

# the news



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

Vol. 60 - 6

OUR 74th YEAR

March, 1988

## MARCH DINNER MEETING

Philadelphia Section, American Society of Civil Engineers

**TUESDAY, MARCH 8, 1988**

ENGINEERS' CLUB, 1317 Spruce St., Philadelphia

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

**SUBJECT:** THE NAVY'S CONTRACTOR-QUALITY-CONTROL SELF INSPECTION PROGRAM

**SPEAKER:** MYRON BERNHANG, P.E., Contract Administration, Northern Division, Naval Facilities Engineering Command, Philadelphia Naval Base

The U.S. Navy has on numerous projects instituted a program for assurance of quality control based upon self inspection by the contractor. Although this system would appear to encompass a potential conflict of interest, it has been used successfully throughout the country for the last several years. Thus, the Navy's CQC program should be of interest to both other public entities and private concerns looking for a better means to assure quality at reasonable costs and without incurring liability as a result of inspection of the works.

*(Continued on Page 2)*

FOR RESERVATIONS FOR THE MARCH 8, 1988 MEETING, PLEASE CALL PRESIDENT NORMAN WEINTRAUB'S SECRETARY, PAULA AT (215) 592-6209.

Dinner Meal Charge: ASCE Member - \$15.00; Non-Member - \$16.00; Students - \$8.00

STUDENTS: If you prefer, you are welcome to attend the Meeting after Dinner, at no charge.

## APRIL JOINT DINNER MEETING

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

**TUESDAY, APRIL 12, 1988**

ENGINEERS' CLUB, 1317 Spruce St., Philadelphia

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

**SUBJECT:** THE ASCE MANUAL OF PROFESSIONAL PRACTICE FOR QUALITY IN THE CONSTRUCTED PROJECT.

**SPEAKER:**  
JAMES W. POIROT, Chairman of the Board, CH2M Hill, Inc.

*(Continued on Page 2)*

FOR RESERVATIONS FOR THE APRIL 12, 1988 JOINT MEETING, PLEASE CALL PRESIDENT NORMAN WEINTRAUB'S SECRETARY, PAULA AT (215) 592-6209.

Dinner Meal Charge: ASCE & SAME Member - \$15.00; Non-Member - \$16.00; Students - \$8.00

STUDENTS: If you prefer, you are welcome to attend the Meeting after Dinner, at no charge.

## TECHNICAL GROUP ACTIVITIES

### Structural Group

#### February Meeting Rescheduled

The Structural Group's February 23, 1988 Meeting, announced in the February, 1988 issue of THE NEWS, has been rescheduled for Tuesday, April 26, 1988. All details as previously published, will be re-announced in the April-May issue of THE NEWS.

#### March Meeting

Date: **Tuesday, March 22, 1988**

Engineers' Club

Cocktails - 5:00 PM; Dinner - 6:00;

Meeting - 7:00

#### Subject: Hydrodemolition for Concrete Repair/Restoration projects

Speaker: **Joseph F. Bradley**, International Marketing Corp.

Hydrodemolition (high pressure water blasting) is fast gaining recognition as the optimum method for concrete removal and surface preparation. Mr. Bradley will present aspects of this technology and its application to parking deck repairs, bridge decks, and an array of other repair/rehabilitation projects.

For reservations and full information, please call **Timothy H. Haahs**, Chairman, Structural Group, at Walker Parking Consultants, (215) 751-9555; or **David Van Ocker**, Vice Chairman, at Christakis & Kachele, Inc., (215) 352-7676.

