September 2012 Volume 59, Number 1

Visit ASCE-NCS on the web: http://asce-ncs.org

## The Great East Japan Earthquake and Tsunami of March 11, 2011 The Nuclear Regulatory Commission's Dan Dorman to speak at September NCS Meeting

At 2:46 p.m. local time on Friday March 11, 2011, a Magnitude 9.0 earthquake struck off the Pacific coast of Tohoku, just 231 miles northeast of Tokyo, Japan. This earthquake, the largest quake ever to hit Japan and the fifth largest recorded in the world (since 1900), triggered powerful tsunami waves that reached up to 133 feet in height. The quake and the subsequent tsunami had devastating effects, including the well-publicized damage to one of Japan's nuclear power plants.

The site, Fukushima Dai-ichi, had a total of six units, with two additional units scheduled to begin construction in 2012 and 2013. These two additional units have since been canceled. The six operating units were all boiling-water-type reactors, completed between 1971 and 1979. The electrical power output of the six units ranged from 460 Megawatts at Unit 1 to 1,100 Megawatts at Unit 6. The total site had an output of 4,696 Megawatts. As a result of the tsunami, Units 1 through 4 have been permanently shut

down. Units 5 and 6, however, are still in operation today.

The original siting of the units at Fukushima Dai-ichi was on a bluff approximately 100 feet above sea level; however, during construction, Tokyo Electric Power Company lowered the site by 75 feet. This change in elevation was made in an attempt to mitigate the effects of earthquakes; the base of the reactors would now be constructed on bedrock. Unfortunately, this reduction in elevation strengthened the site from the forces of the earthquake, but made the site much more susceptible





View of Units 1–4 before and after the tsunami and subsequent events at Fukushima Dai-ichi.

to flooding and tsunamis. The site was designed to protect against a design basis tsunami of 20 feet; the tsunami wave that struck Fukushima Dai-ichi was closer to 50 feet. The backup or emergency diesel generators and other electrical components were located in the basements of the reactor turbine buildings. This design caused the heat removal system to become inoperable, which contributed greatly to the events that destroyed four of the six units at Fukushima Dai-ichi.

Please join us in kicking-off a new NCS dinner-meeting season for a

presentation by Daniel Dorman, **Deputy Director for Engineering** and Corporate Support in the Office of Nuclear Reactor Regulation, U.S. Nuclear Regulatory Commission (NRC). During the aftermath of the earthquake and tsunami in Japan, Mr. Dorman was a member of the NRC response team. He then served as a lead of the NRC's Near-Term Task Force assessing the lessons of the Fukushima Dai-ichi accident for the licensing and oversight of American nuclear power plants. Prior to joining the NRC in 1991, Mr. Dorman served in the U.S. Navy's nuclear propulsion program as a submarine officer, earning subspecialty designations in nuclear propulsion plant operations and joint intelligence operations.

The September NCS meeting will be held on **Tuesday**, **September 18, 2012**, at the **Hilton Arlington**, 950 North Stafford Street in Arlington, VA, on the second floor in the Gallery Ballrooms. Parking is available at the hotel (\$8), at the Ballston Mall garage (\$1 after 6 p.m.), and on the street

(free after 6 p.m.). This location is in the same block as the Ballston Station on Metro's Orange Line. Registration and networking will be from 6:00 to 6:30 p.m., followed by dinner. The program will conclude by 8:30 p.m. The cost will be \$10 for students, \$40 for those who preregister, and \$50 for walk-ins. Please **RSVP by September 13, 2012**. One Professional Development Hour will be awarded to attendees. Click HERE to register. For questions, please contact John Casana at john.casana@gmail.com or 703-377-8980. ■

### President's Corner

It is hard to believe that my term as President of the ASCE–NCS will end this month. Due to the good work of our talented NCS members, we successfully accomplished many objectives during the 2011–2012 term. As examples:

- an expanded slate of Younger Member professional development and social events;
- the leadership seminar jointly sponsored by the NCS Engineering Management Committee and the Association of Women Engineers;
- a joint NCS-American Water Resources Association meeting;
- three community outreach events at the National Building Museum where we coached young people in suspension bridge-building;



- the Sustainability Project Award and participation at EPA's People, Prosperity and the Planet EXPO;
- participation at the USA Science and Engineering EXPO;
- much progress on our Boundary Stones Fence Restoration initiative with the help of a grant from ASCE National;
- initiation of our DC-area
   Infrastructure Report Card effort
   with the help of a grant from ASCE
   National;
- the Emergency Planning Workshop with two repeat performances due to high member demand;
- an expanded and improved ASCE-NCS website;
- publication of a top-drawer Section newsletter; and

 record attendance at monthly section meetings with compelling speakers recruited by our Meeting Champions, at our new Ballston meeting location.

We also successfully executed on-going programs such as our Awards Banquet and NCS technical committee meetings. I am deeply grateful for the hard work and support of all those who helped our Section continue to grow.

