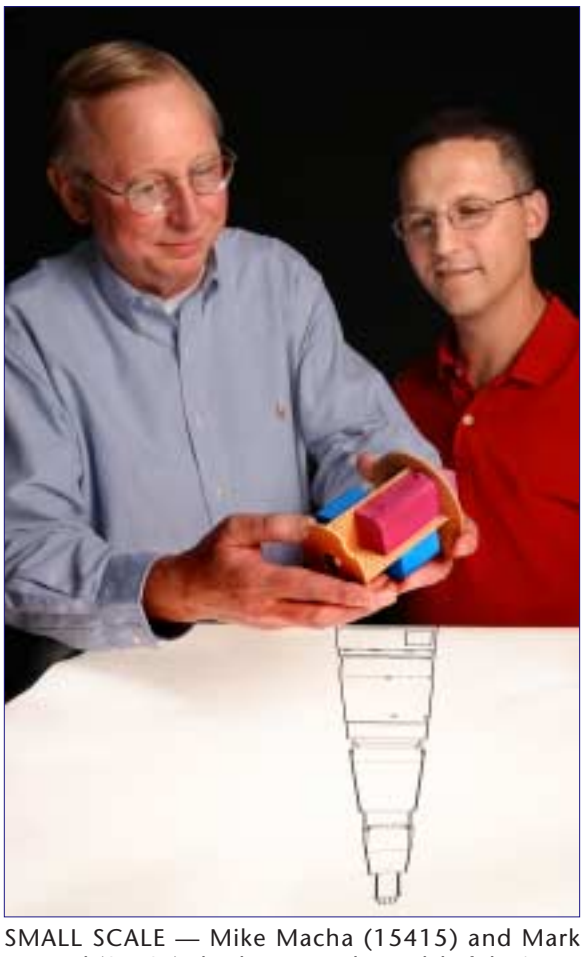
Sandia uses hypersonic vehicle design, development, flight experience to assist with NASA's HyTEx program

Latest project with space agency a good match with Sandia's strategic goals



SMALL SCALE — Mike Macha (15415) and Mark Howard (15414) check out a scale model of the internal experiment assembly that will be flown on the HyTEx reentry vehicle. The model was created using a 3-D printer produced by Dept. 14184.

(Photo by Randy Montoya)

By Michael Padilla

This is a second part of a two-part report. The first was in the Oct. 3 Lab News.

Sandia researchers are assisting with NASA's HyTEx (Hypersonic Technology Experiment) program to create new mature technologies that will benefit next-generation launch vehicles, a follow-on to the current space shuttle.

A part of NASA's Next Generation Launch Technology program, HyTEx will provide a dedicated, timely, and cost-effective means of advancing the readiness level of vehicle system technologies through flight demonstrations in a relevant reentry environment. Sandia will develop the HyTEx re-entry system.

The involvement in HyTEx is synergistic with Sandia's long-range goal of developing advanced technologies and integrated capabilities for hypersonic flight systems applicable to a wide range of military and access-to-space requirements.

A perfect fit

David Keese (15404), deputy director for Strike Systems, says the NASA HyTEx technology flight demonstration is a perfect fit with Sandia's goal of helping create the next generation of hypersonic vehicles. The HyTEx flight is scheduled for May 2005.

"Our most important role in the HyTEx program is to use our integrated hypersonic vehicle design, development, and flight experience to produce a capability to obtain hypersonic flight evaluation of these new technologies," says David.

Hypersonic technologies include a range of technical disciplines that involve high-speed aerodynamic modeling, aero-thermal analyses, high-temperature materials, and navigation/guidance/control (NG&C).

David says there are four basic design challenges in the HyTEx program. The first is to provide a robust — low-risk, effective — vehicle designed to function as a flying test-bed. Second is to incorporate technology experiments into this test-bed design in a fail-safe approach. Third is to collect and transmit in-flight data from these experiments. And fourth is to adapt the flight vehicle design to a variety of potential booster designs, including a recovery system that will allow post-flight examination of the integrated experiments.

Sandia's next major steps in the project involve developing detailed plans and organizing Sandia's resources to produce an actual flight system for the HyTEx proof-of-concept mission. At the same time, researchers want to make progress in advancing key enabling technologies that will give even greater capabilities to programs like HyTEx in the future.

Making an impact

Mike Macha (15415), HyTEx project manager, says he sees the project as an opportunity for Sandia to have a significant impact on a broad spectrum of emerging US hypersonic technology initiatives.

"There is a resurgent and even urgent interest in developing a new generation of vehicles for rapid, long-range military capability and for reliable, affordable access to space," says Mike.

Fortunately, Sandia already has a foothold in a wide range of potential hypersonic technology areas — from high-temperature materials for thermal protection systems, to robust non-GPS depen-

(Continued on page 4)

Sandia LabNews

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Sandia National Laboratories

Sandia Corporation, NNSA sign 'model' contract

New M&O contract includes incentives for outstanding performance

By Chris Burroughs

A new "model" contract that allows Lockheed Martin to continue as the corporate parent of Sandia Corporation to manage Sandia National Laboratories and, for the first time, includes incentives to reward "outstanding" performance was signed Sept. 30 by Labs President C. Paul Robinson and Jim Robbins, the contracting officer for the National Nuclear Security Administration (NNSA). The signing event followed a morning-long Labs tour (*Lab News*, Oct. 3).

"I could not be more delighted in what will be signed here today," said Paul at the contract signing ceremony. "It's a triumph to get this signed on schedule."

Besides the management and operating (M&O) contract, several other agreements were also signed by representatives of Sandia, NNSA, Lockheed Martin, and the NNSA Sandia Site Office. They include:

• A Performance Evaluation Plan, signed by Karen Boardman, manager of the Sandia Site Office, and Sandia Executive VP Joan Woodard. This agreement sets outs performance standards, expectations, and measures for Sandia Corporation in managing the Laboratories during FY '04.