### Transportation & Urban Development Group

#### March Meeting

Date: **Thursday, March 24, 1988**

Engineers' Club

Cocktails - 5:00 PM; Dinner - 6:00;

Meeting - 7:00

#### Subject: SEPTA's 9th Street Branch - Mainline Systems Improvements

Speaker: **George Stanley, P.E.**, Senior Program Manager, SEPTA

Mr. Stanley will provide an overview of this major capital program. The project consists of a complete rehabilitation of the SEPTA (formerly Reading) Mainline from the new Center City Commuter Rail Connection to Wayne-Junction. This will entail rehabilitation or replacement of 26

*(Continued on Page 2)*

**THINK SPRING!! THE ANNUAL SPRING DINNER DANCE**

**Saturday, May 14, 1988**

Colleen's Restaurant and Towne Hall

Parke Towne Place, 2200 Benjamin Franklin Parkway, Phila., PA

*DINNER, DANCING, FUN!!*

**Mark Your Calendar NOW!!**

**March Dinner Meeting**

*(Continued from Page 1)*

**Myron Bernhang, P.E.**, is a 1959 graduate, B.S. in Civil Engineering, of the University of Pennsylvania, with graduate and advanced studies in Structures, Construction Management, Contracts and Claims.

Prior to his 21 years of service with Northern Division, Naval Facilities Engineering Command, Contract Administration Division, Mr. Bernhang was employed by a private consulting engineering firm on local construction projects; served 3 years of active duty with the U.S. Air Force at Otis AFB, Massachusetts Base Civil Engineer Office, performing responsible charge on construction inspection and public works; BOMARC Missile site, housing projects and industrial buildings. His government civilian career following active duty was in the U.S. Army Corps of Engineers - Project Manager; and five years in the Department of Housing and Urban Development - Project Manager.

In his present position, Mr. Bernhang has served as Construction Manager, Quality Assurance Engineer, and Supervising Civil Engineer.

**April Joint Dinner Meeting**

*(Continued from Page 1)*

The publication of this year's "Manual of Professional Practice for Quality in the Constructed Project" is the result of more than two and one-half years of effort by a Task Committee, with numerous volunteer contributors and reviewers, ASCE staff and an expenditure of approximately \$250,000.00

Heading up the Task Committee is James W. Poirot, who will present the results - one of the most ambitious undertakings in ASCE history.

The manual has also become an issue of controversy among some members and other organizations, including the American Institute of Architects, whose National President has announced his opposition to its publication.

**SPECIAL FEATURE: TEMPLE UNIVERSITY NIGHT**

**ACI SEMINAR**

The Delaware Valley Chapter of the American Concrete Institute (ACI) will sponsor a one-day seminar on the subject: "Designing for Durable Concrete," on **Wednesday, March 9, 1988**, at the Holiday Inn, 4100 Presidential Boulevard, Philadelphia, PA.

Design and research engineers, contractors, testing laboratory personnel and concrete producers will benefit from the experiences of nationally prominent presenters as they answer the question: "Why is designing for durability as important as good structural design?"

Topics to be included are:

- Freezing and Thawing
- Aggressive Chemical Exposure (chlorides)
- Abrasion
- Corrosion of Embedded Materials
- Reactive Aggregates
- Coatings, Sealers and Toppings

Registration fee is \$175 for ACI Members; \$200 for ACI non-members; full-time college students - \$30; professors and ACI Chapter officers - \$90. If you are not an ACI member, you may sign up for a free six-month complimentary membership at the seminar. For full information write to **Helmut Wilden, P.E.**, c/o H. Wilden

**WOMEN'S AUXILIARY**

**March Meeting**

After a two-month winter break (there were no regular luncheon meetings in January or February, 1988), the Section's Women's Auxiliary resumes its activities with an event which promises to be very enjoyable. It will take place on **Wednesday, March 16, 1988. At 12:00 noon**, luncheon will be held at **City Tavern, 2nd and Walnut Streets, Philadelphia**. Following luncheon there will be a walking tour of Old Philadelphia, guided by Auxiliary veteran Eria (Mrs. Victor A.) Marcus. For reservations, please call **Mary Ellen (Mrs. Warren R.) Van De Vort (215) 483-0714**.

