)

He detailed the intricate criteris in Trident base site selection, the attempts to provide contingency provision for the unpredictable and the imponderable. He explained the inter-workings and mutual support characteristics between Trident and Poseidan.

From a densely wooded area and 47 miles of railroad track, Capt. Greenwald developed, in illustration, a Military Base Master Plan, which embraced analyses of the mission, proposed population, environmental regulations, agricultural limitations and a myriad of additional physical, military and geographical considerations and specifications.

In the building of a \$1.5 billion Trident Base in Georgia, Capt. Greenwald recited the staggering quantities involved: millions of cubic yards of dredging, roads placement, earthmoving and construction materials. Operational capability of this base is contemplated for the late 1980's.

A question and answer period followed Captain Greenwald's outstanding talk. Phila. Section President Fred Roll presented our distinguished speaker a Certificate of Appreciation and a copy of The Book. SAME President, Colonel R. L. Baldwin extended to Capt. Greenwald his organization's gratitude and presented him its Certificate of Appreciation. Colonel Baldwin then made announcements of particular interest to SAME.

STUDENT CHAPTER CONFERENCE

The 44th Annual Pennsylvania-Delaware Student Chapter Conference was held on April 23, 1982 at Lehigh University. Representatives of six colleges presented a total of seven papers covering a wide variety of Civil Engineering topics.

The student paper competition was started by the Philadelphia Section in 1926 to establish a forum for student authors to gain valuable experience in writing and presenting original papers to technical audiences. The 1982 conference was very successful in achieving this objective.

After a welcome by Dr. David Van Horn, Chairman of the Civil Engineering Department at Lehigh University and Opening Remarks by Chairman of Judges, Michael F. Harter, of Bethlehem Steel Corporation, the presentations were made. All seven papers were ex-

cellent and were delivered with confidence by the authors. At the conclusion of each presentation there was a discussion period in which members of the audience had an opportunity to question the speakers relevent to the paper. Following the paper presentation and lunch, the participants were treated to a very timely and well illustrated talk by **Dr.** Lynn Beedle, Director of the Fritz Engineering Laboratory entitled, "On Making a Paper Speak".

Although a very difficult task, the judges selected Mark S. Moschella of Drexel University as the First Prize winner for his paper entitled, "Segmental Bridge Construction." All participants received awards for their presentations.

The 1983 conference returns to the Philadelphia area and will be hosted by the University of Pennsylvania.

STORMWATER DETENTION SEMINAR

"Stormwater Detention" is the subject of a two-day professional development course to be held in Philadelphia, Pa., November 18 - 19, 1982. The course, which is intended for engineers and planners having a basic understanding of hydrology and hydraulics, will be presented by Stormwater Consultants — an engineering firm located in Bolingbrook, Illinois.

Attenuation of runoff flows by various detention storage methods is the seminar focus. Included are: detention facility sizing and location, inflow and outflow structure design, operation and maintenance, minimizing future problems, and optimizing facility effectiveness, structure life, and costs. Modern methods used to develop hydrographs and route flows through storage facilities are covered in workshop sessions.

The speakers will be Herbert G. Poertner, President of Stormwater Consultants and Chin Y. Kuo, Associate Professor of civil engineering at Virginia Polytechnic Institute and State University. Both speakers have had considerable experience in stormwater runoff control as professional engineers, educators and authors.

The seminar/workshop will be held at the Stadium Hilton Ian, 10th Street and Packer Avenue, Philadelphia, Pa. (off I-76 near Veterans Stadium). Advance registration is required (fee \$198). For information and/or registration, contact Stormwater Consultants, 3 Westchester Court, Bolingbrook, Illinois 60439; (312) 739-3810.

DEATHS

Editor's Note: THE NEWS is sad to report the recent deaths of two prominent and active Philadelphia Section Members.

Isadore ("Cappy") Caplan — suddenly, August 4, 1982 at the age of 66. He graduated from Drexel University in 1939 with a B.S. in Civil Engineering, and served in World War II in the U.S. Army Corps of Engineers. In subsequent years, Mr. Caplan was employed by the Ballinger Company, Architects and Engineers; Dorfman and Bloom, Consulting Engineers. He conducted his own private practice as a Consulting Engineer for 22 years prior to his retirement.