Thank you,

John Casana, P.E.

## Interested in improving your leadership skills?

ASCE, in conjunction with sister societies (AIME, AIST, SME, SEG, MRS, and SPE), will offer an Emerging Leaders Alliance training workshop in 2012 to provide rising leaders with tools to more effectively lead their organizations and serve our professional community in addressing 21st century needs. The workshop will take place on September 11-13, 2012, at the Sheraton Reston Hotel in Reston, VA. ASCE will select at least seven members to attend. For more information, visit http://www. emergingleadersalliance.org or contact professional@asce.org. ■



2011 Emerging Leaders Alliance Attendees

### Newsletter

**L.J. Sauter, Jr.,** *Editor* Telephone: 202-502-8205

October 2012 Issue Deadline: September 12, 2012

**To Submit Articles:** 

laurence.sauter@ferc.gov

### Address Changes:

Call 1-800-548-ASCE, email <a href="mailto:member@asce.org">member@asce.org</a>, go to <a href="mailto:http://www.asce.org">http://www.asce.org</a>, or write: ASCE – Membership, 1801 Alexander Bell Drive, Reston, VA 20191. Remember to include your membership number.

### **National Capital Section**

### Officers (2011–2012)

John Casana, President 703-377-8980

john.casana@gmail.com

Qamar A. Kazmi, Vice President 301-585-9419 qkazmi@gmail.com

Rollie D. Berry, III, Treasurer 301-492-3332 rollie.berry@nrc.gov

Alex Rosenheim, Secretary 202-412-3090 alex.rosenheim@gmail.com L.J. Sauter, Jr., Newsletter Editor 202-502-8205

laurence.sauter@ferc.gov

David R. Dajc, Director 703-404-6363 david.dajc@fhwa.dot.gov

**Sara Guerrero,** Director and Webmaster 703-591-4855

sara.guerrero@feapc.com
Christian Manalo, Director
703-377-1697

manalo\_christian@bah.com

**Stephen Powers,** *Director* 703-417-0091 stephen.powers@mwaa.com

Adam C. Stewart, YM President 734-223-5866 ncsymfpresident@gmail.com

Mark E. Leeman, Past President 703-591-4855 mark.leeman@feapc.com

Fady Afif, Past President 301-921-8231 afiff@bv.com

**Committee Chairs** 

Please refer to the NCS website at <a href="http://asce-ncs.org">http://asce-ncs.org</a> for a current list of NCS committees and chairs.

# 2012 ASCE 142ND ANNUAL CIVIL ENGINEERING CONFERENCE



ASCE is excited to announce **Steve Swift**, Vice President of Operations and Development for <u>Speedway Motorsports</u>, <u>Inc.</u>, as the Closing General Speaker for the ASCE's 142nd Annual Civil Engineering Conference. Swift is responsible for expanding the <u>Kentucky Speedway</u> in only 11 months and has spent numerous hours with engineers, designers, race teams, drivers, NASCAR personnel, operations departments, and events departments in design verses functionality of facilities and there practical uses. Sponsored by ASCE's Foundation, it's a session you won't want to miss!

### Other Conference highlights include:

- Opening Plenary Speaker: David Lapin, author of "Lead by Greatness"
- Earn up to 21 Professional Development Hours (PDH) with relevant and timely session topics including:
- Preparing Civil Engineers for the New Global Economy

- Water Supply Reliability: <u>Critical Tunnel Infrastructures in San Francisco</u>
- Global Competence: Best Practices for the 21st Century
- Impact of the Global Supply Chain on Designing and Managing Civil Engineering Projects
- Managing Risks in a Global Market
- Compelling Technical Tours of Montréal's signature engineering achievements
- Engaging guest programming to experience the best of Montréal
- Attend the <u>Leadership & Society Awards Breakfast</u> and Distinguished Member Induction ceremony
- Prepare to take on the world in beautiful Montréal a city at the crossroads of the international marketplace and one of the busiest inland ports in the world.

**Register Now** 

"Civil Engineering in the New Global Economy"
October 18–20, 2012 • Montreal, Quebec, Canada

## **Engineer Volunteers Needed for Girl Scout Day at the National Building Museum**

The NCS will be participating in Girl Scout Day at the National Building Museum (NBM) from 10 a.m. to 4 p.m. on **Saturday, October 20, 2012.** NCS volunteers will be helping Daisies, Brownies, and Girls Scouts build bridges from drinking straws and cardboard. Scouts will test their bridge creations after construction. In the last few years, NCS volunteers have taught various scout organizations about truss bridges and suspension bridges. This year, we will focus on arch bridges.

For many Scouts, ASCE-NCS activities are their first experience with

engineering and their first chance to talk to engineers about the profession. Help show the next generation of engineers how much fun they can have!

Volunteers are needed for 2 shifts: 10 a.m. to 12:30 p.m. and 1:30 p.m. to 4 p.m. All project materials are provided by the NCS. A pizza lunch is provided by the NBM.