Auxiliary members are urged to recruit Philadelphia Section member spouses to join the splendid organization and to take part in its varied and interesting activities. For more information and applications for membership, please contact Membership Chairman Marie (Mrs. Kenneth J.) Zitomer at (215) 548-5324.

& Associates, Inc., 315 East Main Street, Macungie, PA 18062; or call for brochure - (215) 966-3935.

**Technical Group Activities**

*(Continued from Page 1)*

bridges and more than 4 miles of track, catenary, signal and right-of-way improvements on the 4-track grade separated railroad through densely populated North Philadelphia. The \$150 million plus project undoubtedly will be challenging; and Mr. Stanley's presentation should provide insight of this major transportation undertaking.

For reservations and full information, please contact **William T. Thomsen**, Chairman, T&UD Group, c/o Urban Engineers, Inc., 300 N. Third St., Philadelphia, PA 19106; (215) 922-8080.

**PHILADELPHIA SECTION  
AMERICAN SOCIETY OF  
CIVIL ENGINEERS**

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City of Philadelphia

Water Department

One Reading Center

Philadelphia, PA 19107

(215) 592-6209, 686-1635, 228-7087

**Secretary - Robert M. Wright**

City of Philadelphia

Department of Streets

920 Municipal Services Building

Philadelphia, PA 19102

(215) 686-5538

**PUBLICATIONS COMMITTEE**

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**SEND COPY TO:**

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**FOR**

**APRIL-MAY 1988**

**ISSUE**

**MARCH 8, 1988**

## NOMINATIONS FOR OFFICE 1988-1989

In accordance with the Constitution and By-Laws of the Philadelphia Section, ASCE, the Nominating Committee appointed by President Norman G. Weintraub has submitted the following slate of nominees for elective office for the 1988-1989 administrative year:

President - Susan K. Lior (one year)  
1st Vice President (President - Elect) - J. Richard Weggel (one year)  
2nd Vice President - Francis J. Depman (one year)  
Secretary - Robert M. Wright (two years)  
Treasurer - Thomas J. Branigan (completing second year of a two-year term)  
Membership Secretary - Joanne M. Anovick (completing second year of a two-year term)  
Director - Timothy H. Haahs (two years)  
Director - William T. Thomsen (two years)  
Director - Alvin Zion (two years)  
Director - Edward M. Wallo (completing the second year of a two-year term)  
Director for Reading Branch - To Be Announced (one year)

Offices in which incumbents have one more year to serve are:

Directors - Michael J. Gabor  
- Moustafa A. Gouda

Past Presidents to serve on the Board of Directors:

Ira N. Pierce  
Albert M. Tantala  
Norman G. Weintraub

If no additional nominees have been submitted to the President in accordance with the Section's Constitution and By-Laws by April 1, 1988, the above slate of nominees shall be declared elected at that time, and will be installed at the Annual Spring Dinner Dance at Colleen's Restaurant and Towne Hall, Park Towne Place, Philadelphia, PA on May 14, 1988.

Members of the Nominating Committee are: Albert M. Tantala, Chairman; John E. Durrant, Susan K. Lior, Ira N. Pierce, Sidney Robin, Joseph R. Symick, and Kenneth J. Zitomer.

## NATIONAL ASCE COMMITTEE CONFERENCE AT DREXEL

The Executive Committee of the Waterway, Port, Coastal & Ocean Division of National ASCE will meet at Drexel University on Thursday and Friday, March 24-25, 1988. In an effort to foster greater interaction among ASCE Technical Activities Committees and Local Sections, we cordially invite Philadelphia Section members interested in the activities of our Division to attend. The meeting will begin at 10:00 A.M. on Thursday in Room 226 of the Creese Student Center at 32nd and Chestnut Streets. The first day is usually devoted to reports on recent activities of the Board of Direction and MGD by ASCE Headquarters staff and on the activities of the various Technical Committees of the Division by the respective Division contact member. Thus, Thursday's session may be of interest to Philadel-

## A.P.W.A. CONFERENCE AND WORKSHOP

The Education Committee of the Delaware Valley Chapter, American Public Works Association announces the following events, in which Philadelphia Section, ASCE members are invited to participate:

### CONFERENCE ON MANDATORY SOLID WASTE RECYCLING IN PENNSYLVANIA

Date: April 14-15, 1988

City Hall, Allentown, PA

Keynote Speaker: Arthur Davis, Secretary, Pennsylvania Department of Environmental Resources (DER).

