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PHILADELPHIA SECTION

AMERICAN SOCIETY OF CIVIL ENGINEERS

1317 Spruce Street, Philadelphia, PA 19107

VOL. 59 - 3

OUR 74th YEAR

December, 1986

. . . Greetings of the Season

The Editor and staff of THE NEWS, on behalf of the Officers and Board of Directors of the Philadelphia Section, ASCE, extend to the Members and their families Heartiest Wishes for a Joyous Holiday Season, and a Healthy, Prosperous and Fulfilling New Year.

DECEMBER DINNER MEETING

Philadelphia Section, American Society of Civil Engineers

TUESDAY, DECEMBER 9, 1986

Engineer's Club, 1317 Spruce Street, Philadelphia Cocktails - 5:30 P.M. Dinner - 6:30 P.M. Meeting - 7:30 P.M.

SUBJECT:

THE RESTORATION AND RENOVATIONS OF THE HISTORICAL LIT BROTHERS BUILDING COMPLEX, PHILADELPHIA, PA

SPEAKER:

WILLIAM F. O'DONNELL, P.E., Partner, O'Donnell & Naccarato, Inc., Consulting Engineers, Philadelphia, PA



Mr. O'Donnell will discuss the history and existing conditions at the old Lit Brothers Department Store Complex at 7th and Market Streets, Philadelphia. The renovation work now underway at the building and its impact on the structural elements will be explained. He will also describe the testing programs for determination of soundness and strength characteristics of existing members and the effect of the new architectural modifications of the building on these fundamental functions.

(Continued on page 2)

JANUARY DINNER MEETING

Philadelphia Section, American Society of Civil Engineers

TUESDAY, JANUARY 13, 1987

Cocktails - 5:30 P.M.

Dinner 6:30 P.M.

Meeting 7:30 P.M.

SUBJECT:

THE PHILADELPHIA CITY HALL RESTORATION

SPEAKER.

JOSEPH GRACI, P.E., Project Manager for City Hall Restoration Project, Department of Public Property, City of Philadelphia.

Mr. Graci will discuss the restoration project now in progress. He will describe the state-of-the-art techniques in scaffolding, plating, stone repair and the numerous other engineering and structural facets of this major project.

SPECIAL FEATURE:

DREXEL UNIVERSITY NIGHT

Please call Mr. deKovacs at the Engineer's Club immediately (215 735-5234), for reservation. Dinner Meal Charge:

ASCE Member-\$10.00 Non-Member-\$11.00 Students-\$4.00 STUDENTS-Note that your Dinner Charge is LESS than one-half price. Plan to attend for Dinner or Meeting after Dinner.

YOUNGER MEMBER FORUM ACTIVITIES

One Liberty Place Tour

On October 13, 1986, 32 Philadelphia Section Younger Members and guests attended a tour of One Liberty Place, the new high-rise under construction at 17th and Market Streets.

The tour was conducted by the staff of DRISCOLL//HUBER, HUNT & NICHOLS, INC., CONSTRUCTION MANAGERS, who proved to be excellent hosts. Everyone rode the construction elevator to the 31st floor, then walked around the entire floor to get a feel for the immensity of the project. From there groups of ten went by elevator to the 51st floor, but they could only look out the elevator, as the floor decking has not yet been installed. After everyone was back on the 31st floor, the group walked the rest of the way down as our hosts explained numerous aspects of the project and answered a continuous flow of questions.

The tour proved to be an exciting continuation of this year's YMF program.

Special thanks go to **Rick Slack** of DRISCOLL//HUBER, HUNT & NICHOLS, INC., for arranging the tour.

CHRISTENSEN WINS ASCE AWARD

Dr. G. Lee Christensen, Professor of Civil Engineering at Villanova University, and Dr. Richard I. Dick, the Joseph P. Ripley Professor of Engineering at Cornell University, have been named recipients of the 1986 Rudolf Hering Medal. The Rudolf Hering Medal is awarded annually by the American Society of Civil Engineers "to the author, or authors, of the paper which contains the most valuable contribution to the increase of knowledge in, and to the advancement of the environmental branch of the engineering profession." The award was based on a pair of papers entitled "Specific Resistance Measurements: Nonparabolic Data" and "Specific Resistance Measurements: Methods and Procedures" which were published in the Journal of Environmental Engineering (ASCE) in June 1985. The medals were awarded at the Society's annual convention in Boston in October, 1986.

IMPORTANT!! 1986 - 1987 Meeting Notices

MARK YOUR CALENDAR for the dates of the remaining Philadelphia Section, ASCE monthly meetings and social functions, as follows:

All Dinner Meetings —

Cocktails: 5;30 p.m. - Dinner: 6:30 p.m. - Meeting: 7:30 p.m.

