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 Tōhoku, just 231 miles north-east 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 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.
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;
- 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
- 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;
- record attendance at monthly section meetings with compelling speakers recruited by our Meeting Champions, at our new Ballston meeting location.

We also successfully executed ongoing 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.
ASCE is excited to announce Steve Swift, Vice President of Operations and Development for Speedway Motorsports, Inc., as the Closing General Speaker for the ASCE’s 142nd Annual Civil Engineering Conference. Swift is responsible for expanding the Kentucky Speedway 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: Critical Tunnel Infrastructures in San Francisco
- 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 Leadership & Society Awards Breakfast 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.

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 dwest-man@wrallp.com or at 703-293-7402 to volunteer or for more information.

ASCE-NCS Newsletter Patrons
At a Glance...

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


ASCE-NCS Newsletter Patrons

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EMTech Consulting Engineers
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 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 permitting requirements in a more strategic and prioritized manner. Mr. Hawkins discussed the challenges of operating a vast utility, in particular the 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 manalo_christian@bah.com 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 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 kcronin@wje.com.

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 wpjitt@mbakercorp.com or ncsymf-president@gmail.com.

Attendees at “The Legal Side of Engineering.”

Attendees at the March 2012 Professional Development Seminar.

Christian Manalo presents plaques of appreciation to George Hawkins and Deborah Nagle.
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*, at the Smithsonian IMAX Theatre during the competition.


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 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

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

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.
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 computer's graphical user interface instead of solely through a text-based display and command-line arguments.1, 2

The most recent – and ongoing – shift is TOUCH. With the limited size and weight and portability of mobile devices, an interface that required no peripherals was important. Touch-based 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 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 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 left-sweep 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-sweep 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 Windows 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 Explorer) includes improved navigation and search capability.

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Image Source: http://h20621.www2.hp.com/video-gallery/us/en/d7e768197db05cce6704127975f0e1e94595b7a/video

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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 DAR 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.

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 wastewater infrastructure. 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 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 Stephen@designpowers.com or 703-528-8296.

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 human-computer 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

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 [www.asce-ncs.org](http://www.asce-ncs.org) or the Contact Us page at [www.rcare-solutions.com](http://www.rcare-solutions.com).
NCS Volunteers Continue the Record-Setting Pace of Boundary Stone Fence Restorations
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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.

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!

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!

SW stone #1, before
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.

SW stone #1, after

SW stone #2, before
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.

SW stone #2, after

SW stone #3, before
The Original DAR fence was installed by the American Liberty Chapter of the DAR circa 1916.

SW stone #3, after
NCS Volunteers Continue the Record-Setting Pace of Boundary Stone Fence Restorations
continued from page 10

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!

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

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!

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

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

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

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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 HERE.

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.