The NBM is located at 401 F Street NW, Washington, DC, on Metro's Red Line at the Judiciary Square Station. Parking is available at the NBM lot (free), on streets in the neighborhood, and at public parking garages.



Contact Dean Westman at <u>dwestman@wrallp.com</u> or at 703-293-7402 to volunteer or for more information. ■

### **ASCE-NCS Newsletter Patrons**

- Tunnel Planning & Design
- Claims/Dispute Resolution
- Construction Management

JACOBS ASSOCIATES

WWW.JACOBSSF.COM EXPERTS UNDERGROUND



Fred Tarquinio, P.E.
Business Development Manager
(412) 221-4500

We are Versatile Geotechnical Contractors offering proven expertise in the design and installation of deep foundation elements, earth retention systems and ground treatment solutions.

To learn more, visit us at nicholsonconstruction.com

ANCHORS
AUGERCAST PILES
DIAPHRAGM WALLS
DRILLED SHAFTS
GROUTING
MICROPILES
SECANT PILE WALLS
SOIL MIXING
SOIL NAIL WALLS
SOLDIER PILE WALLS

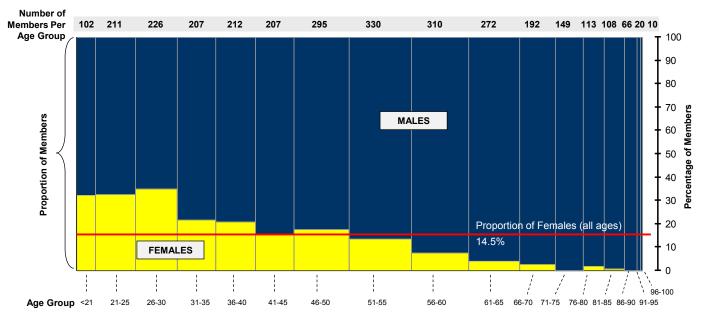
## Improving the Value of ASCE-NCS Membership

In 2011, the NCS surveyed our members to better serve you. Some of these results have informed our decisions in the past year. For example, the change to the new Arlington Hilton meeting location was influenced by survey responses indicating a preference for a more "Metro-friendly" location. In

coming newsletters, we plan to share a snapshot of the results with you as a new monthly feature "At a Glance". This month features NCS member age and gender diversity. These results influenced our 2012 outreach efforts such as expanded YMF programs and the joint Leadership seminar with the Society

of Women Engineers. We hope you find the information helpful. The Board would like to thank Chris Manalo for coordinating the survey. Please contact Chris at manalo\_christian@bah.com with survey questions.

### ASCE-NCS Membership – Age Distribution and Gender (Graphic 1 of 2)



- The largest segment of ASCE-NCS members are between the ages of 45 and 65.
- Civil engineering schools have successfully drawn increasing numbers of women into the profession over the past several decades

Source: Membership Analyses, ASCE-NCS Management and Best Practices Subcommittee, 2011.



### **NCS Committee News and Updates**

## **Engineering Management Committee**

The Engineering Management Committee is looking for volunteers to design another great Engineering Management Seminar. We are seeking individuals to be a part of the Committee and soliciting any ideas and suggestions for topics to address in a seminar (date to be determined) to help engineering professionals develop into managers. Our *Bridging Skills from Engineer to Leader*, conducted jointly last March with the Baltimore-Washington Section of the Society



Attendees at the March 2012 Professional Development Seminar.

of Women Engineers, was very well attended and demonstrated that young and mid-career managers have more than a passing interest in enhancing their leadership skills. If you would like to be part of this Committee and/or provide some ideas, please contact Thomas Lanyon, Chairman, at tlanyon@myrapidsys.com.

### Water Resources Committee – Integrated Planning and the Growing Cost of Clean Water

The Water Resources Committee and the Federal Water Quality Association jointly hosted a luncheon on June 5 at the Dupont Circle Hotel in Washington, DC. Nearly 70 professionals attended the event which featured two renowned speakers in the water and wastewater utilities industry - Deborah Nagle, Chief, EPA Office of Wastewater Management, and George Hawkins, General Manager, DC Water. Ms. Nagle discussed EPA's development of a new integrated planning and permitting framework, which allows utilities to comply with permitting requirements in a more strategic and prioritized manner. Mr. Hawkins discussed the challenges of operating a vast utility, in particular the



Christian Manalo presents plaques of appreciation to George Hawkins and Deborah Nagle.

cost associated with managing aged infrastructure.

For further information on activities of the NCS Water Resources Committee, contact Christian Manalo, NCS Director and Water Resource Committee Chairman, at <a href="mailto:manalo\_christian@bah.com">manalo\_christian@bah.com</a> or 703-377-1697.