Tuesday, February 10, 1987 — Engineers' Club

Arranged by the Water and Environmental Engineering Group

Topic: Update on Asbestos Problems in Construction

Speakers: Dr. Edward Doheny, Associate Professor of Civil Engineering,

Drexel University; and

Dr. Lester Levin, Professor of Industrial Hygiene, Drexel University

University of Pennsylvania and Widener University Night

Tuesday, March 10, 1987 - Engineers' Club

Arranged by the Transportation and Urban Development Group

Topic and Speaker To Be Announced

Presentation of Life Membership Certificates

Temple University and Spring Garden College Night

WEDNESDAY, April 8, 1987 - Officer's Club, U.S. Naval Base, Philadelphia

Joint meeting with the Phila. Post, Society of American Military Engineers (S.A.M.E.)

Arranged by The Structural Group

Topic: National Building Safety Week

Speaker: Charles O. Everly, P.E., President, Building Officials Conference of America (BOCA)

Saturday Evening, May 2, 1987

Annual Spring Social

Location and details to be announced

DECEMBER MEETING

(continued from page 1)

Wm F. O'Donnell earned his B.S. in Civil Engineering at Villanova University. He is a Registered Professional Engineer in 23 States. His professional experience - dating from 1963 - includes: Civil Engineer Trainee with PennDOT; Design Engineer with Day & Zimmerman Engineers on heavy industrial buildings and power plants; U.S. Army in Korea, Headquarters Engineer, responsible for design of bridges, drainage, roads and housing projects in South Korea; Certain-Teed Products, Inc., Marketing Engineer, providing technical, research and development services to the Marketing Division on housing products, patent applications for various new products, etc. He joined his present firm in 1969 when it was titled Greenberg, O'Donnell & Naccarato, Inc., and became a Principal in 1981.

Mr. O'Donnell was elected to the National Engineering Honor Fraternity Tau Beta Pi. In addition to ASCE, he is affiliated with NSPE, PSPE, Engineeer's Club of Phila., and the National Council of Engineering Examiners (NCEE).

SPECIAL FEATURE:

SWARTHMORE COLLEGE NIGHT

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

IMPORTANT PARKING PRIVILEGE NOTICE

Philadelphia Section, ASCE members are entitled to special parking rates after 5:00 P.M. for meetings at the Engineers' Club, through an arrangement between the Club and the E-Z Parking Garage on the east side of Broad Street, North of Pine Street. Have your parking ticket validated at the front desk of the Engineers' Club and your parking fee will be the special reduced price of \$3.25.

PHILADELPHIA SECTION AMERICAN SOCIETY OF CIVIL ENGINEERS

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COPY DEADLINE FOR JANUARY 1987 ISSUE DECEMBER 9, 1986

THE PRESIDENT'S MESSAGE

Even though the calendar indicates that I was installed as President six months ago, my feeling is that the installation was just a few weeks ago. Time flies when you're busy (and having fun).

I'm reminded of a Winston Churchill story in which an antagonistic woman placed her hand over her head, and shouted: "If all the whiskey and brandy you have drunk in your life were poured into this room, it would be filled up to here." Churchill nodded slowly saying, "Yes, Madam. so much to do -- but so little time to do it."

And so goes my half year. My midyear report card reveals two interesting and well-attended Section meetings, busy Technical Groups with motivated chairpeople, an active Younger Member Forum, several scheduled seminars, well-attended board meetings with wide participation (even during the summer months), some legislative activity, representation and involvement at the District, Zone, and National levels, inter alia.

I thank you Philadelphia Section Engineers who roll-up your sleeves, who attend, who advise, or who just pay your dues. The next half year promises to continue to be interesting and professionally challenging.

I am encouraging a greater involvement and interface between younger and older engineers. Keep in mind that the median age in our country is down to 24: 92% of the population cannot recall the completion of the (Phila) Frankford Elevated (1920), 74% cannot recall the opening of the Ben Franklin Bridge (1926), 68% cannot recall the opening of the Philadelphia International Airport (1945), 65% cannot recall the completion of the Pennsylvania Turnpike (1950) or life without TV, and 46% cannot recall the ground breaking for the Verrazano Narrows Bridge (1959).

Accordingly, I encourage all engineers, young and old, to talk, discuss, meet, work together, and learn from each other. I invite our "seasoned" engineers to attend meetings of the Younger Member Forum, and of the Student Chapters and Clubs.

I extend to everyone my heartiest wishes for a Happy and Joyous Holiday Season, and a Healthy and Successful New Year.

