

the news



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PHILADELPHIA SECTION
AMERICAN SOCIETY OF CIVIL ENGINEERS

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Vol. 70-7

Our 84th Year

April, 1998

NOTICE TO PHILA. SECTION MEMBERS — This abbreviated (April, 1998) issue of THE NEWS is intended to give notice of the April, 1998 Main Section Joint Meeting with S.A.M.E., Technical Group Activities, The Concrete Canoe Race and Steel Bridge Competition. Regular features, including the President's Message, Younger Member Forum News, Previous Meeting Review, details of the Annual Dinner Dance at Sugarloaf on May 1, 1998, the 1998 Salary and Benefits Survey, and other news and items of interest will be published in the May, 1998 issue.

APRIL JOINT DINNER MEETING

Philadelphia Section, American Society of Civil Engineers
Philadelphia Post, Society of American Military Engineers (SAME)

THURSDAY, APRIL 9, 1998

Williamson's, GSB Building, City Line Avenue, Philadelphia, PA • See Location Map Below
Cocktails - 5:30 p.m. • Dinner - 6:30 p.m. • Meeting - 7:30 p.m.

SUBJECT: "The Storebaelt-East Bridge — Superstructure Main Span and Approaches"
SPEAKER: Jose R. Celis, P.E., Project Manager, Director of Engineering & Construction Services, Steinman, Boynton, Gronquist and Birdsall, New York.

SPECIAL FEATURE: WIDENER UNIVERSITY NIGHT: The ASCE Student Chapter, Alumni and Faculty of the Civil Engineering Department of Widener University will be honored at this meeting. All Students, Alumni and Faculty are cordially invited to attend.

RESERVATIONS MUST BE SUBMITTED BY FRIDAY, APRIL 3, 1998. Please send your check for the number of attendees @ \$25 per member or guest; \$13.00 ASCE Student Members, payable to the Phila. Section, ASCE, P.O. Box 58186, Phila., PA 19102-8186; or call the electronic Message Center: (215) 934-3639 (Open 24 hours/day).

This is a presentation of the fixed link across the Storebaelt in Denmark. It is based on three important projects: 1. A road and rail bridge between the Sprogø and the island of Funen (West Bridge); 2. A railway tunnel between Zealand and Sprogø (East Tunnel); 3. A road bridge between Zealand and Sprogø (East Bridge).

The West Bridge is formed by two parallel bridges in reinforced concrete, one conveying to railway lines and the other supporting six lanes of road. The bridge is 6.6Km long, with standard

(Continued on Page 2)

TECHNICAL GROUP ACTIVITIES Structural Groups

April Meeting

Date: **Tuesday, April 7, 1998, 7:00 p.m.**

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

SUBJECT: One Meridian Plaza Fire Damage — Structural Investigation and Evaluation

SPEAKER: Richard F. (Dick) Rowe, P.E., AIA

This will be an informal meeting with a presentation and a question and answer period. **Dick Rowe's** presentation will be a continuation of the March 12th joint ASCE/ACI presentation. He will concentrate on the structural investigation and evaluation, in particular: • Fire damage which was identified (with emphasis on structural damage); • Structural system testing and results; • The eventual recommendations to the Owner.

Light refreshments will be served. If you would like further information, please call **Rich Roberts**, Chairman, Structural Group, at (215) 222-3000.

Transportation Group

April Luncheon Meeting

Date: **Thursday, April 23, 1998, 12:00 Noon**

Location: Conference Room C on the 16th Floor of the Municipal Service Building, Phila., PA

Cost \$10.00, students half price.

SUBJECT: Emerging Issues in Airport Planning, Design and Construction

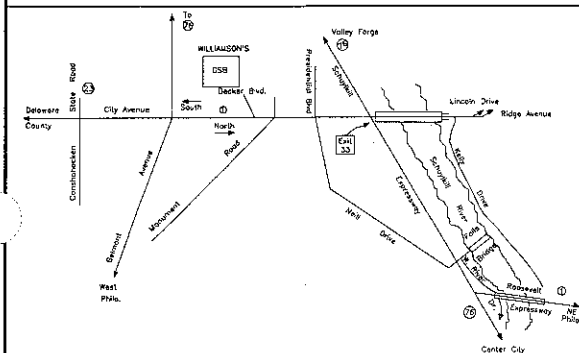
SPEAKER: Mr. William Fife, Corporate Vice President and Director of Aviation Services for Frederic R. Harris, Inc.

Key topics that Mr. Fife will focus on include: the introduction of new large aircraft; technological innovations, such as ticketless travel and AVI; environmental issues; and their relevance on projects planned for major airports around the world.