## Younger Member Professional Development Events

On Wednesday, May 23, the NCS Younger Members held a Professional Development Meeting at the Madhatter restaurant in Washington, DC. The



Erik Sohn, Architectural Engineer at WJE.

meeting featured a presentation on the seismic assessment of the Washington Monument and the Washington National Cathedral. The speaker, Erik Sohn, P.E., of Wiss, Janney, Elstner (WJE),

is an Architectural Engineer with over 10 years of experience in the forensic investigation of building enclosure

failures. Mr. Sohn is a member of a unique team of engineers at WJE that utilizes industrial rope access techniques to survey buildings throughout the county. During the presentation, Mr. Sohn discussed his most recent survey of the exteriors of the Washington Monument and the Washington National Cathedral via rope access techniques to inspect the structures for

damage resulting from the magnitude 5.8 earthquake on August 23, 2011. He also described the unique construction of both structures and their behavior during the seismic event. Mr. Sohn is currently working with the National Park Service to develop repairs for these important historic structures.

The Younger Members held another **Professional Development Meeting** at the Toscana West restaurant in Washington, DC, on Wednesday, July 25. The meeting featured a presentation on forensics and claims consulting, "The Legal Side of Engineering." The speakers, Daniel Stewart and Basil Alexander of Hill International, are both licensed professional engineers and attorneys. Messrs. Stewart and Alexander have experience in various sectors of the construction industry and in various forms of litigation and dispute resolution. In the presentation, attendees learned about the different forms of dispute resolution and the role of a claims consultant. The presenters provided common applications of construction engineering in the legal process by describing multiple case studies and gave tips on how to prepare for a deposition or other form of formal interrogation.

For more information about NCS Younger Members Professional Development Meetings or to suggest a presentation topic, please contact Kelly Cronin at <a href="mailto:kcronin@wje.com">kcronin@wje.com</a>.

The ASCE-NCS Younger Members Forum (YMF) holds monthly happy hours in Arlington, VA or Washington, DC. If you would like to become more active with the YMF or would like more information on our events, please contact the YMF President, Jordan Pitt, at <a href="mailto:wjpitt@mbakercorp.com">wjpitt@mbakercorp.com</a> or <a href="mailto:ncsymf-president@gmail.com">ncsymf-president@gmail.com</a>.



Attendees at "The Legal Side of Engineering."

### Spring ASCE/NCS Volunteer Events

### EPA P3 Expo, April 21-23

ASCE was once again a visible and active presence at the EPA's **People, Prosperity and the Planet (P3) Competition and Expo** on the National Mall in Washington, DC, on Earth Day weekend.

In addition to an exhibit booth, ASCE presented a special award to a student team with VIP judges from the World Bank, International Development Bank, EWB-USA, and the NCS. David Mongan gave remarks at the awards ceremony, which was preceded by a reception for the teams hosted by the ASCE. Jim Johnson, the long-time Dean at Howard University and an active ASCE member, was in attendance as the new EPA Director of the National Center for Environmental Research (which oversees the P3 competition). ASCE also partnered with the Smithsonian and MacGillivray Freeman Films (ASCE's partners on the Real Big! IMAX film) to arrange a special screening for the premiere of MFF's new film, To the Arctic,



Emily Dean and Leslie Payne engage visitors to the ASCE booth which featured a porous asphalt demonstration and insights into "ASCEville."

at the Smithsonian IMAX Theatre during the competition.

Finally, ASCE's activity at the EPA P3 Expo was the headline image in Popular Mechanics coverage of the Expo. See <a href="http://www.popularme-chanics.com/science/environment/green-energy/11-clever-greentech-concepts-from-the-national-sustainable-design-expo-8385232#slide-1">http://www.popularme-chanics.com/science/environment/green-energy/11-clever-greentech-concepts-from-the-national-sustainable-design-expo-8385232#slide-1</a>.

All in all, ASCE was highly visible throughout the event and the EPA has once again expressed its enthusiastic thanks to all who participated! The NCS and ASCE National join the EPA with special thanks to the following volunteers:

- Audrey Copeland
- Margaret Cervarich
- Emily Dean
- Robert C. Field
- Tim Garland
- Kent Hansen
- Stefan Jaeger
- Mike Kvah
- Leslie Payne
- Jill Sanders
- Dean Westman
- Catholic University of America ASCE Student Chapter members

### USA Science and Engineering Festival Expo & Bookfair, April 27–29

ASCE was also well-represented the following weekend at the **Science** and Engineering Expo, held at the Washington Convention Center. Booth visitors got to see Clemson University's concrete canoe display and talk to the ASCE student team members who participated at the national competition. And the Flicker and Float My Boat



Tim Garland works with ASCE booth visitors.

activities were a real hit! Sponsors estimated that over 10,000 people attended the event.

