

# the news



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PHILADELPHIA SECTION  
AMERICAN SOCIETY OF CIVIL ENGINEERS  
P. O. Box 58186, Philadelphia, PA 19102-8186

Vol. 63-5

*Our 77th Year*

March 1991

## MARCH JOINT DINNER MEETING

Philadelphia Section, American Society of Civil Engineers  
South Jersey Branch, New Jersey Section, American Society of Civil Engineers

### TUESDAY, MARCH 12, 1991

Location: HARBOR LEAGUE CLUB, 800 Hudson Square, Camden, NJ  
(See Location Map below)

**SUBJECT: PORT OF PHILADELPHIA: PROBLEMS AND PROSPECTS FOR THE TWENTY-FIRST CENTURY**

**SPEAKERS:** John P. LaRue, Executive Director, Philadelphia Regional Port Authority; Susan A. Howland, Manager of Public Affairs, Port of Philadelphia Maritime Exchange; and Lt. Col. Kenneth H. Clow, Commander and District Engineer, U.S. Army Corps of Engineers, Philadelphia District.

John P. LaRue's appointment as the first Executive Director of the Port Authority caps a 15-year career of public service. Prior positions include: Assistant Director of Commerce, City of Philadelphia; Director of the Federal Programs Unit of the City; and Assistant Director of the Criminal Justice Improvement Team, a special unit within the City government charged with development and implementation of a Crime Specific Control Plan. In his Commerce position his responsibilities included administrative and policy oversight of the Port of Philadelphia, Philadelphia International Airport, and the Philadelphia Civic Center, securing contracts for the U.S. Naval Base at Philadelphia, which created thousands of jobs and generated millions of dollars of commerce for the Philadelphia area.

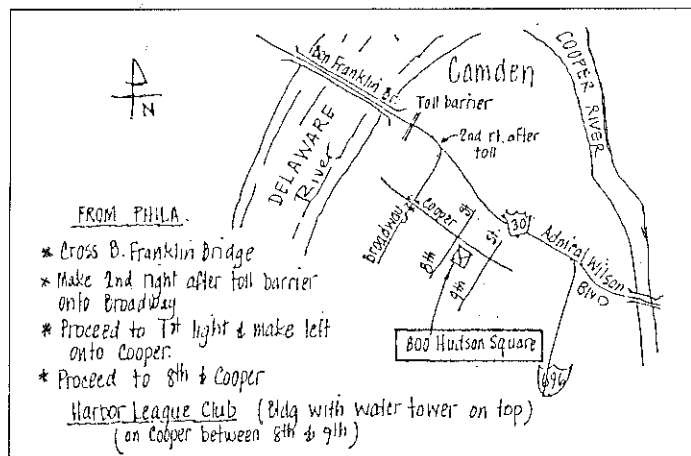
In her present post, Susan A. Howland is responsible for the development of public affairs and communications programs that further both the private and public sector's understanding of the Port and its related transportation infrastructure. As an affiliate of the Maritime Exchange's consulting services, Ms. Howland is Project Manager for Rail-Port Inc., a Joint Venture of several transportation related industries which aims to improve intermodal services for domestic and international shippers to the Ports of Philadelphia and other North Atlantic ports.

Since 1979, Ms. Howland has been president of Susan Howland & Associates, a small consulting firm which serves transportation, energy and financial institutions. Her career also embraces service on the staffs of United States Senators Taft and Heinz (Ohio and Pennsylvania), specializing in transportation, naviga-

(Continued on Page 2)

### LOCATION MAP for Harbor League Club, Camden, NJ

THE NEWS is indebted to  
Past President Rich Weggel, for  
his excellent preparation of this  
Location Map.