• A Lockheed Martin Performance Guarantee, signed by Michael Camardo, executive vice president of Lockheed Martin Technology Services and chairman of the board of Sandia Corporation. This guarantee confirms Lockheed Martin's commitment to stand behind the performance of Sandia Corporation, a wholly owned subsidiary of Lockheed Martin.

• Administrator Memorandum of Decision, signed by NNSA Administrator Linton Brooks. This memorandum extends Public Law 85-804 indemnification to Sandia Corp., thereby protecting Sandia Corp. against unusually hazardous or nuclear risk activities.

The official management and operating contract took six months of negotiations to complete, says Gary Zura (10001), head of the Sandia negotiation team. Preparations for negotiations have been underway since DOE Secretary Spencer Abraham announced the contract extension during a visit to

(Continued on page 4)

Sandia, Lockheed Martin Missile & Fire Control team on first-of-a-kind project in Taiwan

By Will Keener

It's a necessarily complex approach: Sandia and Lockheed Martin's Missile and Fire Control (LMMFC) in Orlando have forged an agreement with the government of the Republic of China (Taiwan) that makes a win-win-win situation for all three entities.

As a result of complex negotiations over months and years:

• Sandia will provide assistance to Taiwan's geologic repository science efforts. Hong-Nian Jow, Manager of Program Development and Environmental Decisions Dept. 6849, is leading the Sandia effort, which officially got under way with a signing ceremony in Taiwan in August.

• Taiwan will make a leap forward in the development of technologies needed to safely dispose of spent nuclear fuels and continue to maintain a viable nuclear power industry, and

• LMMFC will fund Sandia's work and simultaneously earn credit toward a $5.6 million obligation the company presently has with the Taiwanese government.

Needed: Spent fuel repository

"Taiwan is a small country with no repository for nuclear waste, but with a need for one," says Hong-Nian. The nation has three generating nuclear power plants, each with two units.

(Continued on page 5)

What's what

There are some really great "imitation" contests around. The "Imitation Hemingway Competition" started by Harry's Bar and American Grill in Century City, Calif., is now offered every year by United Airlines, which also cosponsors the "Faux Faulkner Contest" with Ole Miss (that's the University of Mississippi, if you're not from SEC country).

And there's the "It Was a Dark and Stormy Contest," named for the turgid opening line of Edward George Bulwer-Lytton's 1830 novel *Paul Clifford*. You can read the whole sentence at <http://itotd.com/index.alt?ArticleID=53>.

Hard to beat that, of course, but after reading a recent tirade from Pyongyang, it occurred to me that we might have a little fun trying to match — or even out-do — the shrill, vituperative venom that often passes for North Korean diplomatic language.

Examples: President Bush's inclusion of North Korea in an "Axis of Evil" — along with Iraq and Iran — in his 2002 State of the Union address moved Pyongyang to mock him as "crazy," decry his administration's "moral leprosy," and retort that the United States is an "empire of the devil."

In January this year, an official broadcast from Pyongyang said the very planet was enraged by the United States, and even "piles of manure in the fields are fuming out smoke of hatred."

And in August, when Under Secretary of State John Bolton denounced "tyrannical rogue state leaders like Kim Jong Il" and described life under Kim as "a hellish nightmare," North Korea screamed back that Bolton was "human scum and bloodsucker," that his remarks indicated "political vulgarity and psychopathological condition," and that Bush administration officials were "political imbeciles."

This is pretty fancy stuff, of course, but if your veins will stand it, work yourself into a slobbering rage about something, and send me the resulting rhetorical spew. We'll see how outrageously inventive Sandians can really be.

* * *

Although there's probably not much to amuse Halle Berry about her current separation from R&B singer husband Eric Benet, a Knight Ridder story about her alleged current romantic tangle included a memorable line. She's now linked, it reported, with "hopelessly inarticulate rock dude Fred Durst."

Some description, huh? Could be, of course, that Durst doesn't mind. If it's accurate, and if his reading skills rise to the same level, he probably doesn't know anything about it. And since he's a rocker, he probably couldn't hear if somebody tried to tell him.

* * *

I think I've figured out why flies have those great big eyes. They watch you when you have both hands full of food — expecially if one hand's holding a brimming drink and the other's holding a partially open *carne adovada* burrito dripping with red chile — they bore in like Luke Skywalker.

If reason takes over immediately and you don't move so you won't slop or sling the contents, they get a quick bite of something. If reflex overrules reason momentarily and you slop/sling your beverage-of-choice and chile on yourself or someone nearby, they get a big laugh and fly on to the next sucker.

Who would have thought the State Fair and Indian Market would be educational experiences.

— Howard Kercheval (844-7842, MS 0165, hckerch@sandia.gov)

Sandia LabNews

Sandia National Laboratories

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LOCKHEED MARTIN

Long-time Sandian Paul Hommert named X Division head at LANL

Paul Hommert, who recently returned to Sandia from a stint helping run Britain's Atomic Weapons Establishment (AWE), has been named the new Applied Physics (X) Division leader at Los Alamos National Laboratory.

LANL made the announcement Oct. 6.

"Paul received the unanimous support of the search committee," said LANL's Ray Juzaitis, associate director for weapons physics.

"He brings a wealth of knowledge and experience in nuclear weapons, energy, and engineering, and has earned the reputation of being an outstanding leader."

He begins at LANL in early November.

Paul most recently has been Director of Sandia's DoD Systems Analysis and Concepts Center 15100, which supports the Military Technologies and Applications Strategic Management Unit.

Before that, Paul served as director of research and applied science for AWE, leading an 800-person research organization in Aldermaston, U.K. Lockheed Martin is a partner in managing AWE for the British government.

Paul joined Sandia in 1976, holding progressively responsible positions. He has been Director of Engineering Sciences, Manager of Energy and Industrial Programs, and Manager of the GeoEnergy Technology Department.

Ruth Weiner receives appointment to NRC advisory committee

By Chris Burroughs

Ruth Weiner's (6141) recent appointment to the US Nuclear Regulatory Commission's (NRC) Advisory Committee on Nuclear Waste (ACNW) gives her one more opportunity to share her expertise on nuclear waste management and make sure waste is handled safely nationwide.