Cappy's most recent building structural design was the Har Zion Synagogue, Penn Valley. Other major buildings he designed included: Temple Sinai, Dresher, Pa.; Keneseth Israel Synagogue, Elkins Park; York House Apartment Complex, Olney.

In addition to his active membership in the Philadelphia Section, ASCE, in which he was a Life Member, and other professional societies, Cappy was a volunteer mathematics teacher in Radnor Township grade schools for special and handicapped students. He also performed volunteer work for the Delaware County Legal Aid Society, principally in assistance to elderly citizens in minor legal problems, social security functions, housing, income tax preparation, etc.

Mr. Caplan is survived by his beloved wife, Bertha, four children and one grandchild.

----O-----

Dr. George N. Bathish — suddenly, June 21, 1982. He was Professor of Engineering at Widener University, Chester, Pa., Faculty Advisor since 1960 of the ASCE Student Chapter at that school, and an active member for many years of the Philadelphia Section.

A 1955 graduate of Union College, George came to Pennsylvania Military College (the former name of Widener) in 1958 as Assistant Professor of Civil Engineering. He received his M.S. in Structural Engineering from Stanford University in 1957, and obtained the Ph.D. from the University of Pennsylvania in 1966.

In addition to ASCE, Dr. Bathish was a member of many academic and professional organizations, including PSPE (where he was Faculty Advisor to the Philadelphia Student Chapter), American Society of Engineering Education,

American Association of University Professors, The Franklin Institute, The Highway Research Board and others. His work on "Free Vibrational Characteristics of Pretensioned Cable Roofs" was conducted under a National Science Foundation Research Grant he was awarded in 1968. While on sabbatical leave in 1979-80 Dr. Bathish was Visiting Professor at Southampton University in England, carrying on research on Structural Dynamics, Finite Elements and Suspension Structures. His industrial experience included positions with Sun Ship, Boeing-Vertol, the U.S. Forest Service and the U.S. Army Corps of Engineers,

Contributions in Dr. Bathish's name may be sent to St. Pius X Building Fund, 260 Lawrence Rd., Broomall, PA 19008.

PLEASE PAY SECTION DUES!!

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

In addition, your payment of Section dues significantly helps the Section in its ongoing search for revenues to finance its numerous and varied programs. National ASCE allots \$3.00 for each assigned member who pays the Philadelphia Section dues.

In a policy initiated in 1979 ASCE National Headquarters will include Philadelphia Section dues in its National billing. In this way, your one check will pay both National and Local Philadelphia Section dues. (National ASCE will reimburse the Phia. Section for the Local dues). You will receive your bill from National ASCE, with appropriate instructions, shortly after October 1, 1982. Please send your checks in promptly to National Headquarters in accordance with their instructions.

Another important function of the billing is for Phila. Section members to include their preferences for membership in Technical Groups @ \$1.00 annually per Group. The bill from National will incude these choices. The total annual Phila. Section dues will therefore be \$10.00 plus \$1.00 per Technical Group membership.

YOU NEED THE PHILADELPHIA SECTION, ASCE FOR YOUR PROFESSIONAL FULFILLMENT. THE SECTION NEEDS YOUR SUPPORT CONTINUOUSLY. IT ALSO THANKS YOU FOR YOUR PARTICIPATION AND COOPERATION IN ALL ITS PROGRAMS AND ACTIVITIES.

ASCE MEMBERSHIP REINSTATEMENT

National ASCE Board of Direction recently approved two important By-Law revisions regarding suspension of members for dues delinquency and reinstatement requirements:

Suspension of a member will now take place after twelve months dues delinquency instead of the former eighteen months. Publications, however, are either paid for in advance or cancelled within three months of non-payment of dues;

Reinstatement — Under the current membership drive, a former (suspended) member who owes money may, for 1982, reapply and pay the \$25.00 membership application fee, and be reinstated, with past debts forgiven. However, large debts regarding journals may not be entirely forgiven.

The above reinstatement provisions will also apply to Phila. Section membership. Reinstatement to the Section will be automatic (after reinstatement to National ASCE) with former member's payment of the 1982 (\$10.00) dues and subsequent year's dues.

