Sandia has conducted the first supersonic tests on its 10,000-foot Rocket Sled Track for the B61 modernization program since major renovations at the facility.

The two tests in late July and early August were part of a series for the B61-12 Life Extension Program that included five sled track tests this summer. The first three were conducted on Holloman Air Force Base’s sled track at slower speeds than the tests performed on Sandia’s track, says test director Jason Petti (1534). Matt Brewer (2159/6512), test engineer for the B61-12 program, says the successful Sandia sled track tests mark another achievement in the revitalization of an important capability. The B61-12 Systems Org. 2150 and Validation and Qualification Org. 1530 performed the tests to characterize impact fuze performance and gather model validation data, with test conditions representing both the steepest impact angle and fastest velocities predicted for normal environments, he says.

The tests will lead to a similar series with two full B61-12 systems tests next fiscal year. The sled track plays an important role in overall weapon system design and qualification not only by verifying weapon performance, but also by validating system models generated from model validation data.

By Sue Major Holmes

Sandia honors 49 individuals, 73 teams in 2014 Employee Recognition Awards program. See pages 12-14

Forward thinking

Women-led team plans for national labs’ future

By Jennifer Awe

Note: This article first appeared on DOE’s Office of Economic Impact and Diversity blog (energy.gov/diversity), as part of DOE’s Women in STEM initiative.

Amid these are three nuclear weapons laboratories that share the critical responsibilities of ensuring the safety, security, and effectiveness of the US nuclear deterrent. Collaboration between these labs, and throughout the National Nuclear Security Administration (NNSA), is essential to achieving these goals.

(Continued on page 4)

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Triplets earn LMCO scholarships ...... 16

Family Day 2014 • Sept. 20
Special section beginning on page 6 features activities list, safety notes, gate map, and more . . . and read Ken Holley’s personal account of past Family Days on page 2
That's that

— Ken Holley

Not cooking on Wednesday supports local force readiness services

By Stephanie Holinka

Regular readers of Sandia Daily News may have noticed the "No-Cook Wednesdays" item at the bottom of every Monday's SDN. Most people who already pick up Wednesday's dinner at the Mountain View's drive-through to-go line may not know that Sandia's patronage has kept alive a program intended to support Air Force families.

The No-Cook Wednesday meal service is part of KAFB's Force Support Squadron, which runs morale, welfare, and recreation programs. Joanne Perkins, marketing specialist for the 377th Force Support Squadron, says the program was right on the verge of being discontinued until we began placing notices in Sandia Daily News.

"Sandia's participation in our programs benefits us because it allows us to keep them going," Joanne says.

Many base services such as the Family Readiness Center and the Airmen's dining facility are exclusively available for members of the military, but some services, such as recreational facilities and activities and child care are available for everyone. "Those programs are available to our base, other military bases, and anyone else with a badge that gives them base access," Joanne says.

To help clarify which activities and services are available to everyone with base access and which are exclusively for military families, Joanne attends many of the Labs' new hire orientation meetings, letting new Sandia members of the workforce know how to take advantage of the base services and activities available to them.

To see what's cooking at No-Cook Wednesday, check www.377thforce.com or call Joanne Perkins at 846-1644.

Sandia News Reader Service

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To receive the Lab News or to change the address (except retirees), contact Michelle Fleming, Media Relations and Communications Dept. 3631, 505-844-4902, email melfleming@sandia.gov, or Mail Stop 1016, Sandia National Laboratories, Albuquerque, NM 87185-1016.

Others:

To see what's cooking at No-Cook Wednesday, check www.sandia.gov/377thforce or call Joanne Perkins at 846-1644.

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To see what's cooking at No-Cook Wednesday, check www.sandia.gov/377thforce or call Joanne Perkins at 846-1644.
Electroplating facility advancing beyond classified, NW

By Mike Janes

The classified electroplating facility at Sandia/California has, for years, been a stalwart for NW customers for its ability to rapidly and responsively perform key surface-finishing work processes on classified weapons components and subcomponents. The facility has seen little capital investment in the past 20 years. But since 2012, due to direct investments by its traditional NW sponsors, hundreds of thousands of dollars have gone into Bldg. 943’s modernization, says Adam Rowen (B223), manager of the materials chemistry group. State of the art equipment, research lab quality flooring, and efficient and safe water recycling have made the facility a core capability of the nuclear weapons enterprise,” he says, updated to meet the growing needs of the Long-Range Stand-Off project (LRSO, now known as W80-4), the B61-12, and the growing needs of the Labs’ customers.

Historically, the electroplating facility has supported the nuclear weapons stockpile’s reconstitution and training work, particularly during the production process for sub-assembly parts and components. Researchers, for instance, develop chemical processes for preventing corrosion of metals that will be exposed to the environment over time, or they may employ electrochemical processes to provide improved functionality.

Meeting evolving needs

“There’s a lot going on there,” says Adam. “We think it’s valuable for others to look at the capabilities the plating facility brings to bear, and we want to do our part to market and put our expertise to the constantly evolving needs of the Labs’ customers.”

SUMMIT moves into exercise operations mode

By Mike Janes

In 2011, a modeling and simulation tool designed by Sandia to be used at emergency preparedness exercises was successfully piloted at the Federal Emergency Management Agency’s (FEMA) National Level Exercise. The tool, known as the Standardized Unified Modeling, Mapping and Integration Toolkit (SUMMIT), was developed under the direction of the Department of Homeland Security’s Science and Technology directorate.

No longer in its beta testing phase, SUMMIT is being transitioned to the FEMA operation environment. Once deployed, it will soon be part of the organization’s cloud network and resource base. It’s also being transitioned to the Sandia Exercise Simulation Center (CSC) and could be adopted by other state exercise programs as well.

“Perhaps just as important, the tool is being expanded into the planning and preparation phases and is undergoing a rebranding effort—a complete with a new name—to reflect its move away from the emergency scenario and into planning and response.”

SUMMIT was initially focused on exercises, but there is a natural progression into FEMA’s planning and response needs as well and, under the direction of Beth Rupprecht (B116), the SUMMIT principal investigator for Sandia.

SUMMIT’s architecture links together models and programs in an integrated, comprehensive, cascading data matrix. The software often a graphical view of areas affected in an emergency, including emergency base buildings—making it easier for exercise participants to comprehend what’s going on in the exercise and make better decisions.

The program was designed to help emergency preparedness professionals from the federal, regional, and local levels tap into existing models to ensure consistency, accuracy, and robustness when exercise scenarios are developed and played out.

Success leads to new applications

Exercises, says Nerayo, were an appropriate focus for SUMMIT initially, and the tool has successfully used at various large-scale exercises, such as the Great Utah Shakedown (an earthquake exercise) and FEMA’s National Level Exercise 2012 where SUMMIT was used to look at the physical impacts of a mock cyber security event. Only one SUMMIT scenario was typically needed at a time, and there are essentially no time constraints with an exercise other than those imposed by those developing the exercise details.

With SUMMIT now being deployed for exercise capabilities and transition to FEMA’s production environment (via its cloud storage network), the program sponsor knew the time was right to target a different customer set.

“With broader planning activities, higher fidelity models are necessary, as is a broader understanding of the uncertainties involved in the hazard scenarios,” says Zach Heath (8958), the SUMMIT software development lead. “Then, when you move into independent mode, you have extremely precise models, lots of them, and they need to run fast.”