RUTH WEINER

At Sandia, the one-time professor of environmental studies at Western Washington University is the project lead for RADTRAN, a Labs-developed risk assessment program for the transportation of radioactive materials. The computer program, used by about 100 people in different locations, calculates the potential doses of radiation to the public and transportation workers, both in normal transportation operations or as a result of an accident.

In her new volunteer role Ruth, together with the other 14 members, will be advising the NRC on all aspects of nuclear waste management. The advisory committee studies activities related to the transportation, storage, and disposal of high-level and low-level radioactive waste, including the interim storage of spent nuclear fuel, materials safety, decommissioning, application of risk-formed, performance-based regulations, and evaluation of licensing documents, rules, regulatory guidance, and other issues as requested by the commission.

"We are essentially advising the NRC on regulations — what they should say, how they should be packaged, and what are the consequences," Ruth says. "We'll be playing a big role in reviewing the license application for Yucca Mountain."

Ruth says she got the position by responding to an ad in *Nuclear News*, the publication of the American Nuclear Society. She sent in her resume and promptly forgot about it. In May she got a call to come for an interview in Washington where she was interviewed by a panel of NRC commissioners and staff. She learned in June she was appointed to fill the position effective Sept. 15.

And this for a person who at one time was not a strong supporter of "nukes," she says.

Ruth obtained her doctorate in chemistry from the Johns Hopkins University and bachelor's and master's degrees in physics from the University of Illinois. Much of the time she was a professor she had mixed feelings about nuclear energy and weapons. She was always researching and questioning in an attempt to determine the benefits and environmental effects of "nukes."

She joined the Sierra Club, discovering that not many members had a hard science background and many didn't understand some of the activities they were protesting.

In 1984, while taking a sabbatical from her professor position to serve as a Congressional Science Fellow, she had a change of heart.

"I realized that nuclear weapons and nuclear power are a perfectly acceptable part of energy resources," she says.

This revelation came from hearing both sides of the nuclear power/weapons arguments as she studied different science issues in her role of Congressional Science Fellow. (Each year some 35 science-oriented organizations sponsor Congressional Science Fellows to advise congressional delegates about science legislation.)

Her change in views caused the Sierra Club to remove her from leadership positions, and she returned to her professor position much different from when she had left. Somehow, it all fit. A Jewish refugee from Austria, who fled with her parents at the age of four to the US in 1938, she saw firsthand how important it was to have a nuclear deterrence.

"No one likes war, but there are times when there are no other solutions," she says. "I'm so glad the Cold War ended without firing a shot."

Process helps clinic earn full accreditation

By Nancy Garcia

Sandia's California site medical clinic certainly has something to celebrate. Through a comprehensive quality review in partnership with the New Mexico medical center, the group received full accreditation from the Accreditation Association for Ambulatory Health Care on its first try.

"We are very proud of our three-year accreditation, which is the longest period possible," says Linda Houston, Level II Manager of 8520 Human Resources and Business Operations.

The clinic had always scored well on patient-satisfaction surveys, but the external agency's seal of approval underscored that sense of confidence in its quality of patient care and carried some added benefits. "It allowed the staff to feel proud of their efforts and resulted in optimized processes for efficiency and quality," says Marta Leon (8529), previous manager of the Benefits and Health Services Department. "It was a huge undertaking," adds Marta, who initiated the accreditation effort in March, 2002.

The aggressive accreditation project was completed in May 2003 and notification received in July. "The successful accreditation was a motivator for the staff, especially since the Department of Energy looked to this fast-track confirmation of quality as a model for other site business functions," Marta says. The passing review given by the external agency was accepted by DOE as meeting its standards under its new shift toward laboratory self-governance.

"I'm very proud that we have attained AAAHC accreditation," says Center 8500 Director Pat Smith. "This accomplishment is a clear demonstration of the professional health care services we provide and the standards we meet. Our California team worked hard to achieve this milestone; we wouldn't have been successful without collaboration and teaming with our colleagues in New Mexico."

The effort began in 2002 when the New Mexico medical center was applying for re-accreditation after achieving maximum accreditation three years before. The California site clinic took the challenge to coordinate with that effort, benefiting from its experience, mentoring, and teamwork to integrate and standardize procedures and guidelines. Now Benefits and Health Services Dept. 8527 Manager Robert Petro will construct a quality assurance program to ensure all the hard work up to now continues to benefit client services.

"We made the documentation consistent and quality-driven," says Kym Lee-Young, who was hired as accreditation project manager (now co-manager of Logistics and Procurement Dept. 8523). Within the first six weeks of being hired she partnered with the clinic staff and put together a submission package about 5 inches thick for an initial review. Based on input from that review by occupational health specialists from the reviewing association, the clinic was then fully accredited at the end of an aggressive schedule.

Following the initial six-month consultative review in December 2002, a quality representative, Adrienne Phillips, was brought on board in April to maintain and standardize documentation. Not long afterward, Robert became manager of the department.

"I was coming in on the end of something great and beginning of something new," he says.

Among the glowing remarks from the accrediting agency were plaudits for such features as clinical record handling, professional education and training, safety and fire audits, a new wellness facility, urgent care with access to laboratory and dispensary services, physical therapy and employee assistance programs, and access to second opinions and consultations.

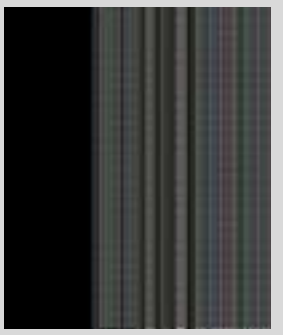
"I'm not surprised that we're giving good-quality care here," says Dr. Stephanie Ball (8527), the clinic physician, "but that we were able to so successfully document it. It's really an accomplishment." She believes the independent, third-party reviewer, an occupational medicine specialist, was especially impressed with the support from multiple levels of management that the health services function enjoys.