HOW TO HAVE A HEART ATTACK

Sage Advice From C.P.R. Class

Editor's Note: Your editor recently was certified in Cardio-Pulminary Resuscitation (CPR). The following advice is a keynote to introduction in the course.

Work like a horse — do everything yourself. Don't expect anyone to do the job as well as you. Never say "no" to more work, even if it takes all your weekends and nights. Don't relax.

Get all your exercise at once — play golf or tennis or some other game, but play it hard — once a week or month. Sit the rest of the time.

Hit the road — catch planes, trains or drive, but do it constantly with catnaps and foodnaps now and then. But don't stop.

Be a nibbler — never sit down to a quiet, nourishing meal. Grab a sandwich on the run or snack at your desk.

Show 'em — don't let anyone get ahead of you. Get mad often. Show 'em how it's done, even if it kills you!

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!

READING BRANCH

OFFICERS — 1982 - 1983

President--

Robert B. Ludgate

Vice President-

Carl A. Vath

Secretary-

T. Daniel Biss

Treasurer-

Gerald J. Gagne

Directors—

Arthur E. White

Joel L. Caves

Ben M. Nacar

Lora L. Schneider

Past President-

Patrick J. McMackin

Reading Branch Meetings

1982-1983 Schedule of Meetings

September 9, 1982-

Location:

Airport Restaurant

Topic:

Reading Airport

Speaker: Kent George

October 10, 1982-

Location:

'Hanover's Restaurant

Topic:

Reading Civic Center

Notes: Joint with PSPE

November 11, 1982-

Location:

Amish Land Motor Inn

(Rts. I-176 & 83)

Topic:

Land Development

Speaker: B. Hankin

December 12, 1982—

Location:

Sze Chuan

Topic:

China & Engineering Opportunities

Speaker: C. Chen

January 21, 1983-

Location:

Reading Motor Inn

Topic:

Decline & Revitalization of Cities-

5 Decades of Change

Speaker: M. LaeFevre

Notes: Spouses Night

February-

Location: GVCC
Topic:

Disney World Notes: Joint with PSPE

March, 1983-

, 1983—

Not and

Notes: Joint with PSPE

April 21, 1983---

Topic: NASA

May 19, 1983—

Topic:

Control Demolition, Inc.

Additional information will be furnished as it becomes available.

GEOTECHNICAL GROUP MEETINGS

Twelfth Annual Lecture Series Geotechnical Aspects of Energy

The Geotechnical Group of the Philadelphia Section, ASCE, has published the proceedings of the Twelfth Annual Lecture Series on Geotechnical Aspects of Energy. The volume includes papers on Siting of Hydroelectric Power Plants (W. F. Swiger), Geophysical Prospecting (R. N. Spect), The Geotechnics of Underground Mining for Fuels (T. D. O'Rourke), Geotechnical Considerations in Surface Mining (W. N. Heine), Geotechnical Aspects of Offshore Drilling and Production Platforms (M. S. Glasscock), Monitoring by Acoustic Emission in Energy Projects (W. M. McCabe) and, as a case history, Geotechnical Considerations for the Trans-Alaska Pipeline (W. W. Moore).

Copies are available at \$15.00 for individuals and \$25 for libraries and institutions. Please make checks payable to: Z. I. Husami, Stone & Webster Engineering Corporation, P. O. Box 5200, Cherry Hill, NJ 08034, phone: (609) 482-3889.

SECTION MEMBERSHIP ASSIGNMENT PREFERENCES

A number of the area ASCE members have raised questions concerning their assignment to an ASCE Section. Section assignments are made on the basis of mailing addresses. If an ASCE member, for example, lives in New Jersey but works in Philadelphia he/she will be assigned by National to one of two Sections. If the ASCE member uses his/her home address for receiving mail, the Section assignment will be New Jersey. If the mailing address used, however, is the work address, the Section assignment will be Philadelphia.

For ASCE members who do not live or work in a region covered by the ASCE Section he/she would prefer to belong to, ASCE National will still make the Section Membership assignment based on mailing address. If membership in another Section is still desired, the member must personally contact the Section he/she is desirious of joining and pay Local Section dues. This procedure is discussed in the mailing package sent with the annual dues statement.