## TECHNICAL GROUP ACTIVITIES Geotechnical and Environmental/Water Resources Groups

(Combined program for 1990-1991)  
March Meeting

Date: Tuesday, March 19, 1991, 7:00 pm

Location: Hill Seminar Room, LeBow Engineering Center, Market & 31st Sts., Drexel University, Philadelphia, PA

**SPEAKERS:** Robert Kunzell and Gordon Burnett, Moretrench, Inc., Rockaway, NJ

**SUBJECT: Applying Dewatering and Groundwater Control Techniques to Environmental Problems**

A frequent problem in subsurface construction is temporary control of groundwater to clear excavations and improve stability. Methods include either inducing flow, i.e., drainage, or restricting flow, i.e. subsurface barriers. Techniques are continually being improved in both areas. The same principles and practices can and are applied to environmental cleanup projects. Goals include restricting entry of clean water, recovering contaminated liquids, and prevent off-site migration. However, in applying traditional techniques to such problems, more emphasis is required with respect to restricting flow rates, chemical interactions and worker safety.

Moretrench is a leading firm in the area of temporary groundwater control. The presentation will include both an overview of advances in dewatering techniques and case histories of environmental applications. A special emphasis will be on the use of ground freezing methods to hydrologically isolate subsurface contaminated zones.

For further information, please contact: Dr. J. P. Martin, Chairman, Geotechnical Group, Dept. of Civil & Arch. Engrg., Drexel University, Philadelphia, PA 19104, (215) 895-2363 or Mr. Raymond A. Lees, Chairman, Environmental/Water Resources Group, Westinghouse Env & Geotech Svcs., 323 Norristown Rd., Ambler, PA 19002, (215) 542-9100.

(Continued on Page 2)

## RESERVATION FORM FOR PHILADELPHIA SECTION ASCE APRIL DINNER MEETING WEDNESDAY, APRIL 10, 1991 – OFFICERS' CLUB, US NAVAL BASE, PHILA.

Please reserve \_\_\_\_\_ dinner(s) at \$15.00 each. Check enclosed \$\_\_\_\_\_.

Students – \$7.50 (Group Reservations by Faculty Advisors). You are welcome to attend all Section Meetings after Dinner, at no charge.

Name \_\_\_\_\_

Address \_\_\_\_\_

Phone \_\_\_\_\_

Please return with payment to:  
ASCE, P.O. Box 58186  
Philadelphia, PA 19102-8186  
Reservations must be postmarked  
no later than **April 2, 1991**.  
Tickets will be issued at the door.

I prefer future Section Meetings to be held at:  
Name of Restaurant/Club \_\_\_\_\_  
County Location & Address \_\_\_\_\_

**IMPORTANT: Dinner Reservations  
for ALL Section Meetings Are Essential.  
Please mail in Your Reservation  
Coupon As Directed.**

### APRIL JOINT DINNER MEETING

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

## WEDNESDAY, APRIL 10, 1991

Location: OFFICER'S CLUB, U.S. NAVAL BASE, PHILADELPHIA  
Cocktails – 5:30 p.m. Dinner – 6:30 p.m. Meeting – 7:30 p.m.

**SUBJECT: WETLANDS AND THE COURTS – TAKING AND ENFORCEMENT ISSUES**

**SPEAKER: CAROL R. COLLIER**, Vice President, BCM Engineers, Inc. – Moderator  
**JAMES BUTCH** of the Wetlands Section, EPA Region 3-“A Case on Wetlands Enforcement”  
**BARRY GALE, ESQUIRE**, Philadelphia District, U.S. Corps of Engineers Office of Counsel  
– “The Loveladies Harbor, Inc. Case”

Bring your questions! This will be an evocative and stimulating discussion.

**SPECIAL FEATURE: Spring Garden College Night**

**PLEASE FILL OUT AND RETURN RESERVATION COUPON  
AS DIRECTED ABOVE – FOR THE APRIL 10, 1991 MEETING**

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### March Meeting

(Continued from Page 1)

tional, environmental and veterans' jobs programs and related issues. She was selected as 1989 Woman of the Year by the Women's International Trade Association, for outstanding achievement in the maritime community; and she has been nominated for membership in Outstanding Young Women in America.

