



Demo Host Volunteers

Bicycle Wheel Gyroscope: Edward Feng (8246) and Jacquie Reardon (8222)

Bristlebots: Lisa Andersen (8226), Chris Kershaw (8135), Bryn Miyahara (8226), Karen Scheffel (8133), Simon Scheffel (8244), Grace Soh (8133), and Adrian Wong (8226)

Bubbles of Fun: Joe Lewis (8944)

Build a Mini Motor: Lee Druxman (8231)

CERT Demos: Kristi Huerta (8128)

Cyber Defenders: Steve Hurd and Elliot Proebstel (both 8965)

Dr. Bill's Science Challenge (Scientific Method): Bill Ballard (8100), Susanna Good Bugs Make Great Scientists (Scanning Electron Microscope): Jeff Chames and Ryan Nishimoto (both 8651)

Gordon (8101), and Jane Ann Lamph (8243)

GeeWhizz Laboratory: ~~XXX XXX (8xxx)~~

IR Camera: Fe Canono and Hope Niblick (both 8944)

Laser Jell-O: David Osborn (8353)

LEGO Mindstorm Robots: Donna Edwards (8114)

Liquid Nitrogen: Ann Harren (8226) and Kyle Marchini (8223)

Magnetic Fields: Michele Kahn (8949) and Debra Post (8248)

Non-Newtonian Fluid Demos: Ben Sanders and Ed Talbot (both 8965)

Paper Airplane Contest: Casey Deccio (8949), John Didlake (8136), and Craig Hokanson (8944)

Polymer Balls: Noel Chang ~~(8xxx)~~, Nicole Lemaster (8961), and April Nissen (8223)

Red Man and FATS: Doug Brown (9312) and the security officers

Student Intern Job Fair Booth: Kelly Nykodym (8524)

Surfboard Foam Science: LeRoy Whinnery (8223) and other members of the 8223 Materials Chemistry department

Tornado in a Bottle: Cherissa Puchta (8362) and Ashley Wilkins (8237)

Wii Fit: Morgan Edwinson, Emily Thompson (both 8527)

Employee Recognition Award winners announced

Congratulations to the winners of the Division 8000 2009 Employee Recognition Awards (ERAs), who will be honored at a celebration in New Mexico this summer.

Individual ERA winners include the following: in the category of Individual Leadership, Marisa Ruffolo (8226); for Individual Technical Excellence, Steve Eisenbies (8237) and Julie Kaiser (8621); and for Individual Exceptional Service, Ed Allen (8243-1), Morgan Edwinson (8527), and Daniel Strong (8533).

In the team division, the winners are the Biofuels Systems Analysis Team led by Todd We ~~(8114)~~, the California Foreign Interactions Team led by Jessica Matto (8524), the Non-Port of Entry Team led by Linda Groves (8112), the Sandia/California Complex Transformation Future Studies Team led by Shirley Johnson (8522), Sandia's Joint BioEnergy Institute Operations Team led by Grant Heffelfinger (8630), and the W87/JTA4 Product Realization Team led by Mark McConkie (8231).



Daffodil Days 2009 concludes

By Gigi deCastro (8300) and Jennifer Bamberger (8114)

This year Sandia/California contributed approximately \$4,350 in support of the Daffodil Days campaign to help give life and hope to millions of Americans facing cancer. Your donations through Daffodil Days provide valuable programs and services to cancer patients in your community and help fund research, advocacy efforts, and education on cancer prevention and early detection.

To all the volunteer coordinators and those who made contributions even in this tough economy, THANK YOU for a wonderful year! We couldn't have done it without you!

Sandia builds houses too!

What do you get when you combine more than 40 hard-working Sandians (on and behind the scenes); four consecutive eight-hour days of physical labor in grueling heat; and countless nails, boards, and blisters? One house completely framed and ready for finishing.

From April 18 to April 21, a team from Sandia/California took part in Habitat for Humanity East Bay's 2009 Earth Day Build-A-Thon, the largest such event in the organization's history. The Sandia team and hundreds of other volunteers framed 20 homes on Edes Avenue in East Oakland, giving Habitat East Bay a good start toward its goal of building 200 homes within the next five years.