SUMMIT, says Zach, is now poised to offer that kind of value.

“We can handle more threat scenarios and more models than we could a few years ago,” he says. SUMMIT now features a web-based software development kit that model owners can use to add models to the ecosystem, and data can be exported in various formats. In the software’s earlier version, only individual simulations could be saved at one time; now, entire archives can be exported, offering a fully populated package of data and model information for the exercise and planning communities.

“For example, he says, Adam’s team could use techniques such as nickel-plating to add metallization to plastic parts, giving them a new, shiny look that resembles actual machined pieces of stainless steel. “If the customer needs something silver, gold-plated, or something altogether different, we can do that for our own customers, we can probably do it for them,” says Adam.

Connecting the dots

Adam acknowledges an occasional disconnect between advocacy and funding.

“Customers funding fundamental science that can lead to revolutionary breakthroughs aren’t necessarily the same customers who are laser-focused on qualifying a sub-component for NW stockpile use,” he says. “So we need to help connect the dots for them to bring customers with specific success metrics into the same room with researchers who possess significant expertise in advancing materials performance.”

Re-branding needed to attract new users

Though SUMMIT’s end users are all under the umbrella of preparedness, planning, and response, Nerayo says the software’s new capabilities will require a new name and brand since the capability will be significantly advanced and because there are different aptitudes as exercise personnel.

“With my team, we’re looking for new ideas for a SUMMIT refresh,” he says. “We considered SUMMIT-B [for ‘response’] to differentiate from the old SUMMIT-B [for ‘exercise’], but a complete rebranding was needed.”

At press time, a number of new name possibilities had been submitted to the Sandia.org team for review.

“We’re proud of what we’ve accomplished with SUMMIT these past few years, but there’s still a lot more to do,” says Nerayo. “Fortunately, we’ve got momentum on our side, and there’s great need for the product we offer.”

For more information, visit www.sandia.org/sa/summit
Women-led team plans for national labs’ future

(Continued from page 1)

Administration’s nuclear security enterprise, is crucial to delivering on this multifaceted mission.

One “tri-lab” team cutting across lab boundaries is led by three female engineers — from Lawrence Livermore, Los Alamos, and Sandia national laboratories. Together, Wendy Baca (Los Alamos), Sheryl Hingorani (Sandia), and Cynthia Nitta (Lawrence Livermore) lead a newly formed team that is developing plans and options for future strategy.

Toward a cohesive vision

“Our collective perspective looks far beyond what we’re doing today,” says Sheryl. “We anticipate and plan for what we may need 10, 20 years down the road, even into the middle of the century.”

The team looks to a cohesive vision for the future of the US nuclear deterrent from a laboratories’ point of view. As Federally Funded Research and Development Centers, the labs are trusted government partners structured to meet special long-term research and development needs, to operate autonomously in the public interest, and to attract personnel with the highest level of expertise.

“At a national lab we’re able to tackle huge global problems — intricate, long-term, multidisciplinary problems that no one else can,” says Nitta. “I work around world-class minds, people who’ve had a significant impact on history ... and they’re humble and ready to help wherever it’s needed.”

“It’s working for Elvis,” Baca adds.

“We’re standing on the shoulders of giants here,” Sheryl agrees. “And that sense of duty is powerful.”

The team meets regularly to anticipate needs for 21st century nuclear deterrence and to help inform priorities so that the most essential activities are accomplished within the labs’ available budgets. They collaborate on approaches with the entire US nuclear weapons community and advocate for collective action in the best interests of the nation.

“This team has been very valuable,” says Sheryl. “It helps us better understand and explore interdependencies across the laboratories. None of us works in a vacuum.”

With nearly 30 years apiece in national security roles, each of these women has dedicated her career to serving the nation in an incredibly unique niche. As leaders in the predominantly male industries of engineering and nuclear weapons, the group welcomes the challenge.

Actions speak louder than gender

“There were so few women when I started,” Nitta recalls. “That has changed over time. I’ve tried to learn continuously, and to be known as someone who gets things done.”

The women explain that throughout their careers their actions have spoken louder than gender — that if you deliver quality projects, people will want to work with you based on your merits. Executive leadership from each lab initiated the directive for the tri-lab team, with mutual recognition for the power of a shared collective on critical issues. The women agree that edict has been critical to the team’s success.

“The team’s formation wasn’t about being women; it was about the skills and knowledge we have, the experience we brought to the role,” says Baca. “We knew the three of us could make it work.”

“We approached this with a perspective of collaboration, rather than competition,” says Nitta. They draw expertise in from a variety of areas across the laboratories, uniting disciplines that may otherwise rarely interact. In addition to broad expertise, diversity adds value to the team, but not necessarily gender diversity.

“It’s a diversity of ideas,” Nitta stresses. “It’s important to have someone in the room with a different view than yours; that’s some of the most valuable input I ever receive.”

What advice would Sheryl, Baca, and Nitta share with women pursuing STEM careers?

“Don’t get so myopic in finishing your degree that you miss opportunities along the way,” says Baca. “No matter what it may feel like at the time, keep learning. I had three different majors before I became an industrial engineer.”

“I had four,” says Nitta.

Sheryl changed her major six times. “Although it took me longer, I was exposed to a breadth of experiences, and was able to enjoy the journey.”

As they meet deadlines and milestones, the group agrees they are chiefly focused on building strong relationships and making sure the team is solid — on enjoying the journey, not just the destination.

Sled track test

(Continued from page 1)

erated by Solid Mechanics Dept. 1554.

Jason says it’s been a long process to get a sled track team put together and trained since a 2008 accident that shut down the facility after a motor ignited prematurely while employees were preparing for a test.

Most test team members have joined in last few years

Most current Org. 1550 staff members transferred in or were hired after 2009. Separate departments had to learn to work together to coordinate activities, develop trust, and feel comfortable conducting tests at ultra-high speeds, Jason says. Test planning emphasized safety, including procedures to ensure no one was within a defined hazard area during the tests. Several years of work also went into the firing system design for the rocket motors, with safety engineers’ scrutiny for safety and the rigor that we go through to prove that a test is safe, that things are going to work as intended,” he says.

“We’ve had to learn about facilities, learn how to conduct tests under the new Work Planning and Control Criteria for Safe Design and Operations with a level of scrutiny for safety and the rigor that we go through to prove that a test is safe, that things are going to work as intended,” he says.

Having to pull the team together in a few years and get to the point where we could get these tests conducted says a lot about their professionalism, their ability to come together and work together to develop the infrastructure and the capabilities we needed to get the tests off. There are a number of people who probably doubted we could get back to this point as quickly as we have. The team takes pride in the fact that we’ve been able to do that and do it safely.”

— Test Director Jason Petti

CYNTHIA NITTA, left, from Lawrence Livermore National Laboratory, Wendy Baca, center, Los Alamos National Laboratory, and Sheryl Hingorani, from Sandia, lead a team that is developing plans and options for future strategy. (Photo by Stephanie Blackwell)
Multidisciplinary effort centers on studies in deep saline aquifers

The effort concentrates on deep saline reservoirs, studying problems from the atomic to the full reservoir scale in a multidisciplinary approach that brings chemistry, microbiology, geomechanics, geophysics, and computer sciences. The team includes researchers from Sandia and The University of Texas at Austin.