Sincerely,
Albert M. Tantala, P.E.
President, Philadelphia Section, ASCE

NOVEMBER MEETING
(Joint with Women's Auxiliary)

November 11, 1986

Engineer's Club

CHUCK GOES TO CHINA

C.R. "Chuck" Pennoni, President, Pennoni Associates, Inc., Past President, Phila. Section ASCE and current National ASCE Vice President, Zone I warmed a capacity crowd of over 130 members, guests, and students who braved a cold rain to attend the November joint meeting of the Phila. Section ASCE at the Engineer's Club. Mr. Pennoni, with the aid of nearly 150 slides, presented a lively and insightful travelogue of China from a Civil Engineer's perspective. His subject was "Civil Engineering and the Chinese Culture". Chuck captured the exquisite beauty of this ancient land with a rich kaleidoscope of images of the cities, people and cultural landmarks. Mr. and Mrs. Pennoni visited the country for a month with a group of distinguished engineering representatives in order to study its engineering and cultural advancement.

> by Dave Perri and Michael Peleszak Staff Writers

Villanova Night

The spotlight focused on the ASCE Student Chapter and the Civil Engineering Department of Villanova University. The turnout of students, alumni and faculty was impressive.

President Tantala introduced Student Chapter President **Mark Lewis** who then presented the other Chapter officers and affiliates.

Vice-President: Mary Burns
Secretary: Joseph Langan
Treasurer: Paul Salamy
Faculty Advisor: Dr. Paul C. Hoffman

President Lewis reviewed the Chapter's activities, guest speakers, sports competitions, and the participation in the Annual Concrete Canoe race. Last spring Villanova took second place in all of the events. The hope is that the Student Chapter will continue its growth and involvement in the ASCE. Mr. Lewis thanked the Section for honoring the Chapter.

President Tantala next introduced Dr. Lewis Mathers, Chairman of the Civil Engineering Department at Villanova. Dr. Mathers thanked the Section again for its courtesies and for its keen interest in students. Dr. Mathers also announced that faculty member **Dr.** Lee Christensen has been awarded the prestigious Rudolph Hering Medal for valuable information in Environmental Engineering for two papers he authored. (See article elsewhere in this issue of THE NEWS). Lastly, Dr. Mathers spoke about his acceptance of the Civil Engineering Chairmanship; He replaced Dr. Edward Wallo who stepped down from the chairmanship this summer to devote full time to teaching. Dr. Mathers led the audience in a round of applause for Dr. Wallo in tribute to his 10 years of dedication as Chairman of the Department.

Construction & Transportation In Beijing

Mr. Pennoni opened his presentation with a report on current construction practices in the capital city of Beijing (Peking). Construction of mid-rise apartment complexes (6 to 9 story walk-ups) is predominant in this city of 9 million people as a means of alleviating a severe housing shortage. Numerous tower cranes dominated the skyline in the slides presented of this great city. A particularly dramatic shot captured by Chuck illustrated the use of hemp-tied bamboo scaffolding in the construction of a 32 story building. Precast concrete techniques have gained wide acceptance in China; however, much of the construction is labor intensive with some excavations still dug by hand.

Though modern highways exist in the People's Republic of China, very few cars and trucks were evident in the Capitol. Mr. Pennoni reported that bicycles, tricycles, articulted buses and mule-drawn carts were the dominant modes of transportation. The heavy volume of bicycle traffic has led to an interesting phenomenon—pay parking lots for bikes!

Cultural Landmarks

Chuck toured the People's Square, built as a monument to the country's workforce and which contain's Mao's tomb, the Great Hall of the People and the Forbidden City. A particular highlight of his visit, recalled Chuck, was a walk along the Great Wall of China. This ancient landmark has the distinction of being the largest structure ever built. Not satisfied with rough estimates of its length, Chuck reported that he persistently queried local officials until he had an exact measurement -- 3,946.5 miles. Slides beautifully documented the sweeping grandeur of this landmark seen winding its way along the mountains and hill tops of northern China.

A visit to the site of the Terre Cotta Soldiers of the Emperor's Tomb, discovered and excavated in 1974, provided additional highlights. Sculpted in 211 B.C., 3,000 six-foot tall warriors, each one different, defend the tomb of China's first emperor. Close-up slides of the soldiers revealed the extreme detail and precision of the artwork.