The mandatory recycling provisions in the recent Pennsylvania Senate Bill 528 will be the focus of this timely two-day conference. The registration fee for the conference is \$125.00 per person (approximately). For more information, contact Paul Ciotta at (215) 270-1918, or Charlene Thomas at (215) 437-7576.

### WORKSHOP ON REHABILITATION OF SEWER SYSTEMS

Date: April 18-19, 1988

8:00 A.M. - 4:30 P.M.

Sheraton Poste Inn, Routes 70 and 295,  
Cherry Hill, NJ

Sponsored by: Central Office A.P.W.A., Institute for Water Resources and Delaware Valley Chapter.

Costs: Members - \$195.00

Non-members - \$230.00

The objective of the workshop is to provide management, engineering and maintenance personnel with information for evaluation of alternative methods of rehabilitation of sanitary and stormwater systems, including pumping stations, manholes and pipes. Planning guides, specifications, design considerations, inspection, and construction contracts will also be evaluated for rehabilitation program alternatives. The workshop is designed for public works supervisors, engineers and sewer maintenance managers responsible for the operation and rehabilitation of sewer systems.

Topics include: Applicability of Various Rehabilitation Techniques; Estimation of Costs; Relative Impact Upon Infiltration/Inflow; Suitability for Public Agency Force Account Work; and Contracting for and Inspection of Rehabilitation Projects.

For further information, contact Marlene Vescovi at (215) 563-3460, or Charles Norkis at (609) 465-9026.

phia Section members. We would like to encourage attendance by any individuals who might be interested in serving on Technical and Task Committees within our Division.

I will be glad to provide further information to those Philadelphia Section members who are interested.

J. Richard Weggel, Ph.D., P.E.,  
ASCE Management Group D (MGD)  
Contact, Waterway, Port, Coastal &  
Ocean Division; c/o Drexel University  
(215) 895-2355

## DENNY RESIGNS AS TREASURER

Charles J. Denny has informed the Board of Directors that he will be unable to continue as Section Treasurer and has tendered his resignation from that position effective at the end of the activity year in June.

Denny has served as Treasurer since 1981. Prior to that he served a four year apprenticeship as Assistant Treasurer.

Denny joined ASCE in 1975 after earning a Bachelor of Science in Civil Engineering from Drexel University where he was on the Dean's List. Following graduation he took a position with the Philadelphia Water Department in its Water and Sewer Systems Planning Unit. In October, 1977, wanting to make better use of his transportation training, he transferred to the Streets Department as a Traffic Studies Engineer. As such he is involved in analyzing and evaluating various traffic parameters with an eye towards identifying and solving city-wide traffic problems.

Denny has always been active in the Philadelphia Section. He has served for many years as a Contact Member to the Drexel University Student Chapter and chaired the Section's Hospitality Committee from 1976 to 1978.

Chuck now lives in Roxborough with wife Kathy and sons Charles Joseph IV (C.J.) and Jonathan. His interests include softball, skiing, chess and music (he played tuba in his high school band). Prior to moving to Roxborough, he lived in Center City where he was active in the Logan Square Civic Association.

He confesses that with the many responsibilities of being a father he is no longer as active as he once was. He offers the phrase "couch potato" to describe himself. But we know better. We see him as an active, hard-working professional who has spent many hundreds of volunteer hours making the Philadelphia Section function smoothly. And we're going to miss his detailed financial reports at our monthly board meetings. But we trust he'll be around to offer advice to his successor and counsel to the Section. We wish him well and thank him for all he has done for us. But Charlie, don't think for one minute that we're going to let you ride off into the sunset. We're just going to use your talents differently.