The program so far has published 80 papers, including the featured article in the July 17 issue of the Journal of Physical Chemistry C: Chemical and Hydrodynamic Mechanisms for Long-Term Geologic Carbon Storage.

The original EFRC focused on multiscale, multiphysics processes to ensure safe storage of CO2 without harming the environment. Researchers will work to couple geophysics and geomechanics across length scales. For example, they will look at the integrity of the caprock, the low-permeability mudstone that helps keep buoyant CO2 underground, Susan says. They will work at the atomic scale to see if there is significant storage space in the clay layers. They will work at the core scale to measure the caprock’s mechanical properties to better understand how the rock could fracture under pressure. Then team members will integrate knowledge and measurements from the core scale to model the caprock itself — the reservoir scale — to understand how fracturing develops in the reservoir.

The center also studies how CO2 dissolves into resident brines over time. During injection, CO2 is trapped by the caprock, which is critically important but the least secure of four trapping mechanisms. After that comes residual trapping, in which CO2 bubbles are caught in pore space; solubility trapping, when CO2 dissolves in the brine or other fluids underground; and finally, plume trapping, where carbon becomes a solid, such as calcite, the most secure mechanism but the one that takes longest.

Researchers also are working in the field at northeastern New Mexico’s Bravo Dome, a natural reservoir of CO2 trapped underground. They’re trying to calculate long-term dissolution rates at the site to understand how important solubility is to CO2 trapping, Susan says.

CARBON SEQUESTRATION — The Center for Frontiers of Subsurface Energy Security is studying the basic science of carbon sequestration, the injection of carbon dioxide in the deep subsurface as a way of controlling greenhouse gas emissions to the atmosphere. This image depicts the multiscale, multidisciplinary complexity of carbon sequestration. (Graphic courtesy of Monia Aragon (6920))

Sandia IT enthusiasts troop to CIO Services Expo

By Kelli Jennings

The Steve Schiff Auditorium filled with spirited discussions about IT — Information Technology — as people attended the CIO Services Expo on Aug. 18. The Expo, the first IT event of its kind at Sandia in almost 20 years, attracted attendees from across Sandia’s mission areas. The event highlighted some of the innovative ways IT services, under the auspices of the CIO, enables Sandia’s mission work and achieves the delicate balance between securing the Lab’s systems and networks and maintaining workforce productivity.

Div. 9000 VP Mike Viable, Sandia’s chief information officer, was the featured speaker. He shared the gratification he feels when IT meets the needs of Sandia by creating value for the mission, harnessing innovation, and managing risk. He also highlighted a number of projects he’s passionate about, including the Earned Value Management System (EVMS), mobile computing and applications, and architecture modernization.

Attendees had the opportunity to hear 30-minute presentations and visit exhibit booths. Some of the scheduled topics included mobility services, apps, and devices; cloud computing at Sandia; Sandia search; Enterprise Project Management; and institutional computing. The topics struck a chord with an attendee, who commented, “The presentations were informative and the booths were particularly helpful. I had no idea of all the services available to staff at Sandia. Very useful and a great use of my time. Will save me lots of time on future projects and efforts. Do it again!”

Many thanks to personnel in Div. 9000 and the CIO’s office for sponsoring the event. If you were unable to attend, videostreams are available on the “Schedule” page of the CIO Services Expo site (cio.sandia.gov). You can also provide feedback on the event and presentations or talk to IT at Sandia by going to the “Feedback” page, which is linked from the CIO Services Expo site.
Executive Support Division

CSNAC Auditorium

CounterIntelligence Video “Game of Pawns” – The Glenn Duffie Shriver Story (video will show twice during the day and lasts for one hour) ........................................... 10 am & 1 pm

Spy Catcher Scavenger Hunt – Participants will use the pictures and clues on the handout to identify the New Mexico places the “Spy Gnome” has been seen. Prizes awarded ...................................................... 9:30 am-2:30 pm

Division 1000

Bldg. 701/1327

Optical Microscopy Demonstration – Can I see the hair in the nose on Lincoln’s Face! Bring your own penny .......................................................... 10 am-noon

Bldg. 701/1315

Scanning Electron Microscopy (SEM) Demo – Get to know some bugs up real close. ............................................................. 10-12 am

Bldg. 701/1305

Focused Ion Beam (FIB) Demo – Microscopic Graffiti – Let’s tag Lincoln’s Face! ............................................................. 10 am-12 pm

Bldg. 701/2214

Breath Analysis Demo – Stop by and see if there are any molecules in your breath. ............................................................. 10 am-3 pm

Bldg. 701/2307

LIBS Demonstrations – Curious about Crazy? See how the Mars rover tests rocks with a laser. ............................................................. 10 am-3 pm

Bldg. 897/2082

Computer Lab Demo – View examples of how modeling and simulations can help solve materials mystery! ............................................................. 10 am-12 pm

Bldg. 983

Z machine tours ............................................................. Noon-3 pm

Division 2000

Steve Schiff Lobby

Bldg. 861-12 Life Extension Program: Continuous looping of video footage/PowerPoint, Bldg. 861-12 brochure, actual size cardboard cut-outs of B61-12 and F-35, B61-12 cookies. ............................................................. 9 am-3 pm

Bldg. 827/155

Temperature Lab demos. ............................................................. 9-11 am

Bldg. 827/120

Length Mass Force (LMF) Lab demos – There will run every 20 minutes starting at 9:05 a.m. Last demo begins at 11:05. ...................................................... 9 am-3 pm

Division 3000

Hardin Field

Project Heart Start – Bring the whole family to learn compression only CPR and what to do in an emergency. 30 minute sessions with the following start times: 10:30, 11, 11:30, noon, 12:30, 1, and 1:30. ............................................................. 10:30 am-2 pm

Hardin Field

Virgin Pulse – What’s New and Cool Tools? Stop by and learn about new ways to track your daily activity and fitness as well as the much requested online food tracker. ............................................................. 10:30 am-2 pm

Hardin Field

Health Management Clinic – The IHMC can help you manage conditions like metabolic syndrome, pre-diabetes, diabetes, high cholesterol, high blood pressure, obesity, and depression. Come by for information on our clinic and Health Action Plans. We will have food science experiments for kids and recipes for the whole family on school days and getting kids involved in creating their own healthy foods. ............................................................. 10:30 am-2 pm

Hardin Field

United Health Care – Learn how your spouse/son’s gender domestic partner can earn 500 HealthMiles by participating in a designated Health Action Plan. Wellness and prevention programs in addition to the healthy pregnancy and disease management program are now offered by UHC. ............................................................. 10:30 am-2 pm

Hardin Field

Blue Cross Blue Shield – Learn how your spouse/son’s gender domestic partner can earn 500 HealthMiles by participating in a designated Health Action Plan. Wellness and prevention programs in addition to the healthy pregnancy and disease management program are now offered by UHC. ............................................................. 10:30 am-2 pm

Hardin Field

Expectant Parents – Learn about on site services for expectant parents ............................................................. 10:30 am-2 pm

Hardin Field

Savings and Income Plan – Fidelity – A Fidelity representative will be available to provide information on the savings and income plan ... 10:30 am-2 pm

Hardin Field

Inspiring the Next Generation of Scientists & Engineers – Enjoy a variety of family-friendly science and engineering activities. The UNM Formula SAE student design team and their Formula-style race car. ............................................................. 9 am-3 pm