Larry Carrillo (8237) and Chuck Oien (8940) organized the Sandia team and worked all four days of the event. It turns out that working for Habitat is something many people have always wanted to do—they just needed a nudge. "I've wanted to work with Habitat for years," says Dr. Stephanie Ball (8527). "These guys made it so easy."

"It was really an awesome experience," says Dave Franco (8114). "It was a great change of pace from day-to-day work to spend the day

outside creating something of value. There is really nothing like having a home of your own. At the end of the day, I felt really good about what we'd accomplished."

He also thinks the experience helped build a sense of community within Sandia. "I got to interact with people I normally never come into contact with, and most of the time, we never talked about work," says Dave. "It's a way to branch out and makes you a little bit prouder to be a Sandian."

Now that the framing is complete, work on the 20 houses will continue through the end of the year. Wednesday through Saturday of most weeks, smaller teams will work on electricity, plumbing, siding, sheetrock, and other tasks to get the houses ready for move-in at the dedication in December.

Larry says he plans to help out at the site on a monthly basis to see the houses grow. And he, Chuck, and many of the other volunteers are looking forward to working on the next Sandia Habitat team. "I hope that Sandia/California will sponsor more events like this one," says Heidi ~~XXXXXX (8XXX)~~. "I would definitely participate in the future as well."



Kicking off day one of the build-a-thon, counter-clockwise from bottom: Mike DeVay, ~~X~~ Curt Nilsen, Ming Lau, Mike Neuman, Larry Carrillo, Chuck Oien, ~~X~~ and Jane Ann Lamph.



~~XX~~ Ming Lau, Chuck Oien, Jane Anne Lamph, and Larry Carrillo bring the frame for one of the walls into place. (Photo by Larry Carrillo)



A view of the Edes Avenue build site. The Sandia house is the first duplex on the left. (Photo by Larry Carrillo)

Thanks to everyone who participated in the Earth Day 2009 Build-a-Thon:

Heidi Ammerlahn (8962)
Stephanie Ball (8527)
Steve Carpenter (8945)
Larry Carrillo (8237)
Dan Chavez (8243-1)
Mike DeVay (8237)
Katherine Dunphy-Guzman (8114)
Steve Eisenbies (8237)
Roger Everett (8237)
Dave Franco (8114)

Ann Harren (8226)
Tammy Kolda (8962)
Jane Ann Lamph (8243)
Ming Lau (8237)
Leticia Longoria (8243-1)
Will Loo (8244)
Jessica Matto (8524)
Mike Neuman (8237)
Curt Nilsen (8200)
Kelly Nykodym (8524)
Chuck Oien (8940)

Devon Powers (8529)
Elliot Proebstel (8965)
Howard Royer (8238)
Pete Spraggins (Sandia spouse)
Derek Young (8229)
Frank Zendejas (8625)
... and Mindy Hutchings (8000), Patti Koning (8529), and Laura Plosser (896) for their efforts behind the scenes.

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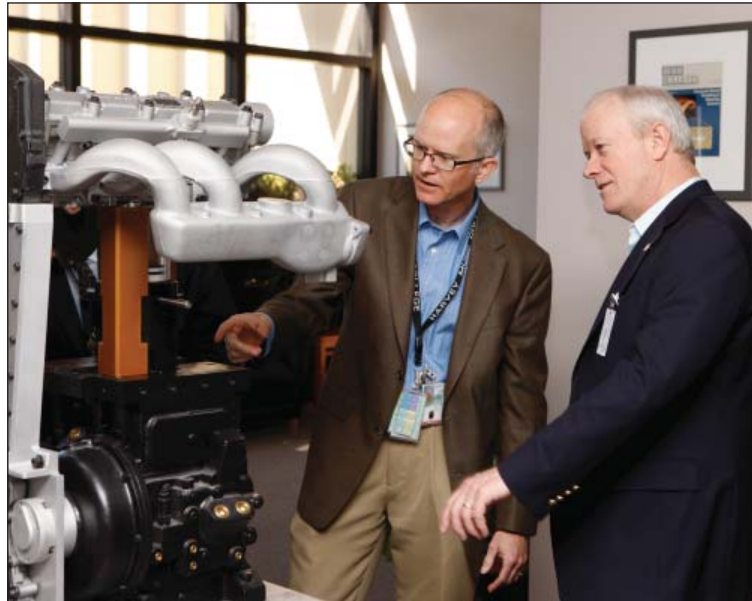
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Congressman Jerry McNerney visits Combustion Research Facility

