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April 2002

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## ASCE 150<sup>TH</sup> ANNIVERSARY – PLANNING THE CELEBRATION

By Craig F. Butler, P.E.

We have some exciting news to report on our 150<sup>th</sup> Anniversary activities in the Syracuse Section! Here are some of the highlights:

- The regional qualifying round of the ASCE-sponsored West Point Bicentennial Engineering Design Contest concluded on February 28th, and two teams from Chittenango High School submitted the top two designs in Zone I (includes all states from Maine to Maryland, along with Puerto Rico)! In fact, the Chittenango student teams submitted 2 of the top 20 designs from among 54,000 design entries nationwide! The student team members are Mark Kasdorf and Nathan Durfee (also known as “The Assembly” team), with their first place design, and in second place, Team “Do It Now”, consisting of team members Walton Owens and William Burns. These students, and their Teacher/Mentor Beth Carpenter, are to be commended for their outstanding accomplishments (more on than later)!
- As this issue is going to press, the Chittenango student teams are preparing to enter the national semi-final round of the contest, being held on March 16th. During the semi-final round, the teams will download a new design challenge, and then will have three hours to develop and submit a completed design. The top design submittals from the regional semi-finals will be invited to West Point to compete in the national finals. Congratulations to these exceptional students and best of luck to you for the rest of the competition!! We will certainly keep everyone updated on the contest results, and you can check it out yourself by visiting the contest web site at: <http://bridgecontest.usma.edu/download.htm>.
- The fourth annual “Celebration of Technology” Exhibition Expo and Banquet, was held on March 1st at the Holiday Inn Convention Center in Liverpool. Pam Newberry, the keynote speaker of the event, presented a compelling case for the need to stress the importance of technology education for all students at the middle school and high school levels. Other highlights of the event included the awards banquet, where the ASCE Syracuse Section (lead by our President Chuck Stanton) honored the Chittenango student teams for their excellent achievements in the West Point Bicentennial Design Contest (see above). It was also no surprise that Chittenango teacher Beth Carpenter was honored as the “Science Teacher of the Year (by AIChE). Jim Tyler was also recognized for his

attainment of “Life Membership” status in ASCE. Jim certainly embodies the ideal of a career of service to ASCE and the Civil Engineering profession, and the Syracuse Section is fortunate to benefit from his continuing involvement as the “Adopt-a-Highway” and “History and Heritage” chairman. Last, but certainly not least, Kathy Pollard received the Exemplary Service Award for her years of dedicated service to the NSPE. Of course, Kathy has served as the Syracuse University liaison to ASCE for many years, and her annual contributions to our Section, and to such events as the Celebration of Technology, are very much appreciated and valued.

Thanks to ASCE Syracuse Section officers Matt Millias, Ayesha Dolasa, and Chuck Stanton, for their service at the “ASCE booth”, along with their other contributions to the Celebration of Technology. Thanks also to other Section members who attended the event and demonstrated their support of ASCE and the Technology Alliance of Central New York.

- The next “big event” for our Section’s sesquicentennial celebration will be the hosting of the regional ASCE Student Chapter concrete canoe and steel bridge competitions at Syracuse University on April 12 and 13. Additional information about this event is elsewhere in this newsletter. Additional plans on the horizon for our Section’s sesquicentennial celebrations include an area “beautification project”, an ASCE picnic/baseball game at P&C Stadium, recognition of local civil engineering “historical landmarks”, and a golf tournament. Stay tuned for further details on these events.

Now that 2002 has arrived, we have an exceptional opportunity to take advantage of the special events associated with the 150<sup>th</sup> Anniversary of our Society. We should all be proud of our role as civil engineers, and as ASCE members. As always, please contact me or any other member of the 150<sup>th</sup> Anniversary committees, for further information and to **GET INVOLVED** in these noteworthy events.