Steve Schiff Lobby

Creative Services Green Screen – Come take a video with selected backgrounds. The file will be sent to you via email. ............................................................. 9 am-3 pm

Steve Schiff Lobby

Creative Services Photo Studio – Take a photo with your cell phone on our fun backgrounds! ............................................................. 9 am-3 pm

Steve Schiff Lobby

Recruiting – Information for you about why “Sandia is a great place to work” ............................................................. 9 pm-3 pm

Hardin Field

SERP Activities Display – information about

Division 4000

Hardin Field, Schiff Courtyard, Thunderbird Café & TA-IV Café

Parking Lot E of Bldg. 825

Handin Field

Non-point Source Pollution Model: Engineers are problem solvers! We will have computerized puzzles and questions for the kids to solve and answer. ............................................................. 10 am-2 pm

Division 5000

Handin Field

Stormwater Team. ............................................................. 9 am-3 pm

Pro Force firearms simulator (hands on) ............................................................. 9 am-3 pm

Pro Force firearms display. ............................................................. 9 am-3 pm

Division 6000

International Programs Bldg 10600

Guided Tours of International Biological Threat Reduction Training Laboratory: Learn about biosecurity and biocentrism. How do biological safety cabinets work? See examples of personal protective equipment, test proper handwashing technique, learn a little about how laboratories protect assets (biosecurity), and other safe laboratory work practices. ............................................................. 10-11 am, Noon-1 pm

Division 8000

Robotic Vehicle Range

Sandia’s Intelligent Systems, Robotics, and Cybersecurity group will host a variety of robotic demonstrations and displays at the Robotic Vehicle Range. ............................................................. 9 am-12 pm

Division 9000

Bldg. 880/D Aisle

Computing and Communications Museum: See the very early Mac to ASCII Bed (the world’s first supercomputer to exceed one trillion operations in a second), to phones that most have never seen before, tounch cards – their passport at the Div. 10K table at Hardin Field. High performance computing video presentation ............................................................. 10-12 pm

Corporate Archives & History Exhibit – Corporate Archives & History Program will have an unattended exhibit on Project Plowshare (a government-sponsored program to develop peaceful uses for nuclear weapons) and fact sheets about Sandia’s achievements. ............................................................. 9-3 pm

Technical Library handouts on science websites, library careers, and fun games and puzzles. ............................................................. 9 am-3 pm

Information Security Using Encryption – This presentation demonstrates how information is secured using encryption. ............................................................. 9 am-noon 1-3 pm

Steve Schiff Lobby

Bldg. 880, Rm X10

Milestones and Marches: From Fighter Aircraft to Wind Turbines. Sandia uses modeling, simulation, and visualization in many ways. The dynamics of fluid flow, which includes air flow, pose critical problems for engineers. In this presentation, a Sandia aerospace engineer will explore several applications of computational fluid mechanics, from energy beauty of fluid flow through visualization. ............................................................. 1:45-4 pm

Division 10000

Hardin Field

Division 10000 Passport – All Family Day visitors are encouraged to grab a “Passport” at the Div. 10K table at Hardin Field or at other various “passport stamping” locations around the laboratory. Participants can collect “passport stamps” throughout the day and redeem their passport at the Div. 10K table at Hardin Field for an exclusive 2014 Family Day souvenir. ............................................................. 9 am-3 pm

Other Hardin field activities

Sandia Labs Federal Credit Union ............................................................. 9 am-3 pm

Kirtland Air Force Base opportunities ............................................................. 9 am-3 pm
Family Day 2014 will sport more exhibits, activities

T he rapidly approaching Sept. 20 Family Day 2014 brings with it a new opportunity for about 30 percent of the Labs — a chance to bring family members and guests of all ages to a day of varied activities, learning opportunities, and hopefully vivid and positive memories. That’s because about 3,500 folks now a part of the Labs’ Albuquerque-based workforce weren’t on roll when the most recent Family Day occurred in 2009.

The 2014 event should have something to offer everyone. For example, complimentary sack lunches with several heart-healthy menu options will be available. There will be three wraps — ham, turkey, or veggie — along with baked chips, fresh fruit, and bottled water.

Lunch will be available at Hardin Field, the Steve Schiff Courtyard, the Thunderbird Café, and the TAV Café. The serving hours for all are 11 a.m.-1 p.m.

Many activities are planned than in 2009. For example, here’s what’s new for 2014 from just Div. 5000 and all in Bldg. 701.

• Getting to see how the Mars rover tests rocks with a laser at the LIBS (Laser Ionization Break-down Spectroscopy) demo. 10 a.m.-3 p.m.
• Using a scanning electron microscope to see some bugs up close. 10 a.m.-noon.
• A breath analysis demo that just might reveal that you’ve got molecules in your breath. 10 a.m.-3 p.m.
• Getting to see how the Mars rover tests rocks with a laser at the LIBS (Laser Ionization Break-down Spectroscopy) demo. 10 a.m.-3 p.m.

Every division will host activities available to all attendees. While the full list is available on the activities page of the Family Day 2014 web site (http://familyday.sandia.gov), here are some more activities that might catch your eye.

From 10 a.m.-2 p.m. workers from Div. 5000 will help young visitors solve computerized puzzles. The goal is to show how engineers are problem solvers. This can be found in Bldg. 894/Rm. 204 from 10 a.m.-2 p.m. Div. 5000 is having homeland security displays and demos in the Bldg. 810 lobby. And there will be a Center for Cyber Defenders demo in MO 303 (the corner of H and 18th St.). Both will be available for the entire Family Day 2014. There also will be a tour of the antenna and radar cross-section measurement facility (Bldg. 9972) from 1 p.m.-3 p.m.

Div. 6000 staff will offer guided tours of the International Biological Threat Reduction Lab where visitors will learn about some of Sandia’s biosafety and biosecurity efforts. The meeting point for this activity is the first floor of the International Programs Building 10640. As of press time those tours will be available from 10 a.m.-11 a.m. and noon-1 p.m. Div. 6000 also is offering self-paced tours of the Solar Tower from 11 a.m.-3 p.m., and the always-popular Robotics Vehicle Range demo with moving robots, static displays, a video, and a tour. That’s from 10 a.m.-noon.

Among several Div. 9000 offerings will be the Computing & Network Services Center’s non-technical talks and visualization movies in the JCEL Visualization Lab. That’s Bldg. 899, Rm. 1702. The Labs’ Recorded Information Management organization, a part of Div. 9000, will have a Labs history exhibit, which will include films about Sandia, its work, and important highlights of its history. That’s in Bldg. 894/111A from 9 a.m.-3 p.m.

Div. 3000 has a fresh set of Hardin Field attractions designed to entertain event comers of all ages. Project Heart Start, for example, will offer seven 30-minute sessions throughout much of the day during which all family members will get to learn compression-only CPR and other things to do in an emergency. Dr. Barry Ramo, the widely known Albuquerque heart doctor, is scheduled to be present. The first of those sessions will begin at 10:30 a.m. and the final at 1:30 p.m.

And throughout the day on Hardin Field the Sandia Employee Recreational Program (SERP) in concert with the local Defined Fitness gyms will provide Patissi and Zumba classes.

Family Day 2014 to include ‘zero waste lunch’

Lunches to be offered at 4 locations

There will be something really green at Family Day 2014 that is another first for this periodic event.