ASCE National and the NCS would like to thank all those who volunteered to assist with this event, including staff from ASCE National and the ASCE-Maryland Section:

- Tim Garland
- Jane Howell
- Kennedy Huddleston
- Zainab Nejeti
- Leslie Payne
- Andrea Putscher
- Jackie Simon
- Dean Westman
- Clemson University Concrete Canoe
   Team members



Leslie Payne and Kent Hansen with the Earth Day poster at the ASCE booth.



Clemson University ASCE student members demonstrate the theory behind their concrete canoe with budding engineers.



## 14TH ANNUAL LCI CONGRESS

October 9 - 12, 2012 Improving the Way We Work

## 2012 LCI Congress Details | Registration Is Now Open!

When: Tuesday, October 9 - Friday, October 12, 2012

Where: Arlington, VA

What: A rich and informative series of presentations and conversations about lean construction and how it is "Improving the Way We Work" through education, implementation, execution, and

results.

Register: www.lci-ncr.webs.com

Call for Presentations: Deadline is July 25th. Deadline extended to August 8th.

For instructions or more details on the event, please visit our website.

Sponsorships: Click here for details!

Exhibitors: Click here for details!

**Program:** Each day is scheduled from roughly 8AM to 5PM, with the exception of Friday, which will end around noon.

### Tuesday, October 9, 2012 - Improving the Way We Work...Education

LCI has partnered with leading industry organizations who teach lean processes, including Associated General Contractors (AGC), American Institute of Architects (AIA), and Design-Build Institute of America (DBIA). This day will be dedicated to showcasing and sharing their training programs and leveraging the collective knowledge of industry partners.

### Wednesday, October 10, 2012 - Improving the Way We Work...Implementation

Public and Non-Profit organizations as well as private sector companies will report on their use of lean design and construction principles in a diverse range of projects. Learn from their stories how best to implement lean in your organization.

### Thursday, October 11, 2012 - Improving the Way We Work...Execution

All sector organizations will report on their execution of lean through design and construction teams and contract models in a diverse range of projects. Learn from their stories how best to create and drive lean performance in your teams and organizations..

### Friday, October 12, 2012, Improving the Way We Work...Results

See the results achieved from projects and companies who use lean processes. We will also perform a plus/delta on the entire LCI Congress to improve our programs for future years.



## **Upgrading Computers? Go Touch!**

The Computer Corner by Ranjit S. Sahai, P.E., F.ASCE

Interacting with the first electronic computers required special skills: familiarity with binary match and mechanical gears. Computers took up full rooms and used punched cards to accept data input. However, as computers became more mainstream, the first shift occurred: introduction of the keyboard. The keyboard facilitates your interaction with computers through command-line arguments as you view information in real-time on human-readable displays.1,2

The advent of graphical user interfaces on personal computers was the force behind the second shift: rise of the mouse. The computer mouse allows you to interact efficiently with a computers graphical user interface instead of solely through a text-based display and command-line arguments.1,2

The most recent - and ongoing shift in how we interact with computers is TOUCH. With the limited size and weight and portability of mobile devices, an interface that required no peripherals

was important. Touchbased interaction on capacitive screens solved the challenges posed by pressure-sensitive touch-based interactions that had emerged on PCs a decade earlier. Touch on capacitive screens offer greater accuracy and a

more intuitive implementation.1

Though touch-based computing is now prevalent on mobile devices such as smartphones and tablets, the time is upon us when, I believe, most computer monitors, yes even those for laptop and desktop computers, will support capacitive touch interactions. Why? The world's most dominant computer operating system vendor, Microsoft, has implemented in Windows 8 native support for capacitive touch hardware.

#### **Windows 8 with Touch**

The Windows 8 Modern interface encourages users to adopt touch. It replaces the classic Windows Start button with an entire Start screen. This screen uses rectangular tiles for



Image Source: http://h20621.www2.hp.com/video-gallery/us/en/d7e768197db05cce67041278755d5e5e0f458b7a/r/video

application icons. Windows applications can now be of two types:

- Windows Store Apps that run within the Windows 8 Modern interface, use the full screen, and are at home with the touch interface; and
- **Windows Desktop Applications** that represent all Windows 7-compatible applications. Windows Desktop retains the classic Windows functionality and application compatibility.

Over the last thirty years, there have been three major shifts in how we interact with computers. We're in the midst of the most recent shift - and that shift will likely influence what you buy when replacing or upgrading your computer.

> Windows 8 was designed with the goal of letting you run the same operating system across your smartphone, tablet, and personal computer. The Windows 8 Modern interface is intuitive on smartphones and tablets. The Start screen tiles are large, easy to read, and touch-enabled. Windows 8 also supports touch gestures: swiping from the right edge of the screen towards the center brings up the charms bar which includes search and settings functionality; swiping from the left edge of the screen towards the center lets you switch between open applications; pinch zoom; and others.