(Continued on page 4)

ASCE DUES BILL AND TECHNICAL GROUP DETAILS

Section members will notice in the 1986 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

Susan Lior Peer Systems, Inc. 1218 Chestnut St. Philadelphia, PA 19107 (215) 925-3196

Younger Member Forum

Anthony M. Micciolo, Chairman Phila. Water Department Design Branch One Reading Center, 2nd Floor Philadelphia, PA 19107 (215) 592-6088

Construction

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

Engineering Management

Madeline Salomon, Chairman Peer Systems, Inc. 1218 Chestnut St. Philadelphia, PA 19107 (215) 925-3196

Geotechnical

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

Structural

Timothy H. Haahs, Chairman Walker Parker Consultants 2 Penn Center Plaza Philadelphia, PA 19102 (215) 751-9555

Transportation and Urban Development

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

Water and Environmental Engineering

John E. Tunnell, Chairman Chief, Coastal and Special Studies Section; U.S. Army Corps of Engineers, Phila. District U.S. Custom House 2nd and Chestnut Streets Philadelphia, PA 19106 (215) 597-4714

NOVEMBER MEETING

(Continued from page 3)

Engineering Challenges

Mr. Pennoni was particulary impressed by the highly dedicated and enthusiastic work force in China. Chuck stated that challenges facing this unique country are in manufacturing, construction project management and quality control. Mr. Pennoni's anecdotal account of his lecture tour of this ancient country delighted the attendance. His charismatic style, combined with a keen eye for photography and a genuine interest in the people and culture of China resulted in a memorable and valuable presentation.

Questions and Answers

May comments and questions from the audience were answered and discussed by our eminent speaker and colleague. Only the constraints of time limited the exchanges.

Section President Al Tantala ably presiding over his second General Membership meeting of the season, presented Chuck the Section's Certificate of Appreciation for his outstanding presentation. He also thanked the members of the Women's Auxiliary for their attendance and participation in this highly successful joint meeting.

FALL SOCIAL AT THE RUTECKI'S

The 1986 Philadelphia Section, ASCE, Annual Fall Social, sponsored and arranged by the Women's Auxilairy, was hosted by Wallace H. ("Wally") and Joan Rutecki at their beautiful home in Bywood, Upper Darby, PA., on Sunday, November 2, 1986. The misty Fall day did not discourage attendance or detract from the pleasant time enjoyed by the Section members, their wives and guests at the splendid affair. Arranging functions such as this comes easily to Joan, who has contributed imeasurably to the countless successful social affairs arranged by the Auxiliary during the many years of her dedicated participation in that extraordinary Section affiliate. She was the Auxiliary's President in 1971-1972. (It probably cannot be denied that Wally - himself a long-time active member of ASCE and the Phila. Section - helped Joan a little bit in preparations for the party)!

Joan and Wally - always the gracious and

amiable hosts - busily catered to the needs of their guests. They were ably assisted by Joan's sister, Peggy Cantley and her husband Charles, and the Rutecki's son, Wally, Jr. in serving, bartending and general attentiveness to the guests. With trepidation - but acknowledging reality - we must report that Wally, Jr. might have created a monster which could subliminally threaten his professional career (not to mention his pending marriage next May). Wally, a 1983 Economics Major graduate of Harvard University, so expertly bartended - dispatching fancy drinks to eager, outstretched hands - that it is doubtful he can henceforth revert to his alter ego with the same dedication and resolve which he obtained before this event.

As in the past Socials, tasty hors d'oeurves and delicacies were brought to the party by members of the Women's Auxiliary. This added fulfillment and atmosphere to the

The "at home" Fall Social format was started by the Auxiliary in 1976. Proceeds of the function are deposited into the Auxiliary's Annette Estrada Memorial Awards Fund, in memory of the beloved President of the Auxiliary who was killed in an automobile accident many years ago. The Fund was established to help finance noteworthy civil engineering educational and research endeavors in area colleges and universities. Section members contributed modest fees to cover costs of the affair and to enhance the Memorial Fund.

The Philadelphia Section gratefully salutes Joan and Wally Rutecki, their competent assistants, the Social Committee and general membership of the Women's Auxiliary for their fine efforts in making the 1986 Fall Social a happy and memorable occasion. The glorious record of social programs sponsored and arranged by the Section's Women's Auxiliary continues to flourish.

WOMEN'S AUXILIARY

December Meeting — Christmas Party

The next monthly Luncheon-Meeting of the Phila. Section Women's Auxiliary will be held at the Engineers' Club on Wednesday, December 17, 1986, 12:00 noon. It is the Annual Christmas Party. As is customary, business discussion will be held an an absolute minimum. Pollannas will be exchanged and the Holiday spirit will prevail. All Auxiliary members and their guests are cordially invited to attend.

There will be no Women's Auxiliary Meetings in January or February, 1987. The next regular Luncheon-Meeting will be on Wednesday, March 18, 1987.

Full details will appear in the March, 1987 issue of THE NEWS.