The Labs’ Materials Sustainability and Pollution Prevention team (4144) and food contractor Sodexo have come up with a plan to turn this Family Day into a zero waste lunch event.

One key to achieving this goal will be the presence of green rolling compost collection carts that are being dispatched to the Hardin Field and Steve Schiff Courtyard and popup event recycle bins, reports Sam McCord (4144).

“We’re planning to have a cadre of helpers — let’s call them ‘zero waste specialists’ for the day — who will be at the zero waste stations to teach and guide folks to use the proper containers.”

Sam also points out that the plan is to recycle or compost all the lunch wrappings and food containers.

“Although our group is prepared to make this zero waste goal, we appreciate all the support we can get from hosts and guests at Family Day. Zero waste is a journey,” Sam says.

The lunches also will be available at the Thunderbird and TAV cafés, and zero waste is the goal there, too. Those facilities already have proper recycling and composting bins and associated signs, so no special preparations are required. Sam just asks you to please heed the signs’ instructions.

Family Day 2014

LOTs OF FAMILY DAY 1991 visitors got a show — a security officer demonstrating how to repel a wall. (Photo by Randy Montoya)
Family Days past bring back vivid, varied memories

It doesn’t take long to find Sandians who have vivid memories of past Family Days. (Also see Ken Holley’s That's That essay on page 2.)

Dick Spalding (5791) is one. In fact, he’s been hanging around Sandia in one capacity or another for all except the first Family Day back in 1959. He arrived here shortly thereafter as a Purdue electrical engineering student with a summer job. Dick became a staff member three years later.

“My wife Shirley recalls daughter Michelle’s first Family Day,” Dick says. About 5 years old then, Michelle is now 32. “I think she was a bit too young to get much from the displays and activities. The lone exception,” he recalls, “was evidently the punch and cookies setup in the Sandia cafeteria. In those days, it was in the middle of TA-1.

“When I arrived home from work the first time following that Family Day, she asked, ‘Daddy, did you have punch and cookies today?’”

Dick says he has been at the Labs in some capacity or another during the tenures of 10 of Sandia’s 13 presidents. Bruce Better (3600) has one particularly clear memory of Family Day 1999 and how the Labs’ dedication to STEM—Science, Technology, Engineering, and Math, a theme of this year’s event as well—has had an influence on his family.

“I attended this event with my daughter Jennifer, who is now pursuing a biomedical engineering degree,” Bruce recalls. “She was 13 at the time and was fascinated by some of the technical demonstrations. That Family Day provided a great venue for her to get a sense of the breadth of science and engineering work, and at some level, helped to shape her academic decisions to pursue an advanced technical degree.

“The past Family Day memory for Mike Penderly (6632) definitely is family related but with a different slant:

“Back in 1992 I was thinking about making a change,” he begins. “I’d been at Sandia in Livermore for 21 years and was thinking about moving to the Albuquerque site for a few years that position came open in Albuquerque. That’s how the Penderly family moved to New Mexico. My job here is very good for me. I just don’t have a desire to retire,” Mike says.

Important Family Day do’s and don’ts

Committing a number of important do’s and don’ts to memory will help Family Day run as smoothly as possible. This applies not only to hosts but also to guests.

Here is a listing of keys to a successful day:

- For Family Day 2014 there is no guest age minimum or maximum. That means infants, toddlers, and grandparent are welcome. That’s a key distinction between this event and the annual Take Our Daughters and Sons to Work Day.
- Bring plenty of water, dress for the weather, and wear appropriate, closed-toe walking shoes and sunscreen.
- Supervise children at all times.
- Always maintain visual contact with your guests.
- You can escort a maximum of eight guests (including infants and young children) at one time.
- Family Day 2014 begins at 9 a.m. and concludes at 3 p.m. That means all hosts and their guests must head toward their vehicles for departure no later than 3 p.m.
- Family Day 2014 is a time for fun — getting a rare chance to see where Mom or Grandma works — and a time for learning, particularly about the vast contributions to the world that the Labs’ science, technology, engineering, and math efforts make.
- It’s also a time when everyone should be safe.
- Sidney Gutierrez, director of Environment, Safety, and Health (4100), shares his thoughts on safety for the Sept. 20 Family Day 2014, Sandia will open its doors to welcome the children, spouses, other relatives, and some friends of our workforce. For some families this will be its first opportunity to see where we work every day. For some of our children, it might be the visit that inspires a new love of math, science, or engineering that will lead them back to Sandia. For all of us, Family Day is a great way to share our passion for what we do.

“...And we want this day to conclude,” he says, “as it did in 2009, with no safety-related incidents at all. So, let’s not let our guards down.

“Family Day is a great event and we want everyone to have a wonderful time,” Family Day Safety Officer Whitney Faust (4122) says. “The Family Day Safety Committee is planning for a safe day, trying to anticipate possible problem areas and eliminate unsafe conditions. You can do your part by talking to your guests about safety before their visit, and by paying attention to your surroundings and reporting any unsafe behavior or condition that day.

Here is a selection of EE&H-related highlights taken from the Family Day 2014 website (https://familyday.sandia.gov):

- Hosts are responsible for guests.
- Always maintain visual contact with your guests.
- Supervise children at all times.
- For Family Day 2014, Sandia will open its doors to welcome the children, spouses, other relatives, and some friends of our workforce. For some families this will be its first opportunity to see where we work every day. For some of our children, it might be the visit that inspires a new love of math, science, or engineering that will lead them back to Sandia. For all of us, Family Day is a great way to share our passion for what we do.

Two shuttle buses will be available to carry Family Day goers around Area 1 and down to Area 4.

STOP 1 – Southwest corner of Hardin Field (Frost Ave. and 5th Street). STOP 2 – On H Avenue directly in front of Tech Area 1, Gate 1, and just south of Building 800.

STOP 3 – The west side of Schiff Auditorium, Building 825.

STOP 4 – In Tech Area 4, in the parking lot directly west of Building 960.

STOP 5 – In the parking lot south of Building 898, west of Gate 29.

STOP 6 – Turn on K Street, stop on the northside of street across from Bldg. 701.

Family Day shuttle bus route and schedule

ATTENDEES of Sandia’s first Family Day in 1959. Check out those wardrobe choices.

Catch a ride

FAMILY DAY 1981 attendees check out parachutes and what’s attached to them.

For Family Day 2014, it’s have fun, think safety

Two shuttle buses will be available to carry Family Day goers around Area 1 and down to Area 4.

Stop 1 – Southwest corner of Hardin Field (Frost Ave. and 5th Street). Stop 2 – On H Avenue directly in front of Tech Area 1, Gate 1, and just south of Building 800.

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Stop 4 – In Tech Area 4, in the parking lot directly west of Building 960.

Stop 5 – In the parking lot south of Building 898, west of Gate 29.

Stop 6 – Turn on K Street, stop on the northside of street across from Bldg. 701.