### February Meeting (Cont'd from page 4)

expressed concern that higher skilled plant operators are needed and he called for increased compensation and training. Mr. Marrocco's masterful presentation of the DER's strategies and implementation plans included many graphs, charts, maps, and to drive some points home — cartoons.

### Questions and Answer Period

Penetrating comments were directed to the speaker from members of the audience, on the challenges and questions which remain in limbo, particularly: "Where do we go from here?" as to the EPA enforcement tools and DER coordination with water utility companies and municipal authorities to meet the standards of safe drinking water. Mr. Marrocco addressed these issues directly and unequivocally.

President Weintraub congratulated Mr. Marrocco for his exemplary program and, on behalf of the Philadelphia Section, presented him its Certificate of Appreciation.

## ASCE DUES BILL AND TECHNICAL GROUP DETAILS

## February Meeting

February 9, 1988

At the Sheraton Valley Forge Hotel

By Sid Robin, Editor and Dave Perri, Staff Writer

Section members will notice in the 1987 dues bill from National ASCE Headquarters, that the PHILADELPHIA (SECTION) DUES is itemized as \$13.00. This amount includes 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 Chairman of the Technical Groups of your preference*, so that their membership lists can be classified.

The appropriate individuals to contact are the following:

### Liaison

*J. Richard Weggel*  
Drexel University  
Dept. of Civil Engineering  
Philadelphia, PA 19104  
(215) 895-2355

### Younger Member Forum

*Anthony M. Micciolo*, Chairman  
1141 Dyre Street  
Philadelphia, PA 19124  
(215) 744-8767

### Construction

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

### Engineering Management

*Chairman position available.*  
*If interested, please contact*  
*J. Richard Weggel*  
*(See "Liaison" above).*

### Geotechnical

*Moustafa A. Gouda*, Chairman  
Lippincott Engineering Associates  
501 Burlington Avenue  
Delanco, NJ 08075  
(609) 461-1239

### Structural

*Timothy H. Haahs*, Chairman  
Walker Parking Consultants  
2 Penn Center Plaza  
Philadelphia, PA 19102  
(215) 751-9555  
*David A. Van Ocker*, Vice Chairman  
(215) 352-7676

### Transportation and Urban Development

*William T. Thomsen*, Chairman  
Urban Engineers, Inc.  
300 N. 3rd Street  
Philadelphia, PA 19106-1193  
(215) 922-8080

### Water and Environmental Engineering

*Farid F. Mansour*, Chairman  
United Engineers & Constructors, Inc.  
30 S. 17th Street  
Philadelphia, PA 19101  
(215) 422-3376

In a pleasant diversion of change in location — attended by more than 100 members and guests — the Philadelphia Section, ASCE February Dinner Meeting took place at the beautiful Sheraton Valley Forge Hotel, King of Prussia, PA. It was a joint meeting with the Section's Reading Branch. Reading Branch President **Rod K. Simonetti** led a nice delegation of Branch members to the meeting. Mr. Simonetti was introduced to the assemblage by Philadelphia Section **Norman G. Weintraub**. Norm and Vice President **Sue Lior** are to be congratulated for their fine research and innovative ideas in locating and arranging the outstanding meeting.

The subject for the meeting was: "*The Safe Drinking Water Act*," and principal speaker was **Frederick A. Marrocco**, Chief, Division of Water Supplies for Harrisburg Central Office, Pennsylvania Department of Environmental Resources.

### Villanova University Night

The meeting honored the ASCE Student Chapter and Civil Engineering Department of Villanova University, and there was an impressive turnout of students, alumni and faculty. President Weintraub introduced **Dr. Lewis J. Mathers**, Chairman of Villanova Civil Engineering Department. Dr. Mathers thanked the Section for its courtesies and for its keen interest in student participation in ASCE affairs. He then presented Villanova's 1988 Student Chapter President, **Chuck Catania**.