A buffet lunch will be served starting at 12:00 Noon with the presentation beginning at 12:30 pm.

Reservations are required and seating is limited to 50. Please contact **either Chris Rood, P.E.**, Transportation Group Chairman at (215) 580-7586 or **Steve Buckley**, Younger Member Forum contact at (215) 790-2310 if you have any questions and for reservations.

(Continued on Page 2)



**LOCATION MAP
for
Williamson's
GSB Building,
City Line Ave.,
Philadelphia**

APRIL JOINT MEETING*(Continued from Page 1)*

spans of 110 m. The East Bridge is a six lane steel road bridge with a length of 6.8Km. At the central part of the crossing there is a suspension bridge with a record main span of 1,624m and two side spans of 538m each, as well as a 14 span approach with a total length of 2,529m extending from Zealand to the eastern anchor block, and a 9 span approach with a total length of 1,567m extending from Sprogo ramp to the western anchor block.

The clearance above sea level is 65m in the main span. The total length of the suspension bridge is nearly 2,700m with a 1,624m main span.

The stiffening girder is continuous running from anchor block to anchor block. The suspension bridge deck is 31m wide, and is composed of 59 sections, each typically 48m long 4m high and weighing 530 tons (average).

The primary structural system consists of two main cables with a diameter of 827mm erected 27m apart.

Each cable is composed of 18,648 high tensile steel galvanized wires 5.38mm diameter, each laid parallel with no twisting. The spinning of a mass of 19,500 tons of wires was carried out in a record time of 112 days.

Final cable configuration is obtained by wrapping a 3.5 mm diameter wire and by applying surface coating protection.

Mr. Jose R. Celis, attended Leigh University as a liberal arts student, obtained a Bachelor's Degree in Civil Engineering from Drexel University and a Master's Degree in Heavy Construction Management from Stanford University. Mr. Celis has worked as a construction specialist since 1965. He has worked in major construction projects in North, South and Central America. During the last six years he has been responsible for East Bridge construction engineering in Denmark. Presently he is responsible for the construction technical support services for the Tagus Bridge in Lisbon, Portugal.

THE CANOES ARE BACK

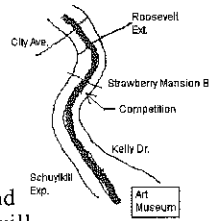
The Concrete Canoe Race and Steel Bridge Competition is back in Philadelphia. After a long absence the competition will be held on **April 11, 1998** on The Schuylkill River at the Canoe Club on Kelly Drive at the Strawberry Mansion bridge (see map).

10:00AM - Steel Bridge Competition begins and judging of the canoes

11:30AM - Canoe Races begin after the last College regatta

Bring your family and friends, the competitions will run all afternoon. Schools from the Tri-State area, Maryland, Ohio, and New York will be competing for the chance to go to the National Competitions this summer. Some of these concrete canoes weigh less than 100lbs., the bridges span 20' and support over 2500lbs. It is truly amazing what the student have accomplished. Check it out, you've never seen anything like it before.

We still need judges and volunteers for both the race and bridge competition (No, you don't have to get wet). We can use all the help we can



William G. Richards, P.E.
Vice President

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Technical Group Activities*(Continued from Page 2)***Engineering Management Group****May Luncheon Meeting**

DATE: Wednesday, May 13, 1998, 12:00 Noon.
LOCATION: Municipal Services Building, 1401 John F. Kennedy Blvd., 16th Floor, (Room To Be Determined), Philadelphia, PA

SUBJECT: "The Impact of Waterfront Development on the Greater Philadelphia Region"
SPEAKER: Mr. James Cuorato, Executive Vice President, Penn's Landing Corporation

Price: \$10.00 (Students and retired persons \$5.00)
A buffet lunch will be served starting at 12:00 noon and Mr. Cuorato's presentation will begin at 12:30 p.m. Seating is limited. For reservations, contact **Dennis MacBride** at (215) 580-7084 no later than **Wednesday, May 6, 1998.**

get. If you are interested in helping with the preparations or on the day of the competition, please call **Darin Gatti** at (215) 686-5573 or email at darin.gatti@phila.gov.

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**COPY DEADLINE FOR
MAY 1998 ISSUE
APRIL 9, 1998**

Remember! The Phila. Section Annual Dinner Dance!!

Friday, May 1, 1998 • Sugarloaf Conference Center, Chestnut Hill, PA • \$35.00 per person

Details and reservation info will appear in the May, 1998 issue of TJE NEWS



Craig R. Calabria, P.E.

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