Busess – Return to Stop 1 by driving non-stop around the east side of

Bus 1 and Bus 2 Leave Bus Stops At:

Hardin Field: 9:15, 9:30, 10:15, 10:30, 11:15, 11:30, 12:15, 12:30, 1:15, 1:30, 2:15, 2:30 (final pick-up)


Stop Area 4: 9:45, 10:00, 10:45, 11:00, 11:45, 12:00, 12:45, 1:00, 1:45, 2:00, 2:45, 3:35 (e.g. umbrellas)

Gate 29: 9:55, 10:10, 10:55, 11:15, 11:50, 12:15, 12:50, 1:15, 1:50, 2:10, 2:50, 3:05 (final pick-up)

Bldg. 701: 10:05, 10:20, 11:05, 11:20, 12:05, 12:20, 1:05, 1:20, 2:05, 2:20, 3:05, 3:15 (final pick-up)

All times are approximate!
**Get to know your Family Day 2014 web site**

Your attendance at Family Day 2014 on Sept. 20 will be difficult to pull off smoothly without spending some quality time on the event’s website — http://familyday.sandia.gov.

To start, registration is required on that site. Registration for foreign national workforce members and family has closed but the deadline for all others is Sept. 12.

To sign yourself up along with family and guests click the Registration tab on the orange band at the top of the website. That will take you to a SharePoint file, with various pull-down screens. Type in your Sandia login ID where directed and go from there. Don’t forget to complete the help section.

Yes, it’s possible to edit your registration

One of the more frequently asked questions Family Day planners are getting is a simple, but important one — “Can I change my registration information once it is submitted?”

The answer is “yes,” and here’s how to do it.

1. Access your confirmation email that came from the SharePoint Admin.
2. Once that emailed confirmation is open, select “edit,” which takes you to the SharePoint site.
3. Next select “edit item” on the upper left-hand corner of the page and make your changes.
4. You receive another confirmation letter. Remember to make any changes before the registration cut-off date of Sept. 12.

**Family Day Car, Truck & Motorcycle show**

Hey, got a cool car, truck, or motorcycle? We want it for the Family Day Car, Truck, & Motorcycle show. The display will take place in the Building 825 parking lot just east of the Steve Schiff Auditorium. The show is open to all classic, restored, special interest, hot rods, customs, muscle cars, sport cars, turners, race cars, trucks, and motorcycles. Free goodie bag to the first 75 vehicle owners. Please RSVP by Sept. 15 as space is limited. Set-up time on Sept. 20 is from 6-8 a.m. This will be enforced as vehicles cannot move once there are spectators. The show will end at 3 p.m. Dust off all those cool rides and cruise them out to Family Day 2014.

Information: Matt Torres, mjtorre@sandia.gov, 328-3591 or 294-7273, or Talbot Smith, tmith@sandia.gov, 344-9535.

**Hints, reminders for a smooth day**

Here are a number of tips and reminders offered in hopes of making your Family Day 2014 experience to be as smooth running as possible.

- Unlike past Family Days, there will be no need to stop at a sign-in/registration table before your party begins its rounds. That’s because all that begins and ends by completing the registration page on the Family Day 2014 website (http://familyday.sandia.gov).
- You’ll need your DBIDS-qualifying Sandia badge when entering Kirtland Air Force Base, and if any of your guests are 18 years of age or over they’ll need a valid form of picture ID such as a driver’s license.
- Family Day begins at 9 a.m. and ends at 3 p.m. Hosts and their guests should plan to go to their vehicles and depart promptly at 3 p.m.
- However, not all activities, demos and the like will be open for business during the entire six-hour long event so pay attention to the activities listing on page 6 and on the Family Day web site.
- The event is a popular one. The most recent versions have brought crowds averaging 12,500 attendees. As it will be a busy day, consider arriving early (from 9-11 a.m.), be prepared to be outdoors (e.g., walking shoes, sun screen, etc.), and as we change our routines on this day please remember to keep security and safety foremost.
Hispanic Heritage Month

Sept 16 Kickoff Breakfast – 7:30am
Mountain View Club
Speaker: Dr. Cheno Torres, UNM VP for Student Affairs
Mariachi music and cultural dance.
Tickets are $10

Sept 17 Diversity Plática – 11:30am
Building 810 Auditorium

Sept 30 Diversity Day
Steve Schiff Auditorium
Art Contest Judging – 10am-2pm
Serve as a judge and review excellent student art!
Leadership Panel – 10:30am
Learn from our own leaders! Panelists include:
- Bonnie Apodaca (CFO and Vice President for Business Operations, SNL)
- Joseph Oder (Executive Director, AFNWC)
- Jim Chavez (Director, SNL)
- Sid Gutierrez (Director, SNL)
- Anthony Medina (Director, SNL)

Cultural Dance Performance – 11:30am
Tierra Adentro of New Mexico Student Flamenco Performers

Hispanic Foods Contest
Open tasting at 11:30am. Categories include:
- Salsa
- Red Chile
- Green Chile
- Dessert
- Otra Comida.
To enter contact amimagor@sandia.gov

Sodexo BBQ – 11am-1pm
Have lunch with us. Cash only.

Diversity Activity – 1-2pm
Explore diversity in a new way during this interactive session.

Oct 14 Finale Diversity Celebration - 11am-1pm
Hardin Field (east)
- Keynote Speaker: Brigadier General Andrew Salas, NM National Guard
- Cultural Music provided by The Abel Lucero Band
- Student art contest display!

Food & drink provided by Garcia’s Kitchen
$10 advanced tickets only
Includes: Red Cheese & Green Chile Enchilada, Taco, Refried Beans, Spanish Rice, Biscochitos, Tortillas and Passion Fruit Tea

Tickets for Oct 14th Finale Diversity Celebration
Purchase from the following before Oct 9th

Sandia Area 1
802: Valerine Salm-Meza, 845-0735
810: Rebecca Lopez, 845-8948
823: Emily Baca, 284-4143
838: Ernie Aknikawa, 845-3097
890: Barnadette Ramirez, 845-3164
892/890: Dorothy Saavedra, 284-0920
MO86: Erla Barreras, 284-4400

Sandia Area 2
MO308: Bernadette Garcia de Rodriguez, 284-3169

Sandia Area 4
960: Lavern Lopata, 284-6727
962: Damaris Hill, 284-2900

Sandia Area 5
6584: Dana Mendez, 284-4141
6585: Mary Lou Garcia, 845-3039

Sandia Science & Tech Park
IPOC: Janet Lovato, 844-0558
IPOC: Veronica Meestas, 284-4093

KAFB
377ABW: Rebecca Auinger, 846-2411
377ABW: Anna Encalada, anna.encalada@us.af.mil
APDTEC: 20130: Richard Quintanilla, 846-2812

CONTACT:
Valerine Salm-Meza valerine.salmmeza@sandia.gov

Sandia National Laboratories is a multimission laboratory managed and operated by Sandia Corporation, a wholly-owned subsidiary of Lockheed Martin Corporation, for the U.S. Department of Energy’s National Nuclear Security Administration under contract DE-AC04-94AL85000.
Sandra’s prestigious Employee Recognition Awards are presented to individual employees and teams nominated by their peers and a division selection committee with final approval by the division VP for their accomplishments during the past year. The ERA winners are honored for their exceptional service, leadership, technical accomplishments, or teamwork. Sandra this year recognizes 49 individuals and 73 teams for their outstanding contributions to mission success.

**Individual honorees**

Catalina Acosta 9525
Susan Altman 6915
Tod Amon 9526
Bonnie Antoun 8256
Reid Bennett 3959

**Team honorees**

Executive Support Division

The Executive Support Division Team supports major NNSA Milestones. The B61-12 @E Team led development, Fission Spectroscopy review, and release of a system-wide baseline of qualification plans and ESRS. The team met NNSA Milestones.