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## HISTORY & HERITAGE COMMITTEE

By Jim Tyler

**A Bit Of History- Part 2** A study of salt and limestone available in this vicinity caused Mr. Cogswell to select Syracuse as a suitable location for a plant. Rowland Hazard, a life long friend, joined Mr. Cogswell to help finance the plant, and The Solvay Process Company was organized in September 1881, with Rowland Hazard as president, William B. Cogswell as manager and engineer, and O. V. Tracy, secretary and treasurer. A plant site was purchased in the fall of 1881.

After construction was started, Mr. Cogswell again visited Brussels for plans of special apparatus, accompanied by William L. Neill, a chemist, and the first employee of The Solvay Process Company. In March 1882, E. N. Trump was employed as assistant engineer, and Mr. Trump, Henry Cooper, and Nicholas Bodot were sent abroad to study operation preparatory to starting the new plant. Construction was completed and operation of the first soda ash plant in America started in January 1884.

The fundamental chemical reactions involved in the production of ammonia-soda have not changed, but design of apparatus has radically changed since Solvay Brothers first plant. In about 1880, the ammonia used in the process became difficult to obtain. Solvay of Belgium had solved a similar shortage by the invention by Louis Semet of the by-product coke oven (Louis Semet was related to the Solvay Brothers). To meet Solvay's need for ammonia, the first Semet-Solvay Coke Oven Plant was built in Syracuse in 1892. The coke produced was used in the limekilns and the gas was utilized in the plant. Increasing demand for coke oven products led The Solvay Process Company to organize a subsidiary company called Semet-Solvay Company, and plants were built at several locations to supply coke for blast furnaces, foundries and domestic use.

## 2002 ASCE Upstate NY Regional Conference

**Hosted by the Syracuse University ASCE Chapter**

**Supported by the ASCE Syracuse Section**

**When:** April 12-13, 2002

**Where:** Syracuse University, Syracuse, NY 13244-1190

**Who:** *School Participants include:* Broome Community College, Clarkson University, Cornell University, Hudson Valley Community College, Rensselaer Polytechnic Institute, Rochester Institute of Technology, SUNY-Buffalo, SUNY-Canton, SUNY Institute of Technology, Syracuse University, Union College, United State Military Academy

*Company Supporters include:* Barton & Loguidice, Camp Dresser and McKee, O'Brien and Gere, Sear Brown, Stearns & Wheeler

**Agenda:** *Friday, April 12, 2002*

5:00PM – 10:00PM

Registration (Goldstein Studenty Center, South Campus)

Icebreaker (Goldstein Studenty Center, South Campus)

Basketball Tournament (Skybarn, South Campus)

*Saturday, April 13, 2001*

7:00AM – 8:00AM Captain's meeting (104A, 107 Hinds)

8:00AM – 4:00PM Steel Bridge Competition (Underground, Schine Student Center)

Contrete Canoe Competition (Onondaga Lake)

Poster Displays (101, 104, 104A, 107 Hinds)

9:00AM – 12:00PM Mead's Paper Competition (201 Hinds)

12:00PM – 1:00PM Lunch (on your own)

1:00PM – 4:00PM Oral Presentation (201 Hinds)

5:00PM – 6:00PM Business Meeting (201 Hinds)

7:00PM – 10:00PM Award Banquet (Underground, Schine Student Center)

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## ASCE SYRACUSE SECTION 2001 – 2002 PROGRAM SCHEDULE