**Lieutenant Colonel Kenneth H. Clow**, a graduate of the U.S. Military Academy, West Point, NY holds a Master's Degree in Mechanical Engineering from the University of California at Berkeley. He is also a graduate of the Naval Command Staff College, Newport, RI.

Col. Clow has served, as Director of Engineering and Housing (DEH), and several other major overseas and stateside assignments for the U.S. Seventh Army Training Command and other units. From 1985-87 he was Deputy Commander and Deputy district Engineer at the Corps' San Francisco District. His decorations include: The Legion of Merit; Meritorious Service Award (with two oak leaf clusters); Army Commendation medal (two oak leaf clusters); and the national Defense Service Medal. Col. Clow is a Registered Professional Engineer in Virginia.

**SPECIAL FEATURES: Widener University and Villanova University Night**

### ENGINEERING MANAGEMENT GROUP ACTIVITIES

The Steering Committee conducted its first meeting on February 12, 1991. Chairmen were selected for sub-committees concerning Management at the Organizational Level – **Bob Wright**; Project Level – **Chris Rood**, and the Individual Level – **Bill Mulloy**. Various potential activities for the Group were discussed. The next meeting has been scheduled for **March 21, 1991 at 5:30 pm** at 714 Market Street. Those interested in attending should contact **Al Zion**, Group Chairman (215) 977-7750, or any of the sub-committee chairmen.

**COPY DEADLINE  
FOR  
APRIL/MAY 1991  
ISSUE  
MARCH 15, 1991**

## FEBRUARY JOINT DINNER MEETING

February 12, 1991

Williamson's Restaurant

### THE CRUMBLING INFRASTRUCTURE

By Bill Richards, Staff Writer

A gratifying turnout of members, guests and students gathered for an excellent evening of socializing and to enjoy a singularly impressive feature presentation at the Joint Meeting of the Philadelphia Section, ASCE and the Delaware Valley Chapter, American Public Works Association (APWA). Featured speaker was **Albert M. Tantala, P.E.**, President, Tantala Associates, Inc., Consulting Engineers and Past President (1986-1987) of the Philadelphia Section, ASCE. Mr. Tantala's timely and critically important subject was "Infrastructure - The Crumbling of America." The meeting was jointly chaired by Section President **Frank Depman** and **Stephen B. Lester**, President of APWA. Mr. Lester expressed his appreciation for the opportunity of the Joint Meeting. Phila. Section President-Elect **Moustafa Gouda** announced upcoming events and Technical Group meetings, and acknowledged the presence at the meeting of ten Past Presidents of the Phila. Section.

#### Swarthmore Night

The meeting honored the ASCE Student Chapter, Faculty, alumni and the Civil Engineering Department of Swarthmore College. Section Past President **Rich Weggel** introduced the Chapter's Faculty Advisor, **Dr. Faruq M.A. Siddiqui**, Professor of Civil Engineering, who expressed his often-repeated appreciation of the Section's recognition of the Swarthmore Student Chapter and Civil Engineering Department during the many years he has been Faculty Advisor.

#### Chapter President Simone Reviews Programs

After recognizing several Faculty and alumni in the audience, Professor Siddiqui introduced Student Chapter President **Anthony E. Simone, Jr.** Tony thanked the Phila. Section for all its past and present courtesies and presented his fellow officers and students in attendance: Vice President - **Whitney Potter**; Treasurer - **Gregg Marsh**; Secretary - **Mark Hook**; and Contact Members - **Dan Honig** and **Dick Mavery**. An articulate speaker, Mr. Simone described the highlights of the Student Chapter program and activities; and equated the Chapter and Civil Engineering Department qualities: though small in size, they compensate this with the intensity of their involvement and enthusiasm. He told of Chapter visits to major area engineering projects; the entries in the Annual Crum Creek Regatta, Miniature Bridge Design Contest, and the Annual Concrete Canoe Competition.