One way in which that was evident was in the launching of the site's new wellness facility, the Life Design Center, spearheaded in January by health educator Morgan Edwinson (8527). "It was a great thing to showcase," Stephanie says.

The launching of new benefit and health programs, including the wellness facility, helped reinforce a positive view of patient care and customer service. The California Site recently received another commendation — this time from Child Care Links for being the Family Friendly Employer of the year in Livermore. The honor is in large part due to work/life balance attributes that include some of the amenities offered by Benefits and Health Services, as well as Staffing and University Partnerships Dept. 8524 and Strategic Public Relations and Communications Dept. 8528.

Norm Augustine is Oct. 27 Truman Distinguished Lecturer

For the fourth Sandia/California Truman Distinguished Lecture Series event, Norm Augustine, Lockheed Martin's retired Chairman and CEO, will discuss "Lessons Learned" during his 45 years of national service.



NORM AUGUSTINE

Some of those lessons, says DLS committee chair John Hinton (8114), come from mistakes he has made or seen made. John heard Augustine speak when he last visited Sandia/California 10 years ago and found the dialogue riveting. He expects the upcoming talk to be fascinating.

To ensure a seat, fill out the form at www.ran.sandia.gov/dls/reservations. The talk takes place Monday, Oct. 27 from 10 – 11:30 a.m. in the 904 auditorium. (The talk will be videolinked live to Sandia/New Mexico, Bldg. 810 auditorium, 11 a.m.-12:30 p.m. MT.)

In addition to heading Lockheed Martin when it formed in 1995, Augustine began a career of aerospace engineering management and government service when he joined the Douglas Aircraft Company in 1958. Selected by *Who's Who* and the Library of Congress as one of Fifty Great Americans, he continues to serve as a member of the President's Council of Advisors on Science and Technology and on the Department of Homeland Security Advisory Board.

For further information, visit www.ran.sandia.gov/dls or call Kim Sandoval (8112) at 294-2228.

Sandia CaliforniaNews

In New Mexico and California . . .

Service Finder: New internal web search tool narrows hunt for services

By Michael Padilla

Finding Sandia services on the Internal Web site just got a lot easier. Integrated Enabling Services (IES) is rolling out the Service Finder (SF) on its home page this month.

The new search engine is intended to help employees locate services available at Sandia without the hassle of searching through thousands of sites and documents. SF will also be available through other sites in the future.

Doug Weaver (7001) says Service Finder is not intended to replace other Sandia search engines, but rather to serve as a tool to assist Sandians who are looking for services. Currently, there are several primary search engines on Sandia's Tech Web including TechDirect, Sandia Yellow Pages, Qwest Dex Yellow Pages, and Search Sandia.

"Service Finder helps you get closer to what you are looking for," Doug says. "Service Finder will help save time, our most valuable commodity, when searching for services."

Narrows search

Currently when an employee searches for "shipping" on the Search Sandia engine 4,620 sites and documents are available. When "shipping" is searched through SF, six sites are available, and SF opens a priority page, taking the employee directly to Sandia's Web Shipper page.

When "health" is entered as a search on SF, 14 sites are available, and the site opens up Health Services as a priority page. On the Internal Sandia search engine 4,242 health documents are available with 13 category matches.

For a service to automatically be chosen as a priority page or to be high on the list the page has to be a linked site in the Sandia Yellow Pages/ Service Finder database. Currently, there are nearly 300 services linked to SF. If an employee cannot find the service, most likely it has not been linked yet. There is, however, a "Poor Search Results" e-mail alert to SF administration to add service links to the database. SF does not locate names or nonservice organizations.

Fits the Big Four

Jane Tardiff (7001) says SF fits perfectly into IES's "Big Four" objectives: Agility, increased lab productivity, decreased hassle, and worth the cost.

"First it decreases customers' hassles in finding the services they are looking for, whether it is to talk directly to a service provider or to get quick service info on the web," Jane says. "Second, if we succeed in decreasing the customers' hassles, then their productivity will increase."

One reason SF was implemented was that employees wanted to get to the right person and the right information quickly and easily, Jane says.

The biggest challenge while producing SF was programming the site so that the most likely web page would open up for the customer. Jane says part of challenge is the complexity of the code, and the other part is customers putting in pretty vague one-word searches. The more specific the search, the better the chances SF has in opening the right page — such as "video conferencing" as opposed to just "video."

"We continue to make adjustments," Jane says. "The goal is to make this search tool faster than the other ways customers are finding service information now."

Sam Cancilla (9527) serves as programmer for SF, and Susan Stubler (10262) serves as designer.

"We believe we will still need to fine-tune the URL selection algorithm based on users' experiences with the Service Finder," Sam says.

Susan says Service Finder is about getting customers to service web pages in the most direct possible way.

Check it out:
http://www-irn.sandia.gov/IES/

Sandia Weapon Intern Program grads have nothing but praise for program established in 1998

Program gives graduates a more comprehensive understanding of the nuclear weapons complex

By Chris Burroughs

New Mexico Weapon Intern Program graduates last week had nothing but praise for the program that gave them a more comprehensive understanding of the nuclear weapons complex.

"I liked the program a lot," says graduate Brent Blankenship (2111). "I went into it with some hesitation. By the end I realized this was the best thing I could have ever done. I didn't know how much I'd learned until the final exam and presentation."

The graduation was held Sept. 30 at the Steve Schiff Auditorium with more than 300 attending. It honored 17 graduates in the Class of 2003 two-year program and 13 graduates in the Class of 2003 one-year program, the fourth and fifth classes to graduate.

WEAPON INTERN GRADUATES, from left, Rupal Patel (1748), Maj.-select Mark Glissman, and Brent Blankenship (2111), second from right, share thoughts about the program with Andrew Rogulich, the former program coordinator, center, and Ben Benjamin, senior mentor, right.

(Photo by Bill Doty)

The program was established by Sandia in 1998 to give young scientists and engineers a broad and in-depth understanding of the nuclear weapons community. It started out as a two-year program and last year was changed to a one-year program.