On Monday, April 20, Congressman Jerry McNerney (Democrat, 11th District) paid a visit to Sandia/California's Combustion Research Facility to learn about our energy programs. Terry Michalske (6100), Andy McIlroy (8350), and Karen Scott (12122) hosted the visit. While at Sandia, McNerney spent time in the Combustion Chemistry Laboratory, where he spoke with Craig Taatjes (8353); the Turbulent Combustion Laboratory, where he spoke with Rob Barlow and Joe Oefelein (both 8351); and the Advanced Fuels Laboratory.

Prior to winning his seat in 2006, McNerney worked as a contractor at Sandia/New Mexico and had a long career in wind energy, consulting for PG&E, FloWind, and the Electric Power Research Institute, Inc. McNerney has many congressional assignments, including the Energy and Commerce Committee, which is particularly relevant to Sandia. McNerney's district, which touches Alameda, Contra Costa, and San Joaquin counties, includes the cities of Danville, Dublin, Lodi, Manteca, Pleasanton, San Ramon, and Tracy.



Andy McIlroy (left) shows Jerry McNerney an optical engine developed at Sandia for combustion research.

Sandians, members of the public invited to "test-drive the future" at Hydrogen Road Show on May 28

By Mike Janes (8529)

Sandians and other members of the public interested in learning firsthand about how hydrogen fuel cell-powered vehicles might be part of our transportation future are invited to take part in the "Hydrogen Road Show," which will make a stop in downtown Livermore on Thursday, May 28, from 11 am to 1 pm.

As part of the event, which is organized by Sandia, the City of Livermore, and Livermore Downtown Inc. on behalf of the California Fuel Cell Partnership (CaFCP), a dozen hydrogen fuel cell vehicles will be stationed between First St. and Railroad Ave. in the old Lucky supermarket parking lot. Visitors will be able to view, refuel, and even test-drive or ride in the vehicles. In addition,

members of CaFCP and engineers from several leading automakers, as well as Sandia researchers, will be available to



talk about hydrogen research projects and the commercialization of hydrogen fuel cell vehicles.

"Every major automaker is working on hydrogen-powered vehicles, and California has more fuel cell vehicles and hydrogen stations than any other region of the world," says Jay Keller (8367), whose relationship with the CaFCP led to Livermore's selection as a stop on this year's tour. "This event offers a terrific showcase for some of those vehicles and gives people a unique opportunity to see how they look and perform."

For more information on the May 28 "Hydrogen Road Show" stop in Livermore, contact Mike Janes at 294-2447.

Kids invade Sandia

On Thursday, April 23, Sandia/California looked a little different as more than 100 Sandia daughters and sons spent the day on-site enjoying Take Your Daughters and Sons to Work Day. As always, it was not your typical workday at Sandia—special activities included LEGO Bots, Surfboard Science Foam Chemistry, Bristlebots Races, the Bubbles of Fun Bubble Chamber, and the Paper Airplane Contest. One of the most popular demos this year was the bristlebots. To make your own, visit <http://www.evilmadscientist.com/article.php/bristlebot>.

Committee chairs Shannon Yeoman (8000) and Kristi Miller (8965) would like to thank the core committee of Annette Mahmoud (8947), Rachael Gupta (8132), Tracy Bartholomew (8246), Pamala Vela (8231), Susie Rexroad (8945), Laura Plosser (8960), and Nancy Morris (8205) for their hard work. Special appreciation goes to Carole Farnan (8238) for providing Noah's bagels and the lunch crew of Grace Solari (8944), Hailey Poole (8962), and Martha Campiotti (8360).



Ann Harren puts some flowers on ice in the liquid nitrogen demonstration.



Bristlebots was one of the most popular demos this year. (Above) Kids make bristlebots using the head of a toothbrush, a vibrating pager motor, double-stick foam tape, a wire, and a button-cell watch battery. (Right) Kids watch their bristlebot race.



Breaking the Sound Barrier Paper Airplane Contest.

Thanks also to the demo hosts, who took time from their busy workdays to host exciting and educational activities (although we suspect you had a little fun too!). Details on page 4.