Team members: Jean Adams, Shana Adams, J. Douglas Clark, Dougrey J. Krith, Robert Lundgren, Meredith Maha, Cynthia Pyne, Monica Yost and Jim, Tony Bostick, Imaaz Mohammed, Allison Melichar, keeping a critical path to success on the 2012 Management Review.

Team members: Jennifer Devos, Jennifer Lidstrom, Yasmin V. Whittaker, Janet M. Moore, Naha Nazar Perez, Lisa Tornesi, Lumi Johnstone, Raymundo Zapata, Leslie Yenske, Mary L. Walsh, Jeffrey Bernard West, Richard E. White, Barbara Anne Yongeran.

Design Improvement Team

The work of the very unique Design Improvement Team (DIT) had a significant and positive impact on the FY12 Performance and Compensation review.

Executive and SMU Management decision-making.

Team members: Tony J. Baca, Emily Louise Barnhart, Douglas M. Cotter, Dovis Dickerman, David James Diller, Carol L. Ferguson, Louis Griego, Valerie Marie Jimenez, Lyle D. Lininger, Philip C. Montoya, Hong N. Nguyen, Yvonne Petrova, Cody Snell, Deborah Redmond, Carla Morisco.

Division 1000

Amphipod Evaluation Team

The Amphipod Evaluation Team evaluated non-conformances affecting thousands of NMS products, established the potential impact to the NMS stockpile, and positively resolved all discrepancies.


A Cohesive Neutron Generator Environmental Test Team from organizations throughout Sandia National Laboratories.


For successfully designing and executing the first magnetized inertial fusion experiments on Z, which demonstrated that magnetization and laser heating can reduce fusion requirements.


Improved Flywheel Materials

The Improved Flywheel Materials Team made substantial improvements to flywheel materials resulting in greater energy storage capacity thus achieving a major National Security Goal.


Iron Trap Realization Team

The Iron Trap Realization Team successfully planned, simulated, designed, fabricated, released, packaged, and deployed multiple new devices, advancing the state-of-the-art and expanding customer expectations.


B61-12 Quality Engineering Team Supports Major NNSA Milestones

The B61-12 @E Team led development, Fission Spectroscopy review, and release of a system-wide baseline of qualification plans and ESRS. The team met NNSA Milestones.

Team members: Jennifer Devos, Jennifer Lidstrom, Yasmin V. Whittaker, Janet M. Moore, Naha Nazar Perez, Lisa Tornesi, Lumi Johnstone, Raymundo Zapata, Leslie Yenske, Mary L. Walsh, Jeffrey Bernard West, Richard E. White, Barbara Anne Yongeran.

BMI Tooling Opportunity

The BMI Tooling Opportunity Team evaluated semiconductor tools from the BMI Family, determined which tools would benefit BMI, and successfully won a bidding round in the installation of the original TBM equipment. The BMI tooling equipment that BMI is currently using is a key part of the cutting-edge production capability in producing major National Security Goals.


**Recognized for their outstanding contributions to mission success.**

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<td>B61-12 Quality Engineering Team</td>
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**Not pictured among individual winners:** Jerry Smith (9129)
The Weapon Intern Program staff overcame significant challenges in implementing a fire sprinkler system.

The Energy Team implemented problem solving methodology and coordinated installation of a fire sprinkler system.

The S Process Redesign Team developed and implemented a graded approach to change control and product verification of Nuclear Safety Critical features and technologies.

The Corporate Liquid Nitrogen Review Team reviewed the existing liquid nitrogen systems across all SNL sites for compliance.

The Model-Based Design Tool Development Team is recognized for their contributions in support of model-based design and prototyping.

The Model-Based Design Tool Development Team is recognized for their contributions in support of Nuclear Weapons-related product realization and shielding.

The Model-Based Design Tool Development Team is recognized for their contributions in support of the B61-12 Life Extension Program at the Tonopah Test Range.


Security, Health Services, and Emergency Management team:

approach to Emergency Response

Exemplary performance and leadership efforts not only saved lives, but also contributed to the success of the program.

The W87-1 AF&F (Arming, Fuzing, and Firing) Team developed the first radiation-tolerant multi-mode telemetry system.

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The iHVB team implemented problem solving methodology and coordinated installation of a fire sprinkler system.

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Division 6000

AWS Task Manager Test Integration
Successfully completed the AWS-774 transportation package proof-of-concept, impact and check tests, and demonstrated the ability to meet stringent certification requirements. Energy & Climate Nuclear Energy & Fast Cycle Program


Emergency Response Software Development Team
The Emergency Response Software Development Team develops and provides innovative software solutions for the highest quality for the nation’s Emergency Response organizations through the BENS/CoCom/Disaster Response Program.

Team members: John Tfook, Lindsey K. Gallagher, Gregory J. Madrid, Richard D. Schram, Dustin White, Gary Whitmore.

Limited Area Production and Control (LAPSC) Team
The LAPSC Team successfully supported DoD’s installation of the Command, Control, Communication, Computers, and Intelligence (C4I)/Electronic Security System (ESS) Intrusion Detection System (IDS) as a stand-alone system.


Wide Bandwidth Thermal Management Facility (WBFM) and Safety Facility Usage
For excellence in operational and safety engagement in support of the nation’s mission-critical operations for the WBFM and Safety Facility, capitalizing on the U.S. Treasury.


Harpoon Data Analysis
The Harpoon analysis team: Tasked a subproblem that the community has been working on for years, enabling muchneeded capabilities for the US.

Team members: David James Carter, Ronald Episodio, Lauren Felix, Robert Richard Miller.

Harvester Team
For the exceptional, cost-effective design, engineering, and qualification of the United States’ next-generation worldwide air sampling capability supporting national security missions.

Team members: Craig Croxall, Scott Davis, Michael E. Phandel, David P. Reddington, Brian M. Thompson, Scott R. Valler, John A. White, Daniel J. Wille.

Jewett Development Team
This team was successful in addressing and delivering a capability of extremely high risk and achieving significant cost savings.


Multi-Polarization and Change Detection LIBS
For the development of novel laser detection polarimetric-spectroscopic change detection products, proof-of-concept through atmospheric full-polarimetry field-testing and data collection.

Team members: Wallace J. Boss, Billy C.Bruce, Dale F. Duckett, Justin Wayne Enders, Dale Luis, Stephen James, Robert May, Matthew M. Thompson, Jonathan Tran, Roger Dovichi, Kevin John, Christopher Knobloch, Scott M. DeBree, Michael Gartner, Gregg Jones, Mark W. Johnson, Walt Read, Terry H. Peterson, Justin A. Reuter, Dwight Jones, Tony Siew, Matthew White, Charles T. Yoder, Ken White, Dariel Wood, Philip White.

Safe POs Q3R BSQ Core Team
Team provided JWIPC Sponsor with a new technical solution to a challenging performance metric, including novel utilization of a complex technology with seamless results.

Team members: Wayne J. Boss, Billy C. Bruce, Dale Duckett, Justin Wayman, David Luis, Stephen James, Robert May, Matthew M. Thompson, Jonathan Tran, Roger Dovichi, Kevin John, Christopher Knobloch, Scott M. DeBree, Michael Gartner, Gregg Jones, Mark W. Johnson, Walt Read, Terry H. Peterson, Justin A. Reuter, Dwight Jones, Tony Siew, Matthew White, Charles T. Yoder, Ken White, Dariel Wood, Philip White.