As part of the program, the students — most already with advanced degrees and working in the nuclear weapons arena — take classes, attend seminars, do individual research, and go on site visits throughout Sandia's New Mexico and California operations and the national nuclear weapons community. Out of the 30 graduates of the two classes, 21 will obtain, through accreditation of the program, a master's degree in engineering mechanics with a specialization in explosives engineering from New Mexico Tech.

Although most of the students are Sandians, some are from the Honeywell Kansas City Plant, US Air Force, and NNSA.

For Rupal Patel (1748), graduate of the one-year program, the program broadened her understanding of the nuclear weapons community.

"I've been at Sandia almost five years and before the program I was in the dark about where the integrated circuits [ICs)I manufactured in the MDL went," she says. "I've learned so much and now know what happens to those ICs."

Two-year graduate Maj.-select Mark Glissman, one of three Air Force officers in his class, says the program "was an extraordinary experience."

"We had lunch with Edward Teller and interacted with lab senior mentors," he says. "It was academically challenging and I made a lot of friends and contacts. It was a great program for building relations between the DoD and the labs."

During the ceremony, Andrew Rogulich, the former program coordinator, and John Stichman, VP 2000, welcomed the interns and challenged them to apply their knowledge. Special guest speakers included Ambassador Linton Brooks, administrator of the National Nuclear Security Administration; Steve Henry, deputy assistant to the secretary of defense for nuclear and chemical and biological defense programs; and Sandia President and Labs Director C. Paul Robinson.

Speaking on behalf of the one-year class of 2003 was Mary Abt (2113), while Mark Glissman spoke on behalf of the two-year class of 2003.

John Hogan, Senior Scientist and program founder, presented certificates to the graduates.

Not only did the graduates have praise for the program, so did the six senior mentors, all retired Sandia weaponeers.

"Congratulations, you are now well prepared to make a contribution to the nuclear weapons stewardship program," said Ben Benjamin, senior mentor. "You're are also prepared to assist in the design and testing of the next generation of nuclear weapons, if required. Good luck to each of you in whatever career you choose."

Senior mentor Harold Rarrick said, "This has been a great program for me as well as you. As a fellow weaponeer, I know that you have invested a lot of time and energy in this program. As you return to your home organizations, I challenge you to take the self-discipline it has taken to complete this course, the weapon development knowledge you have acquired, and your demonstrated ability to team with fellow classmates to your home organization and apply them every day. I treasure the time I have spent with all of you and wish you the best of luck in the future."

At the conclusion of the ceremony, John Hogan said, "Although Andy and I are no longer involved with the program, we are honored to have graduated five classes of highly trained people from Sandia, Honeywell FM&T, the US Air Force, and NNSA. They are charged to be exceptional stewards of the stockpile that DOE and the nation have entrusted to them and I am positive they will meet the challenge."

The graduates

Class of 2003 two-year program graduates: Byran Adams (Honeywell, Kansas City Plant), Brent Blankenship (2111), Jon Eberhart (1904), Mark Ekman (6252), Robert Galloway (2113), Maj. (S) Mark Glissman (Air Force), David Harding (12333), Robert Houck (NNSA), Siv Limary (2331), Shung Lin (12326), Maj. Warren Nuibe (Air Force), Maj. Phillip Opela (Air Force), Cecily Romero (9132), Lysle Serna (1832), Scottie Walker (5352), David Walsh (1111), and Bernard Whitaker (NNSA).

Class of 2003 one-year program graduates: Mary Abt (2113), Mark Anderson (1122), Sharon Arp (NNSA), Bobby Baca (12335), Julie Beachner (Honeywell, Kansas City Plant), Capt. Todd Broyles (Air Force), Dan Cantu (2113), Capt. Jackson Crocker (Air Force), Maj. Joe MacCaffrey (Air Force), Marisa McGregor (Honeywell, Kansas City Plant), Rupal Patel (1748), Gabriel Pugh (NNSA), and Jimmie Wolf (1738).

M&O contract

(Continued from page 1)

Sandia last Dec. 13 (*Lab News*, Jan. 10, 2003).

"In April NNSA presented us with a proposed contract," Gary said. "Between April and September the two negotiation teams discussed, agreed, and compromised on a variety of provisions. The executive management of NNSA, Sandia , and Lockheed Martin were engaged personally on several key provisions to ensure a fair and equitable, balanced agreement.

Gary notes that what makes the management contract a "model" and distinguishes it from a standard M&O contract used by DOE is that it has a variety of provisions tailored to the Sandia operation and never before included in previous contracts. For example, for the first time, both monetary and "term" incentives are included in the contract. These provisions allow Sandia Corporation to earn an additional fee and the opportunity for a one-year extension, each year for up to an additional five years, if overall performance is at the highest rating of "outstanding" and Sandia meets the Performance Incentive Fee and Award Term Incentive Measures.

The contract also includes an NNSA commitment to focus on the "whats" and not the "hows" and to tailor its oversight according to the confidence it has in Sandia's management control systems. The intent is to move away from transactional oversight in non-nuclear programs and business areas and instead use a systems orientation, where appropriate. There is a strong mutual focus on contractor accountability and operating in a cost-efficient and effective manner, and a commitment by NNSA to allow such savings to be used for the benefit of Sandia.

Also new in the contract is that many standard provisions were either eliminated or deviated from when it made sense in the context of Sandia.

Patty Wagner, deputy manager at NNSA's Sandia Site Office, headed the contract negotiations for NNSA. She said that NNSA had worked for more than a year exploring model contract concepts. The Sandia contract will assist in redefining the federal/contractor relationship to improve management and performance.

The contract — with its new features — received high marks from Brooks.

"With this new model contract Sandia National Laboratories and Lockheed Martin will have the opportunity to continue to be among the best in the nation," Brooks says. "There are still many challenges facing our national security laboratories, but I am confident that over the next five years Sandia and Lockheed Martin will successfully meet those challenges."