#### Mr. Tantala on Infrastructure

After a brief introduction of his usual humorous anecdotes, Al Tantala vividly described - with startling statistics - the state of America's crumbling infrastructure, an eye-opening report on the condition of our nation's public facilities. Documented with astounding figures on the numbers of facilities in disrepair, and the massive financial requirements

to restore them, Al Tantala's presentation generated as much discussion and concern as any of our Section's speakers for many years past.

Following his documentation of the state of disrepair in all facets of our nation's infrastructure, Al showed how the reduction of capital investment was the real cause of this problem. He cited the need to both raise additional capital and to lower the capital need. In accomplishing the latter, he advocated reassessing standards, using materials and construction methods that lead to longer facility life, and taking advantage of advances in engineering technology. Al also reminded us that we don't inherit the earth from our parents, we borrow it from our children. He ended by requesting ASCE participation in the Rebuild America Program.

#### Question and Answer Period

Mr. Tantala's enlightening presentation was followed by an intense and extended comment, question and answer session which centered on how to stimulate action; and a consensus that we cannot continue "business as usual." The interchange between speaker and audience covered a broad range and wide areas of the critical infrastructure problems internally in the United States and internationally in virtually all countries throughout the world. An ironical statistic mentioned by our speaker is that among the developed countries of the world, Japan spends the most on maintaining and upgrading its infrastructure, while the United States spends the least, as a percentage of Gross National Product.

Phila. Section President Depman expressed the impressions of the entire audience in congratulating Al Tantala for his outstanding address.

## LIFE MEMBERSHIPS AWARD

A Special Event at the February 12, 1991 Philadelphia Section, ASCE Dinner Meeting was the awarding of Certificates of Life Membership in ASCE to the following Section members. The presentations were made by Phila. Section Director **William H. Polk**.

Awardees in attendance, who received their Certificates in person, were: **Christian T. Beechwood**; **William D. Bell**; **Francis J. Depman**; **Edward E. Gilvey**; **John H. Leapson**; **Donald D. Meisel**; **Thomas E. Poliquin**; **John Shetron**; **George D. Weaver, Jr.**; **Kenneth J. Zitomer**

Life Member Awardees who did not attend the meeting and whose Certificates were mailed to them are: **George M. Bayer**; **John M. Fisher, Jr.**; **Fred H. Lindquist**; **William J. McLay**; **Alfred Muscari**; **Elmer J. Pollock**; **John R. Slotterback**; **John C. Williams, Jr.**; **James Yody**

The Philadelphia Section extends its heartiest congratulations to all of the Life Membership Awardees.

## HAAHS CONDUCTS CONCRETE SEMINAR

Philadelphia Section, ASCE former Director **Timothy H. ("Tim") Haahs**, Chief Engineer, Senior Project Manager, Walker Parking Consultants, West Conshohocken, PA, will conduct a seminar on: "Cast-in-Place Concrete Parking Structures," on **Thursday, March 14, 1991**, at the Adam's Mark Hotel, City Ave. and Monument Road, Philadelphia; (215) 581-5000.

The program consists of Breakfast - 8:00 to 8:30 AM and the seminar 8:30 to 9:30 am. Under the auspices of the Concrete Reinforcing Steel Institute (CRSI) and sponsored by many affiliated companies, the theme of the seminar is "**The Design and Construction Techniques to Eliminate or Minimize Future Structural Deficiencies.**"

Structural engineers, architects, contractors, and others will find this talk on the design and construction of cast-in-place concrete parking structures of interest. Older parking structures often have problems of cracking, corrosion and other related structural distress that traditionally have been difficult and expensive to deal with once problems occur. Our speaker will discuss how you can eliminate or at least minimize these potential future problems during the initial design and construction stage.