Space-Based Infrared System Gossamer Phase Change Processing Core Team
GIFS successfully enhanced existing real-time processing capabilities, in mitigating fusion error margin capability and demonstrating capabilities as applied to SBSI’s GEO program.


USN’s Future Aircraft Structure Team
Achieved an unprecedented rate of excellence in performing the USN’s Future Airframe Structure for the Air Force Space and Missile Systems Center.

APPLIANCES: side-by-side refrigerator, $325; sofa, $250; trunk, $350; CD/VCR player, $25; speakers, $100.

CLOTHING & HOUSEHOLD: 25 7911

BABY GRAND PIANO, $5,000; Little Missy, 350-7911, ask for Art.

REAL ESTATE
3-BDR. HOME, 2-1/2 baths, single-story, private acre lot, 2-car garage, 1,795-sq. ft., 2,505 Vernon Drive SE, MS#822955, $262,500. Edwards, 573-932-8250.

WANTED
ROOMMATE(S), Volterra, 5 min. to KAFB, $550/mo., utilities & WiFi included, no pets. Guadalupe, 505-383-8189.

8-BEDROOM, 2,400 sqft., 2-car garage, quiet neighborhood, NE, MLS#822955, $184,900. Chavez, 505-750-8276.

SALES: Glass tables, del Sol, 505-271-9400, ask for Mike.

MISCELLANEOUS
BABY GRAND PIANO, $5,000; Little Missy, 350-7911, ask for Art.

REAL ESTATE
3-BDR. HOME, 2-1/2 baths, 1,675-sq. ft., 2-car garage w/shelving, quiet Vista del Norte Street, MS#815674, $184,900. Chavez, 505-750-8276.

2 ACRE LOTS, utilities on property, Edgewood, NM, near schools & businesses. Sanchez, 980-532-12. OR 4 ACRE HOME/BUILDING LOTS, Sandia Park, electric, phone, well, fenced, level, not rocky, $105,000/$160,000, low down, easy terms. Mihalik, 281-1580.

4-BDR. HOME, 3-1/2 baths, 2,195-sq. ft., quiet NW cul-de-sac, near Cotino


WANTED
ROOMMATE(S), Volterra, 5 min. to KAFB, $550/mo., utilities & WiFi included, no pets. Guadalupe, 505-383-8189.

8-BEDROOM, 2,400 sqft., 2-car garage, quiet neighborhood, NE, MLS#822955, $184,900. Chavez, 505-750-8276.

SALES: Glass tables, del Sol, 505-271-9400, ask for Mike.
S

phanie, Alicia, and Megan Williams share more than a birthday. They each speak a second lan-
guage, excel in a sport, give back to the commu-
ity, and carried higher than a 4.0 grade-point average at Albuquerque Academy.

Being triplets fueled a lot of that success. “We have a saying in genetics and philosophy. Alicia is going to
other forward,” Stephanie says. “It’s always been that
other parents are:

THE WILLIAMS TRIPLETS, from left, Alicia, Megan — on Skype from Los Angeles — and Stephanie, are flanked by their parents

“The triplets were born in 1996. ‘In an early ultra-
ltrasound they saw one baby, then another, then said there
was a third. I said, ‘Wait, let me see that screen!’” Jayne
says. “But our interests are not the same.” Stephanie
says. “We were very excited about it. I worked up to the
highest level.”

The girls all gravitated to science and math but devel-
oped interests about each candidate.

The scholarship awards $3,000 a year for up to four
years of undergraduate study. A National Merit Schol-
arship Corp. (NMSC) committee chooses the recipi-
ents by evaluating several academic and extracurricu-
lar factors about each candidate.

The National Merit Scholarship Program is an annual competition con-
ducted by the NMSC, an independent, not-for-profit organization. For more information on the scholar-
ship, visit the Community Involvement website at:

http://community.sandia.gov/employee-

Lockheed Martin scholarship winners

National Merit Lockheed Martin Academic Scholarship

- Lucy Bartel — Timothy Bartel (6233)
- Nathan Chael — Eric Chael (5752) and Martanne Walck (6900)
- Shelley Dai — Steve Dai (1833)
- Jessica Depoy — Rodney Depoy (2955) and Jennifer Depoy (5628)
- James Erikson — William Erikson (1516)
- David Hatley — John Hatley (6622)
- Nickolas Spahn — Olga Spahn (1766)
- David Hatley — John Hatley (6622)
- Mike Hatter — Mike Hatter (7456)
- Stephanie Williams — John S. Williams (5954)
- Rachel Price — Laura Price (6224)
- Eric Deng — Yalin Hu (8133)

Nineteen high school seniors who are the children
of all US high school graduates.

The children of current full-time and part-time
employees of Lockheed Martin and its subsidiaries can
compete for the scholarships. To be considered, high
school students must take the Preliminary
SAT/National Merit Scholarship Qualifying Test (PSAT/ NMSQ) in the fall of their junior year and
submit an application and essay to the Lockheed
Martin Foundation. Of the 1.4 million students who
take the PSAT each year, about 16,000 are named
semifinalists.

The scholarship awards $3,000 a year for up to four
years of undergraduate study. A National Merit Schol-
arship Corp. (NMSC) committee chooses the recipi-
tenents by evaluating several academic and extracurricu-
lar factors about each candidate.

The National Merit Scholarship Program is an annual competition con-
ducted by the NMSC, an independent, not-for-profit organization. For more information on the scholar-
ship, visit the Community Involvement website at:

http://community.sandia.gov/employee-

Lockheed Martin scholarship winners

National Merit Lockheed Martin Academic Scholarship

- Lucy Bartel — Timothy Bartel (6233)
- Nathan Chael — Eric Chael (5752) and Martanne Walck (6900)
- Shelley Dai — Steve Dai (1833)
- Jessica Depoy — Rodney Depoy (2955) and Jennifer Depoy (5628)
- James Erikson — William Erikson (1516)
- David Hatley — John Hatley (6622)
- Nickolas Spahn — Olga Spahn (1766)
- Sylvie Tran — Hy Tran (2543)
- Alicia Williams — John S. Williams (5954)
- Stephanie Williams — John S. Williams (5954)
- Rachel Price — Laura Price (6224)
- Eric Deng — Yalin Hu (8133)

Lockheed Martin Academic Scholarship

- Donna Bacon — Larry Bacon (5443)
- Julia Liu — Ping Liu (1819)
- Emma Vaitkus — Daniel Vaitkus (9324)
- Allison Watkins — Sheryl Hingorani (260) and Randy Watkins (1532)
- Megan Williams — John S. Williams (5954)
- Monica Walker — Trace Walker (8049)
- Steven Chen — Ken S. Chen (8237)

Sports, art, and music

The girls all gravitated to science and math but devel-
oped different activities. Alicia and Stephanie played
club volleyball, and Megan captained varsity golf, mak-
ing all-state the past two years. Megan and Alicia studied
Chinese and went on a class trip to China, and Alicia is
teaching herself Korean. Stephanie studied Spanish and
visited Spain with Alicia. Alicia is an artist, Stephanie

Three for the road

Triplets push each other to academic success and Lockheed Martin scholarships

By Nancy Salem

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