HyTEx

(Continued from page 1)

dent navigation and guidance methods, to modeling and simulation capabilities for rapid assessment of new vehicle configurations.

"One immediate major challenge is deciding which subset of candidate technology areas to invest in," Mike says. "During the first year we have gone through a discovery phase that includes understanding the current level of development and the time frame for maturation of these technologies."

Material created at Sandia is being used to assist with the project (*Lab News*, Oct. 3). In addition, the project researchers look outside of Sandia to understand the technology requirements of the hypersonic programs being pursued by the various government departments and agencies.

"Sandia's commitment to an internal hypersonic technology program establishes our credibility as a major player in this field and will lead to opportunities to collaborate in a variety of external programs," says Mike.

Taiwan

(Continued from page 1)

The first began operation in 1978, and a significant amount of spent fuel has accumulated from the six operating reactors. Two additional reactors are scheduled to come on line in 2005.

"Like the US, Taiwan does not reprocess spent fuel and has followed our example for a near-term storage solution as well," says Hong-Nian. That means spent fuel is stored in cooling pools near the reactors. As these pools get full, the oldest fuel rods are moved to dry storage casks.

Sandia's first task will be an assessment of technology in the island nation (86 islands in all, totaling about 45,000 square miles) to provide an understanding of Taiwan's technical baseline in geologic repository science.

"We will look at their site characterization work, performance assessment modeling, and conceptual design," says Hong-Nian. "Over the next three or four years, we will identify technological gaps and design specific tech transfer projects to help fill those gaps. We will work with the Taiwanese to analyze the geological data they are gathering and help them model the performance of a repository conceptual design for a potential host rock, such as, granite."

The art of the offset

This work is a "leap in order of magnitude" from past work Sandia has done with Taiwan, Hong-Nian says, and a Lockheed Martin program is the reason it is possible. By brokering this deal, referred to as an "offset" in the international business community, LMMFC earns credit toward an obligation the company incurred several years ago, when it sold Hellfire missiles to Taiwan.

"Essentially, we get paid, but the buying nation wants something else," explains Robert Kelly, LMMFC's offset manager for Asia and other nations. The "something else" can be provided in a variety of ways and usually involves more than one activity, he says. "I saw this as a path where the first [Sandia] project could lead to a series of projects that can satisfy our future offset obligations associated with future sales." (For more detail, see "The offset" at right.)

Sandia's work for Taiwan will be paid for by LMMFC under a typical work-for-others arrangement. The Lockheed Martin company will in turn apply to the Taiwanese government for appropriate credit to its offset obligations.

Sandia began working with Taiwan following the Labs' 1999 licensing success at the Waste Isolation Pilot Plant (WIPP) in New Mexico. A DOE-led team traveled to visit Taiwanese nuclear power executives to discuss the successes achieved in the US. "Margaret Chu, who then managed the project, encouraged us to look for ways to leverage what we had accomplished at WIPP to other projects," says Hong-Nian.

SANDIA'S Hong-Nian Jow (seated at right) signs official minutes of a kick-off meeting held at the Institute of Nuclear Energy Research (INER) at Lungtan, Taiwan, in August. Also seated are INER's deputy director Dr. Li-Fu Lin and Greg Martin (left) of Lockheed Martin's Corporate Industrial Participation Office. The ceremony set the stage for a multi-year effort in Taiwan with Sandia providing needed expertise in geologic storage of nuclear wastes. (Photo courtesy of INER.)

Sandia succeeded in getting some small work-for-others projects, mostly in the few tens of thousands of dollars range, in subsequent years. Then in 2001, Hong-Nian started making calls to Lockheed Martin about offset funding possibilities for the effort. He met Kelly, and the two developed a framework for the agreement.

One reason the effort worked was Sandia's early work with Taiwan's Institute of Nuclear Energy Research, says Gary Jones, Manager of Sandia's Energy and Critical Infrastructure and International Partnerships Dept. 1313. As lead for offset programs at Sandia, Gary sees Hong-Nian's early work and that of the Sandia technical staff to gain credibility as a key.

Dennis Berry, Director of Environmental Security Technology Center 6800, views the Taiwan effort as "an opportunity for Sandia to use its broad experience in repository science and licensing to help others throughout the world solve their nuclear waste problems. By transferring the technology, there will be a benefit for those countries and a benefit to the US, because we will be addressing safe disposal of spent fuel and nuclear waste in the world. This helps other countries solve their problems and sets up circumstances by which nuclear power continues to be a viable global option."

This work is a "leap in order of magnitude" from past work Sandia has done with Taiwan, and a Lockheed Martin program is the reason it is possible.

'Waging peace' in the world

Looking beyond the initial offset project with Taiwan, Dennis Berry, Gary Jones, Hong-Nian Jow, and Dave Goldheim, Sandia's Director for Corporate Business Development and Partnerships Center 1300, see the Taiwan project as a prototype for future work involving other Sandia expertise.

"Looking at a place like Taiwan, you can see there are other needs beyond those associated with nuclear power that Sandia can help with," says Dennis. "There are places we can help in agriculture, electrical power distribution, renewable energy, and other technologies."

Building on this idea, Dennis, Dave, and Gary presented the idea of targeting specific countries and technologies in cooperation with the Lockheed Martin offset program. They call it the "Waging Peace" initiative. The initiative offers the opportunity to leverage the offset program to the benefit of Lockheed Martin, Sandia, the US, and the offset country.

One spin-off of the Sept. 11, 2001, terrorist attacks has been a closer look by the US at the needs of other democratic governments to improve their stability, Gary says. Sandia's experience with DOE and State Department programs in Mexico and elsewhere has shown that technologies applied to energy, water, environment, agriculture, communications, manufacturing, and healthcare can offer a strong base to strengthen economic stability for other nations.

"Our premise is that technology provides a basis for growth and maintenance of business and industry and the creation of a viable middle class. In turn this will foster stable governments by supporting the infrastructure needed for sustained and sustainable economic development," says Dave. "Our next steps are to determine interest for this concept with Lockheed Martin, gain feedback, refine the process, and begin to build appropriate relationships.