This is a FREE seminar. Reservations must be received by Tuesday, March 12, 1991. Mail reservation request to PHILADELPHIA, PA - 3/14/91, Mr. Bill Sebastian, Re-Steel Supply CO., Inc., Eddystone Industrial Park, Route 291, Eddystone, PA 19013; phone (215) 876-8216.

## ACI CERTIFICATION COURSE SCHEDULED

The Delaware Valley Chapter of American Concrete Institute (ACI) announces a course of instruction and examination for ACI Certification as Concrete Construction Inspector Program, Grade II or Concrete Construction Inspector-In-Training.

Place: Site in the Philadelphia area to be determined.

Instruction Date: **April 20, 27 and May 4, 1991**, 7 hours each day.

Examination Date: **May 11, 1991**, 4 hours.

Fee: \$375 for members, \$400 for non-members.

Those who can benefit from ACI certification are personnel employed by contractors, government agencies, engineering/architectural firms, testing laboratories, materials suppliers, and other construction-related organizations.

To be certified as **Inspector - Level II**, applicants must pass the examination and have had either a minimum of two years of college plus two years of inspection experience, a high school diploma plus a minimum of three years of inspection experience, or a minimum of five years of inspection experience. To be certified as **Inspector-In-Training**, applicants must pass the examination.

For more information, please call **Randy Cronin** at (215) 699-5613.

## 1991 CONCRETE CANOE RACES SCHEDULED

Under the expert guidance of Dr. Joseph Marfin, Faculty Advisor of the Drexel University ASCE Student Chapter, arrangements for this popular Spring event are proceeding well.

The Competition will be held on Sunday morning, April 7, 1991, 8:00 am to 12:00 noon, at the East Park Canoe Club on Kelly Drive, just below the Strawberry Mansion Bridge. The race events will also include displays and a report on the designs of the various canoes entered by participating Delaware Valley colleges' ASCE Student Chapters.

**Be sure to come out and root for your favorite entry!**

## RECENT SURVIVORS OF PE EXAMS

You are encouraged to call (215) 787-7802 or write to Professor Stephen G. Jochum, P.E., Civil Engineering Department, Temple University, Philadelphia, PA 19122. He is interested in your response to two questions:

1. What is your opinion concerning the effectiveness of the PE EXAM to screen out the unprepared or unqualified and admit to the profession the competent professionals? (No test is perfect and each test has strong and weak aspects. Please comment on some of each with a view towards retaining the good and changing the bad.)

2. In your preparation for the PE EXAM, was the time you spent a good investment, not only towards passing the test, but also in terms of worthwhile learning, updating, and assembling of important, current reference material? (Some activities and references are more beneficial than others. After your personal experience with this preparation and test, if you were again faced with the need to prepare, what would you retain, what would you do differently, and what can you recommend for others, now preparing for this examination?)

Your involvement in this survey is an important and highly appreciated service to the profession. If there is a sufficiently large and well considered response to this survey, a summary of recurring comments will be made available to those who responded and will be distributed to the National Council of Examiners for Engineering and Surveying (NCEES), the Pennsylvania Registration Board for Professional Engineers, and the participants at the PE Examination Workshop for Civil/Sanitary/Structural Engineering on March 23, 1991 at the Temple University Center City Campus at 16th and Walnut Streets in Philadelphia.

## THINK SPRING!! THE ANNUAL SPRING SOCIAL APPROACHES

SATURDAY, JUNE 1, 1991

HOLIDAY INN, City Line Avenue, Philadelphia

DINNER, DANCING, FUN!!

Mark Your Calendar NOW!!

The Civil Engineering Department  
of  
Temple University  
announces a

### PROFESSIONAL ENGINEERING EXAMINATION WORKSHOP for Saturday, March 23, 1991

8:30 am to 1:30 pm

Seminar Room 306, Center City Campus  
1616 Walnut St., Philadelphia

Included are:

- Interactive, criteria-specific, problem-solving and brief presentations by three or more experts on well selected topics from the broad scope of CIVIL/SANITARY/STRUCTURAL ENGINEERING.
- A short duration, timed testing exercise with same-session feedback, discussion of evaluation criteria and self-scoring.
- PE WORKSHOP NOTES, review of PE EXAM REQUIREMENTS, and a display of well selected reference material.