### **Windows 8 with Keyboard and Mouse**

The Windows 8 Modern interface is very useful and easy-to-use in environments where touch-computing is already the norm: smartphones and tablets. But what about PCs that don't have touch screens and rely on keyboard and mouse for interaction? I should note that all touch-based functionality in the Windows 8 Modern interface is accessible via keyboard and mouse. The leftswipe gesture is performed with a mouse by moving the cursor to the top right screen pixel or

by pressing Start+I on the keyboard. The right-swipe gesture is performed with a mouse by moving the cursor to the top left corner of the screen. Touch scrolling is akin to using the mouse wheel or scroll bar.

I have been using Windows 8 since September 2011 on a tablet and All-In-One PC and find myself at home in both its interfaces. I find myself using touch far more often when interacting with Windows Store Apps than when interacting with classic Widows Desktop Applications.

### Recommendation

Tech industry pundits report that the Windows 8 Modern interface is likely to prevail as the dominant Windows interface over time. Gartner, a respected industry-trends research organization, calls the release of Windows 8 not just an upgrade, but the forerunner of a shift in technology from Microsoft.3

So what should you do? If you're in the market for a new PC, I recommend Windows 8 running on touch hardware. Windows 8 becomes generally availability on October 26, 2012.4

But what if you are not in the market for a new PC? Microsoft has made it very affordable for you to acquire the new version of Windows as an upgrade from XP, Vista, and 7 for an incredibly low \$40.5

Windows 8 includes numerous enhancements under the hood. It runs faster than Windows 7 on the same hardware. The shut down and boot times are significantly reduced. The Task Manager has been redone and File Explorer (previously Windows

continued on page 9

## NCS Volunteers Continue the Record-Setting Pace of Boundary Stone Fence Restorations

### Another Six Fences Restored in May Event; Activities Covered by WAMU Radio

On Saturday, May 19, 2012, a group of 36 volunteers led by NCS Director Stephen Powers, P.E., once again tackled fence and ground restoration at six boundary stone sites. The fences at these sites were scraped, primed, painted and their grounds cleaned and mulched. At noon, all of the teams assembled at Alexandria's Fort Ward Park for a family picnic which was coordinated by NCS Past-President Fady Afif.

This NCS initiative has now **restored 20 fences** and has only 10 to go! The
NCS will also be working with the
necessary parties to install new fences

at the stones where there are damaged fences or no fences at all. Inspired by the NCS's efforts, the Daughters of the American Revolution (DAR) has undertaken major restorations at the Northeast Stone #3 (NE #3) and NE #7 during the summer of 2012. The NCS will also be focusing on work that needs to be done at SE #4 (getting the stone back into the ground) and SE #8 (getting another replica stone installed).

Volunteers from the NCS, the District of Columbia Association of Land Surveyors, DAR, AECOM, and many local citizens came out to participate for this most worthy preservation effort.

Please see pages X-Y for photos of the sites and the volunteer teams.

Beyond the momentum shown by the growing number of volunteers, the NCS efforts over the past 18 months continue to attract serious attention in the media. The NCS wishes to thank Rebecca Sheir of National Public Radio Station WAMU FM 88.5 – American University Radio for covering our May event on the program "Metro Connection." Here is a link to the web page and podcast of the radio program: Volunteers Work To Save D.C.'s Oldest Monuments | WAMU 88.5 – American University Radio.

Of course, the effort is also covered as one of the NCS "Special Projects" on our own website (<a href="http://asce-ncs.org/index.php?option=com\_content&view=article&id=23&ltemid=19">http://asce-ncs.org/index.php?option=com\_content&view=article&id=23&ltemid=19</a>).

The NCS hopes you will consider helping out with its next fence restoration event which will be on **Saturday**, **October 20, 2012**.

The NCS wishes to express its deep appreciation to all the volunteers who took part in the May 26 (see teams on the following pages). For further information or to sign-up for the upcoming October event, contact Stephen Powers at <a href="Stephen@designpowers.com">Stephen@designpowers.com</a> or 703-528-8296.

continued on page 10

## October NCS Meeting – Asset Management for Buried Utilities Infrastructure

Please join us on the evening of Tuesday, October 16, for a presentation by the Washington Suburban Sanitary Commission (WSSC). Ms. Felicia James, P.E., Principal Civil Engineer, will discuss WSSC's efforts to restore the utility's distribution and collection systems. WSSC is one of the largest water and wastewater utilities in the nation with nearly 5,600 miles of water mains and 5,400 miles of sewer pipeline. Nationally, the age and condition of our water and wastewater utilities infrastructure have been of increasing concern, and WSSC has adopted an aggressive program to address this issue.

### The Computer Corner continued from page 8

Explorer) has a new ribbon bar. But don't worry; it's a lot easier to get used to than the changes introduced for Office in 2007!

If you plan to upgrade to Windows 8 on your current PC, I would recommend upgrading your monitor with a multi-touch monitor. This will vastly improve your experience with the Windows 8 Modern interface. The ability to use gestures in desktop computing makes the Modern interface far more intuitive to use. The touchscreen capability of the monitor will also become more relevant with time, which is another reason why it is, in my opinion, a good investment.