In the meantime, Sandia will look at possible candidate countries where offset agreements with Lockheed Martin are in effect, focusing on indirect offset programs that are acceptable to the governments involved.

The offset: A military hardware reality

It started with a successful sale of AGM-114 Hellfire missiles to the Republic of China (Taiwan) by Lockheed Martin Missile and Fire Control (LMMFC) in Orlando. But in the case of military hardware, like these air-to-ground missiles used on attack helicopters, sales for cash are only part of the deal.

Buying nations typically add an "offset" clause to military negotiations, explains Robert Kelly, Asia offset manager of LMMFC, and have for the past decade or more. While the concept has gone out of favor in many commercial sectors, it is very much a reality for defense/aerospace deals. It means the seller will offer something besides the hardware that will benefit the buying nation.

The expectation of most nations buying US-built hardware is that the selling company will offset a large percent of the sales value of the contract. Called by different names and governed by frequently changing rules, the offset is seen by the buyer as an opportunity to increase the attractiveness of its own products in world trade.

Some nations permit only direct offsets — related directly to the item being purchased. In the case of the Taiwan sale, the government agreed to an indirect offset, which provides value to the buying nation, but isn't related directly to the missiles.

"It's extremely complex," says Gary Jones, Manager of Sandia's Energy and Critical Infrastructure and International Partnerships Dept. 1313 and lead contact for offset programs. "We've been trying to get an agreement like this through for about five years. We had a couple of near-misses. This is the first one to happen." Sandia is not proposing that this ever be a large line of business, Gary says. But when such partnership opportunities arise, the Labs should be ready to take advantage of them. "It's just a situation that will work in some cases and not others."

"This time we had the right people at the right time," says Kelly. "I wanted it to work and Hong-Nian wanted it to work." An added allure for Kelly and LMMFC was the potential for continued Sandia work beyond the first phase. "This is the first of perhaps as many as six phases," he notes. "This is a first. It's the result of many years of discussion and learning how to work offsets," Gary says.

Senior VP Tom Hunter talks about challenges, opportunities in Nuclear Weapons SMU

This interview with Senior VP Tom Hunter is another in a series of Lab News *interviews over the past year or so with Sandia VPs who oversee various Strategic Management Units.* Lab News *staff member* ***Bill Murphy*** *conducted the interview.*

Lab News: *Your SMU — nuclear weapons — oversees the work that has always been our primary mission. And of course we want to talk about that, about where that work is and where it's going. But first, in these interviews with Strategic Management Unit owners over the last year or so, we've started out with a more general question, so we'll ask the same thing of you: What's your sense of how effective that SMU structure has been?*

Tom Hunter: I think it works very well because it does some very fundamental things for the Laboratory. It allows for a customer interface that's unambiguous, consistent, and clear.

The Nuclear Weapons SMU has allowed for single-point decision-making on matters that affect the laboratory as a whole around nuclear weapons, and we've taken that decision-making role and put it in two places, which I think works quite well.

First, we have the Nuclear Weapons Leadership Council, which provides oversight, policy, and strategy for the Labs' nuclear weapons work, as well as guidance on general program future direction and content for the program.

The operations, though — and operational decisions generally — have been delegated to a set of directors drawn from all of the organizations involved in weapons-related programs. Involving both of these groups, which represent five of the Labs' divisions, allows for a collective process that we think serves the Laboratory well. But, ultimately, the structure enables decisions to be made by the head of the SMU. So there is a way to reach a decision quickly and effectively and to have a single point of contact with the customer.

LN: *It's been observed that a lot of Sandians don't really "get" the SMU structure; they think in terms of Division 1000, 2000, 3000, and so on. You're an SMU owner but also you're a senior VP and head of Division 9000. How do you explain to folks how they ought to be thinking about their work? Why do we have this seemingly parallel structure here?*

Tom: Good question! How do you balance two roles? Well, what I tell people, and I do this at my employee breakfasts and all other employee dialog sessions, is that I wear two hats or that I have two jobs. One job is the line organization — that would be 9000. My job there is to be responsible for the health [i.e., the consistency and quality] of the work force, the infrastructure that it takes to make that organization function, and to enable the staff and the facilities to be able to support the SMUs. That's a different set of responsibilities than you have for the SMU. The divisional function is more of a support role. The SMU job, on the other hand, deals with corporate representation and corporate decisions. When I make a decision around the nuclear weapons program, it is neutral with respect to my organizational role; it's about what's best for the Laboratory. So my accountability there is to everybody.

LN: *We're talking about the nuclear weapons SMU, but out there in the rest of the country people are, understandably, talking about homeland security, terrorism, counterterrorism, the war on terrorism. In this new environment, where does the nuclear weapons program fit in? It's been our core mission, it still represents 60 percent of our funding, so where does it fit into Sandia now?*

Tom: Well, of course, it is the dominant funding source for the Laboratory, and I think it's important to clarify that work your [*Lab News*] readers may recognize as their division's work may really be part of the Nuclear Weapons SMU work. For example, if people work in the reactors in Area 5, you could draw the conclusion that it's about either Organization 6000 or Energy and Infrastructure Assurance. In fact, the facility is largely funded by the Nuclear Weapons program. Same with most of our research, or at least a very good part of our research; 90 percent of it is funded by Nuclear Weapons. And that's in the decision space of the SMU, not of the local organization.

Your question, though, was "What's going on in the world, and how do nuclear weapons fit in?" The Nuclear Weapons complex is important for the nation because it enables the continued vitality and viability of the nuclear weapons stockpile, of course, but also because it represents an enormous science and technology base from which to draw on to address these other national security issues.

No surprises!