| <b>Date</b>                        | <b>Event</b>  | <b>Place</b>                      | <b>Information</b>   |
|------------------------------------|---|-----------------------------------|--|
| <i>First Tuesday of Each Month</i> | <i>ASCE Syracuse Section Board Meetings</i>                             | <i>C&amp;S Engineers Building</i> | <i>5:15PM; Food/Beverages Provided</i>   |
| April 12-13, 2002                  | Ice-Breaker Reception<br>Concrete Canoe/Steel Bridge Contest<br>Banquet | SU/Onondaga Lake Park             | Students from SU, Clarkson, Cornell, RPI, Union, USMA, SUNY-Buffalo, RIT, etc. will compete, have dinner, and meet local firms |
| May 3, 2002                        | Continued Education Course  | Holiday Inn, Liverpool            | See Notification   |
| April 4, 2002                      | Adopt-A-Highway   | I81 north of Lafayette Exit       | Meet at 9:00AM in McDonald's parking lot   |
| June 7-8, 2002                     | Syracuse SkyChiefs Game/Picnic  | P & C Stadium                     | Food and drinks within the rightfield picnic area during a SkyChiefs vs. Norfolk Mets Game                                     |
| June 22, 2002                      | Adopt-A-Highway   | I81 north of Lafayette Exit       | Meet at 9:00AM in McDonald's parking lot   |
| August 24, 2002                    | Adopt-A-Highway   | I81 north of Lafayette Exit       | Meet at 9:00AM in McDonald's parking lot   |
| September 2002                     | 2 <sup>nd</sup> Annual ASCE Golf Tournament                             | TBD                               | TBD  |

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### ADOPT-A-HIGHWAY

The initial patrol of 2002 will be on Saturday May 4 at 9 AM. As in the past, we will meet in the gravel parking lot behind McDonald's on Route 20 in Lafayette for safety orientation and equipment disbursement. Wear appropriate clothing including long sleeve shirts and stout waterproof boots. We supply gloves, hard hats, safety vests, water and trash bags. In the past some provide their own hard hats and safety vests. We should be done by noon. Let's see some new faces this year of the ASCE Sesquicentennial. Watch the ASCE listserver for changes and updates.

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### SESQUICENTENNIAL PICNIC

Friday June 7 at 6PM at P & C Stadium  
Picnic and reserved seat for Skychiefs vs. Norfolk Tides game following.  
Details in May and June Newsletters.

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***American Society of Civil Engineers Syracuse Section and  
LEAP Software, Inc. Present  
Continued Education Course – Bridge Design***

- Topic:** Bridge Design and High Performance Concrete
- Speaker:** David A. Tomley, P.E.
- Manager of Engineering Services at LEAP Software, Inc.
  - BS in Civil Engineering from New Mexico State University
  - MS in Civil Engineering from University of Dayton
  - PE in Ohio and West Virginia
  - Experience with precast/prestressed concrete bridge design
  - Professional Publications including Structural Engineering Magazine
- Where:** Holiday Inn on Electronics Parkway, Liverpool, NY
- When:** May 3, 2002 9:00AM – 4:00PM EST
- Why:** 0.6 Continued Education Units; Career Improvement
- Agenda:** 9:00-9:30 AM – *Breakfast* and Introduction and Overview to LEAP Software
- 9:30 - 10:15 AM - AASHTO LRFD
- 10:30 – Noon - Practical Precast/Prestressed Concrete Bridge Beam Design
- Noon - 1:00 PM - *Lunch* and Spliced Girder Construction/Lateral Beam Stability
- 1:00 - 2:30 PM - Reinforced Concrete Bridge Pier Analysis & Design
- 2:30 – 4:00 PM - Alternative Foundation & Practical Effects of LRFD on Bridge
- Directions:** Thruway (I90) Exit 37; first traffic light past the toll booths, take left onto Electronic Parkway and right at the first traffic light
- Costs:** \$175/member; \$225/nonmember; includes course materials, breakfast, and lunch. Write checks to: *ASCE Syracuse Section*. Send checks to: Matt Millias, Parsons, 290 Elwood Davis Rd., Suite 312, Liverpool, NY 13088 [Matt.Millias@Parsons.com; (315) 451-9560]
- Menu:** Breakfast includes danish, donuts, muffins, fresh fruit, coffee/tea/decaf  
Lunch includes tossed/potato/tuna pasta salad, cole slaw, roast beef, ham, turkey, breads/rolls, chef’s dessert, coffee/tea/decaf