### What Does The Future Hold?

The human-computer interaction has moved from punch cards, keyboard, and mouse to touch. What does the

future hold for the next shift in humancomputer interaction? I stumbled upon a very informative answer to this question in the form of a well-researched Info graphic. Interested? Email me and I will be happy to send you the link to the info graphic available on the Web.

### **Citations**

- 1. http://www.innovationnewsdaily.com/246-infographic-computer-interface-devices-mouse.html
- 2. http://www.pcworld.com/ article/209224/a\_brief\_history\_of\_ computer\_displays.html
- 3. http://www.computerworld.com/s/article/9228597/Windows\_desk-top\_destined\_for\_long\_slide\_to\_oblivion\_says\_Gartner
- 4. http://en.wikipedia.org/wiki/ Windows\_8

5. http://windowsteamblog.com/windows/b/bloggingwindows/archive/2012/07/02/upgrade-to-windows-8-pro-for-39-99.aspx

### **About the Author**

Ranjit has been writing on computer topics since 1987 and has authored five books on CAD (MicroStation and AutoCAD). His next book is on success in life and business (Be-A-Teacher.com). He is the founder of RAM Corporation and Chair of the ASCE-NCS Automation Committee. He welcomes comments and feedback via e-mail. To e-mail Ranjit, visit the Contact Us>Committee Chairs page at <a href="https://www.asce-ncs.org">www.asce-ncs.org</a> or the Contact Us page at <a href="https://www.rcare-solutions.com">www.rcare-solutions.com</a>.

### NCS Volunteers Continue the Record-Setting Pace of Boundary Stone Fence Restorations continued from page 9







SW stone #1, after

This fence is believed to have been re-installed in the 1950's when the intersection was widened. The stone itself was misplaced when reset so that the current orientation does not reflect how the faces of the stone should be aligned.



Volunteers at SW stone #1: Team Leaders: Tim Summerall (DCALS; 4-time volunteer), Frank Cantwell and William Nell (both 2-time volunteers); Margaret Ballard, Stacy Langsdale, and Olga Valencia. The homeowner in whose yard this stone resides requested that this fence be painted black (not green). The NCS honored these wishes.



SW stone #2, before



SW stone #2, after

The original stone was discovered missing in 1894 when Marcus Baker first surveyed the stones. It is believed to have gone missing at the onset of the Civil War when this entire site was the Union Civil War Military Camp of the 44th New York Infantry, Camp Convalescent or "Camp Misery." The Mt. Vernon Chapter of the DAR installed a replica stone and the original fence (shown above). This fence was originally installed and dedicated by the 'State of Maryland' Chapter of the DAR, on April 14, 1916, making the fence over 95 years old.



Volunteers at SW stone #2: Team leaders Stephen Braks, Vincent Costanzi, Marian Kopecky, and Al Schiffer (all 2-time volunteers); Lora Mueller, Kurt Mueller, and Leona Roszkowski. This was the largest team and due to the proximity to Russell Road had to perform their duties with traffic right on top of them. Bravo for braving this site!



SW stone #3, before



SW stone #3, after

The Original DAR fence was installed by the American Liberty Chapter of the DAR circa 1916.



Volunteers at SW stone #3: Team leader: Dr. Bob Efimba (who has participated in all five restoration events); John Casana, Yaksha Dahal, Manamaya Dahal, and Anthony Konwea. This team had the fewest number of volunteers (tied with team #4), worked late into the afternoon, and as you can see from the photos also managed to paint the protective bollards!

### NCS Volunteers Continue the Record-Setting Pace of Boundary Stone Fence Restorations continued from page 10





SW stone #4, after

The original fence was installed by the Continental Chapter of the DAR in 1916.



Volunteers at SW stone #4: Team Leaders Mark Leeman and Eric Mendelsohn (both 3-time volunteers), and Patty Clark (Fairlington Historical Society and 2-time volunteer); Todd Parker, and Juan Perez. A "Shout-out" also goes to Harold Silva of the Silva Construction Company, who opened up and closed the chain link fence so our team could access the fence. The fence is the pride and joy of the Fairlington Village Historical Society, and our smallest crew of the day (tied with team #3) worked late into the afternoon to complete the job!







SW stone #5, after

The original DAR fence is believed to have been replaced by DAR in the 1950's.



Volunteers at SW stone #5: Team leaders Debra Schwartz (3-time volunteer), Bob Fuller and Brian Glenn (both 2-time volunteers); David Bierlein, Elena Manville, and CC Arrington. David Bierlein traveled all the way from Berryville to help out!



SW stone #6, before



SW stone #6, after

This fence was installed by Arlington County. The original DAR fence was destroyed in a vehicle accident in the 1960's.