Basic Fee: \$100 per person. Reduced Fee: \$85 for second person from same firm, member of ASCE, Temple student or alumnus.

To register (3/12/91 or earlier), mail to the CE Department, Temple University, a check payable to Temple University. For additional information, call (215) 787-7802, or write to Professor Stephen G. Jochum, P.E., CE Department, Temple University, Mail Stop 084-053, Philadelphia, PA 19122.

## SECTION ANNOUNCES SCHOLARSHIP FUND

The Philadelphia Section is pleased to announce the initiation of a Section Scholarship Fund. Two scholarships, each worth \$2,000, will be awarded each year to aspiring civil engineers attending one of the six colleges within the Section's jurisdiction (Drexel, Pennsylvania, Swarthmore, Temple, Villanova and Widener).

A candidate must be an active member of the ASCE Student Chapter at his/her particular college. He/she must be a matriculant in a full-time civil engineering program and must have completed at least two full years of the program to be considered. (Candidates may submit applications during their second year.)

Details are available from the Faculty Advisor of the ASCE Student Chapter at each involved college. Applications must be returned to the Faculty Advisor by March 15, 1991.

## LEHIGH UNIVERSITY ATLSS SEMINARS

March 6, 1991 Mr. Richard H. Hendricks, Consultant and Computer Applications Coordinator for Architectural and Civil Engineering, E.I. duPont de Nemours & Co., Newark, DE, "Computer Aided Structural Design and Analysis Systems."

April 10, 1991 Dr. Jerome J. Connor, Professor of Civil Engineering, Massachusetts Institute of Technology, Cambridge, MA, "Axiomatic Approach to Performance Based Design."

May 1, 1991 Dr. Nicholas J. Carino, Research Engineer, Center for Building Technology, National Institute of Standards and Technology, Gaithersburg, MD, "Structural Assessment of the U.S. Embassy Building in Moscow."

Seminars are open to the public.

Place: Sinclair Auditorium, Lehigh University Campus, 3:10 p.m. Refreshments served at 2:45 PM.

For additional inquiries: William D. Michalerya (215) 758-5483; or David A. Thomas (215) 758-5626.

8-week Short Course Offering

Earthquake-Resistant Design of Buildings in Areas of Moderate Seismicity

Wednesday evenings 7:00 - 9:00 pm

March 6, April 24, 1991

The course will present modern approaches to design of seismic-resistant building structures, with an emphasis on buildings located in areas of moderate seismicity. These are the Zone 2 areas according to the BOCA code and cover much of the mid-Atlantic and New England states. The contents of the course include: Basics of Earthquakes, Dynamic Analysis of Single Degree of Freedom Systems, Dynamic Analysis of Multiple Degrees of Freedom Systems, Seismic Behavior of Structural Members, Seismic Behavior of Structural Systems, Concepts of Earthquake-Resistant Design, Code Requirements and Design Examples.

No prior knowledge of structural dynamics is required. For further information and reservations, please call Joanne Walker, Asst. Director of Continuing Education at (215) 758-3934.

The two scholarship recipients will be cited at the Section's Annual Spring Social/Dinner Dance and Awards Night (Saturday, June 1, 1991) and will receive two complimentary tickets to the Social.

The Board of Directors commends the hard work and diligent efforts of the Section's Scholarship Committee in the initiation and realization of the Section Scholarship.

## ATTENTION!

Due to printer's error in the February, 1991 issue, instructions for mailing in award nominations were omitted. Nominations should be sent to Secretary Bob Wright, P. O. Box 58186, Philadelphia, PA 19102-8186.