### Chapter Activities Noteworthy

President Catania acknowledged for bows his 1987 and 1988 fellow Chapter officers: **1987**-President, **Maureen Warren**; Vice President, **Amy Gallen**; Secretary, **Darlene Dematte**; Treasurer, **Maureen Lindon** — **1988**-Vice President, **Ted Stawasz**; Treasurer, **Denise Springborg**; Secretary, **Patti Murray**.

Chapter highlights reviewed by Mr. Catania included:

- Last year's Concrete Canoe Competition as part of the National ASCE Convention in Atlantic City, NJ; and also on the road to the competition at the University of Maryland.
- Achievements of students, several of whom have been nominated for listing in *Who's Who*.
- Scholarship award from Phila. Section's Women's Auxiliary.
- Participation in the ACI Concrete Beam Contest.
- Varied technical and social activities and workshops.

President Catania appealed to the Senior Members to make presentations on their specialties at Student Chapter meetings.

### Dr. Mathers Discusses Progress

In his usual witty and personable fashion, Dr. Mathers reviewed his Department's programs and introduced fellow faculty members in attendance: Student Chapter Faculty Advisor **Dr. Paul C. Hoffman**; former Civil Engineering Department Chairman **Dr. Edward M. Wallo**; **Dr. William Ferguson**; **Dr. Edward Glynn**; and the newest faculty addition, **Dr. Weerapun Sriboonlue**, Assistant Professor specializing in

Structural Engineering. Dr. Mathers observed that the achievements of these distinguished teachers and their confreres reflect most favorably on Villanova's Civil Engineering Department.

The Department recently earned six-year accreditation for undergraduate curricula. The programs are constantly under review from the freshman to the senior year. Dr. Mathers is encouraged by the improvement in Civil Engineering enrollments from the nadir a few years ago. More than 45 B.S.C.E. degrees will be issued this year. On the graduate level, in the fields of Water Resources, Environmental, Geotechnical, and Structural Engineering, new courses including finite analyses, earthquake probability engineering, and others are being added to the curricula.

### Sue Lior Introduces Mr. Marrocco

Section Vice President Susan K. Lior introduced the evening's featured speaker, Pennsylvania Department of Environmental Resources' (DER) **Frederick A. Marrocco**, who examined in detail the impact that Congress' 1986 Amendments to the Safe Drinking Water Act will have on water supply systems throughout the State. He provided a historical perspective by reciting a brief history of regulatory control of the water supply industry, commencing with measures to control typhoid and cholera.

### Surface Water Filtration

Mr. Marrocco explained that the Amendments mandate that all surface water systems employ filtration processes by the mid 1990's. This provision will result in a significant impact on Pennsylvania, where 20% of the nation's unfiltered water systems are in use. The filtration provisions will also impact existing filtered systems through increased performance and operating controls requiring covers for filtered water reservoirs, and by promulgation of new filter design standards.

### Disinfection and Contaminants

The Amendments also mandate regulation of water disinfection by-products. As a result, the EPA will consider regulating movement toward use of ozone as a primary disinfectant. Also of particular concern is radon contamination which has emerged as a significant issue. The response to this problem is the promulgation of maximum contaminant levels for radionuclides in potable water.

### Financing Problems

To comply with the Amendments, \$581 million will be needed to upgrade Pennsylvania water systems and the total cost of impact and improvements in the state will exceed \$1 billion. Financing will emerge as a particular problem for many Pennsylvania water supply systems since 75% of the systems serve less than 1,000 people and 81% of the systems in need of filtration serve less than 10,000 people.

### Small Water Systems

For very small systems, compliance will entail upscaling point of entry treatment systems and the use of package filtration systems. Mr. Marrocco

(Continued on page 3)