Any ASCE member may belong to as many Sections as he/she would like, but he/she must contact the Sections directly, with the sole exception being the Section assigned by National. Persons interested in membership in the Philadelphia Section should contact Al Tantala, Section Secretary, at 289-4600.

Editor's Note: THE NEWS is indebted to Past President James J. McPhilips for the following tongue-in-cheek gem.

Beware The Wrath Of Abibarshim!

Recently excavated clay tablets shed new light on the most famous engineering failure in antiquity. Although some of the words are conjectural, this translation contains a clear message for modern engineers. Do you know someone who might benefit from this voice from the past?

By Paul Pendragon Translator

I, Abibarshim, Great King, King of Kings, Ruler of Kish, Babil, Agade and Sankhar, and of the regions across the Hilla, conqueror of Ninevah, destroyer of Sepharia, having striven mightily and met with grief, lay down this Code that ye may not also strive mightily and meet with grief, nor fall flat on thy ass.

For I, Abibarshim, King of Kings, and all that, did buy many Aethyopeans and hire many artisans and scribes and masons and Makers of Engines and Designers of Buildings. And great was their craft and great their number, which was one hundred and forty-four thousand, give or take a few job-shoppers. Yea, they did strive mightily, too, for they knew what would happen if they strove not mightily. And the name of my capital improvement project was the Tower of Babil.

Yea, great was their craft and wonderful to behold what the Designers of Buildings wrought on papyrus. All who looked thereon did marvel at their genius. I, Abibarshim, did also look thereon and did declare their designs to have much nift.

But many days did pass, and many times did the moon wax and wane, and the tower was not yet builded.

So I, Abibarshim, King of Kings, did hie me to the palace by the Arakhtu where dwelt the Designers of Buildings and Makers of Engines. And there I found not Designers of Buildings and Makers of Engines, but Drinkers of Coffee and Tellers of Tales (whom men call hurlens of bull dung). So I vented my royal spleen, which did perturb them mightily.

"Look here, O King, etc.," saith the Chief of the Makers of Engines. "Some things can't be rushed. If thou wantest us to get thy bloody tower builded on time, then thou hadst better givest us a little respect. For canst thou build thy tower without us?"

"But I have given thee this palace in

which thy work may be done, and I pay thee many talents of gold and silver, plus all the usual fringies. What more wouldst thou have me do to get this project moving?"

"Well, thou canst start with alabaster lamps for the draughtsmen," saith the Chief of the Makers of Engines, refilling his cup. "And maybe draughting instruments of silver and electrum . . ."

"Thou shalt have them Just get my tower builded." And I, Abibarshim, King of Kings, did depart the palace of the Makers of Engines with my tail betwixt my legs.

And many days did pass, and many times did the moon wax and wane, and the tower was still not yet builded. So I, Abibarshim, did corner the Chief Scribe and ask him, "What goeth on here?"

The Chief Scribe fell to his knees and said: "O Great and Merciful King, the Makers of Engines give us scrolls of material for to purchase. But, verily, no man knoweth what the scrolls signify, save the Makers of Engines themselves. For they call not a spade a spade, but call it here a delver and there a digger and another place an entrenching tool and yet another a geovolvometer, so that the scroll of material agreeth not with the design papyrus. And strange to behold is their numerolgy."

So I, Abibarshim, gave certain orders to try to keep the Makers of Engines from creating their own language, saying, "How did it come to pass that those who have such swiftness of mind, even as the gazell, lack the sense of geese?"

And many days did pass, and many times did the moon wax and wane, and the estimate did wax and never waned, and the tower was not yet builded.

So then I did ask the Chief Mason, "What giveth?" and he, throwing himself prostrate before me, spake thus:

"O King, every day we toil from dawn until the dusk! Every week the Makers of Engines say they have wrought new and niftier designs, of which we knew not, and what we have builded hath been fashioned unto obsolete papyri. Then my team teareth down and starteth over, O Great King, Merciful King, King of Kings . . ."

So I, Abibarshim, gave certain orders that did fix those designs thenceforth.

But many days did pass, and the tower did rise slower than sap rolleth down the bark of a tree.

So I, Abibarshim, did seek out the Chief Aethyopean, who seemed to know where it's at, and asked, "How come no tower?"

(to be continued)