Volunteers at SW stone #6: Team leaders Sara Guerrero, Martin Mamawal, and L.J. Sauter (all 2-time volunteers); Lauren Joy Sauter, Kristina Swallow (ASCE Region 8 Director-Elect), and Tom Yoast.

Special thanks to Scott Wolf for coordinating the efforts of teams 1-3 and Stephen Powers for coordinating the efforts of teams 4-6. Scott and Stephen were also busy spreading mulch at the six stones on Sunday.

## A Final Thank-You to Our 2012 Banquet Sponsors

**GOLD** 



SILVER



Booz | Allen | Hamilton

delivering results that endure











### Get your company in the spotlight!

Promote your company to the engineering community in the NCS newsletter, at NCS monthly meetings, and at special events like the Annual Awards Banquet. Become an ASCE-NCS Partner. Contact the NCS Newsletter Editor to invest in your company's future.

### **Upcoming Events** (Also available on the NCS website under the Events tab)

### September 5-7

ASCE Continuing Education seminar "HEC-RAS Computer Workshop" to be held at the Hilton Garden Inn Baltimore Inner Harbor. Earn 2.4 Continuing Education Units (CEU). To view the seminar brochure, click HERE.

### September 11-13

ASCE, in conjunction with several sister societies, is sponsoring an **Emerging Leaders Alliance training** workshop to provide rising leaders with tools to more effectively lead their organizations and serve our professional community in addressing 21st century needs. The workshop will take place at the Sheraton Reston Hotel in Reston, VA. For more information, visit http://www.emergingleadersalliance.org or contact professional@ asce.org/.

### September 13-14

**ASCE Continuing Education Seminar** "Design of Lateral Force Resisting Systems Using the 2012 International Building Code" to be held at the Hilton Garden Inn Baltimore Inner Harbor. Earn 1.5 CEUs. To view the seminar brochure, click HERE.

### September 18

NCS monthly meeting at the Hilton Arlington. The featured speaker will be Daniel Dorman, Deputy Director for **Engineering and Corporate Support** in the Office of Nuclear Reactor Regulation, U.S. Nuclear Regulatory Commission. Mr. Dorman's topic will be the great east Japan earthquake and tsunami of March 11, 2011. (See newsletter lead article.)

### September 20-21

**ASCE Continuing Education Seminar** "Bridge Rehabilitation" to be held at the Embassy Suites Hotel Center City Philadelphia. Earn 1.4 CEUs. To view the seminar brochure, click HERE.

### September 27-28

**ASCE Continuing Education Seminar** "Earthquake-Induced Ground Motions" to be held at the Holiday Inn Central, 1501 Rhode Island Avenue, Washington, DC. Earn 1.6 CEUs. To view the seminar brochure, click HERE.

### October 9-12

14th Annual Lean Construction Institute Congress will be held in Arlington, VA. Learn about lean construction and how it is "Improving the Way We Work" through education, implementation, execution, and results. For further information or to register, click HERE. (See newsletter flyer.)

### **October 16**

NCS monthly meeting at the Hilton Arlington. The featured speaker will be Ms. Felicia James, Principal Civil Engineer with the Washington Suburban Sanitary Commission. Ms. James will speak on the renewal of the Washington Suburban Sanitary Commission's water distribution system infrastructure. (See newsletter brief.)

#### **October 18-20**

Civil Engineering in the New Global Economy is the theme for the ASCE's 142nd Annual Conference in Montreal, Quebec, Canada. Visit the

ASCE Conference Website for further information.

#### October 20

Girl Scout Day at the National Building Museum in Washington, DC. Volunteers are needed to help staff this event. Help inspire the next generation of civil engineers! Contact Dean Westman to volunteer or for additional information at dwestman@ wrallp.com. (See newsletter brief.)

### **November 7-9**

**ASCE Continuing Education** Seminar "Streambank Stabilization for Restoration and Flood Control Projects" to be held at the Sheraton Suites Old Town Alexandria. Earn 2.1 CEUs. For more information, click

### November 29-30

**ASCE Continuing Education Seminar** "Structural Condition Assessment of Existing Structures" to be held at the Holiday Inn Central, 1501 Rhode Island Avenue, Washington, DC. Earn 1.4 CEUs. For more information, click HERE.

### December 6-7

**ASCE Continuing Education Seminar** "Seismic Loads for Buildings and Other Structures" to be held at the Holiday Inn Central, 1501 Rhode Island Avenue, Washington, DC. Earn 1.4 CEUs. For more information, click HERE.

### **Employment Clearinghouse**

Then ASCE-NCS provides the Employment Clearinghouse as a free service to its membership. The Clearinghouse allows members to post short notices for available positions or candidates seeking employment. All employers listed herein are equal opportunity employers. If

you have questions or would like to post a position, please contact the Employment Conditions Committee, National Capital Section ASCE, 8502 Buckhannon Drive, Rockville, MD 20854-3503; phone: 301-983-9777; fax: 301-983-1953; or e-mail sassi22@ verizon.net.