LN: *Isn't there a perception that nuclear weapons were a deterrent in the Cold War, but that type of deterrent isn't relevant now — or is it? I understand your point about the great investment we've got in a science and technology base, but how do the nuclear weapons themselves make a difference now?*

Tom: The post-Cold War era is certainly different than that of the Cold War period. The deterrence posture that we took with respect to the former Soviet Union resulted in the complex and stockpile that we basically currently have. There's a national consensus that we need to retain a deterrent capability, because, although the world changes, it changes in ways that we can't predict. The nature/composition of the stockpile should evolve to reflect the dramatic changes in the post-Cold War environment. A credible nuclear deterrent gives our nation and our allies confidence that we will meet our national security commitments and will continue to dissuade our adversaries from taking actions that are inimical to the ideals that this nation has championed for more than 200 years.

My view is that the stockpile needs to make a transition to be consistent with the post-Cold War realities. And what that means is expanded deterrence and the ability to hold a wider range of targets at risk and discourage a wider range of adversaries, to the extent that it can. So that means two things: It means that ideas like the Robust Nuclear Earth Penetrator need to be pursued so that when national policy is established and when the policymakers decide that's the right thing to do, the option is there for the policymakers to do it. At the same time, we need to pursue a broad range of technology development so that this nation never encounters a surprise which renders us at a disadvantage.

LN: *Like what kind of surprise?*

Tom: The best example that comes to mind is the launch of Sputnik. That gave rise to the possibility of putting nuclear weapons on reentry vehicles and launching them without our being able to do anything about it. That's the kind of surprise we don't want to have.

LN: *Yeah, that was quite a jolt.*

Tom: And so we need to maintain advanced development and advanced concepts activities so that we can be sure those surprises don't occur.

Budget matters

LN: *Let's talk about the [NWSBU] budget for a moment. First of all, where is the budget and where do you see it going over the next few years? It seems to me that the budget has been going up year by year recently.*

Tom: In the last three years the nuclear weapons budget has grown significantly at Sandia and nationally. Very roughly, the nuclear weapons budget at Sandia has gone up in the last four years about 50 percent. Complexwide, the national budget [for nuclear weapons programs] has gone up from about $4.4 billion to about $6 billion. Now, the other thing that's going up at Sandia is the construction work related to the nuclear weapons program. In fact, construction now at Sandia is at an all-time high — $144 million per

(Continued on next page)

The MESA vision: Remarks by Tom Hunter

The following is excerpted from Tom Hunter's welcoming speech at the MESA groundbreaking ceremony, held at Sandia on Aug. 19.

This is the day when we celebrate the tangible reality of a vision for the future, a vision for the nation's security, a vision for the NNSA and for Sandia Laboratories and its partner laboratories.

TOM HUNTER

It is not truly the beginning, for much hard work has brought us to this point. We should acknowledge the effort of the NNSA leadership to initiate the project, for the project team who planned, presented, designed, and made this idea take shape, and for the members of Congress who committed our nation's resources.

The vision that drove us to the success of this day is about fundamental transition.

The belief:

• That the components and parts that must be placed in our nation's nuclear weapons can be fundamentally different — smaller, smarter, more functional.

• The belief that the NNSA Complex can be different — more robust, agile, and integrated.

The conviction:

• That national security can be enabled by the ability to produce an almost infinite variety of small, smart things that can sense, communicate, think, and act.

The commitment:

• That engineering in the 21st century can be fundamentally different — ideas to prototypes to product — faster, better — and with higher confidence.

• That engineers of the future will choose, above all other places, MESA as a career choice and a place for national service. In this year alone, we have 41 students from 26 universities who serve as MESA Institute fellows.

So —

The vision was simple! It was based on three ideas:

• Imagine how engineering and the engineering of nuclear weapons could be revolutionized by creating the design environment of the future.

• Imagine how modeling and simulation through the truly remarkable power of supercomputers can enable that environment.

• Imagine how integrated microsystems can allow a whole new level of function and flexibility in the nation's nuclear deterrent.

Imagine then how revolutionary the best of these three ideas would be if brought together in one place. That is the vision of MESA. Today we celebrate that vision and dedicate this place and ourselves to making it real.

Tom Hunter

(Continued from preceding page)

year. Most of that is around MESA; it's $112 million this year alone. So your picture is just right up to the present: the budget *has* grown significantly. It's been the largest growth part of the laboratory and, in terms of construction, it's probably a factor of 4 times higher than ever. We don't see that rate of growth continuing, though. In the years ahead, we predict it to be growing slowly and roughly at the level of increasing cost. Hence, after this next fiscal year [after '04], we don't see significant growth in the core weapons program. So, the expectation is: growth now, with modest growth in the future.

MESA will redefine weapons program

LN: *You mention MESA; how big a deal is that for Sandia?*

Tom: MESA is the biggest building project we've ever undertaken. It will ultimately cost somewhere around $450 million. But it's more than a building project. Much more! It's really an initiative to redefine Sandia's future weapons program (see "The MESA vision" on preceding page).

LN: *Going back to the budget. How do your projections there translate into hiring?*

Tom: Well, in the last three years, we've done a lot of hiring because the nuclear weapons program has been growing significantly. We've actually added a couple hundred FTEs to the nuclear weapons program. But as weapons spending slows, which we think it will, it's our intent not to grow in FTEs. For the next several years we will basically use an attrition-based workforce assumption. That is, we will replace those who leave. Given our demographics, that's still a couple of hundred people a year for the next several years in the weapons program.

LN: *We've asked the other VPs to talk about some of the things that excite them the most, the work that is most interesting or most significant in their SMUs. Are there a few things that stand out in your mind?*

SENIOR VP TOM HUNTER with some of the many weapon shapes Sandia has helped develop over the years. (Photo by Randy Montoya)

Tom: Sure. If you allow me a little bit of space here, I put it into four areas. The four areas we usually use to describe the weapons program are Science and Technology, Modeling and Simulation, Weapons Engineering, and Production. Let's just walk through each of those and hit a couple of points.

LN: *Sure, let's do it.*

Tom: In Production, we have stood up the capability for the current [neutron] generators and are beating our production goals and continually improving our processes and yields. So we're very proud of that. At the same time we have

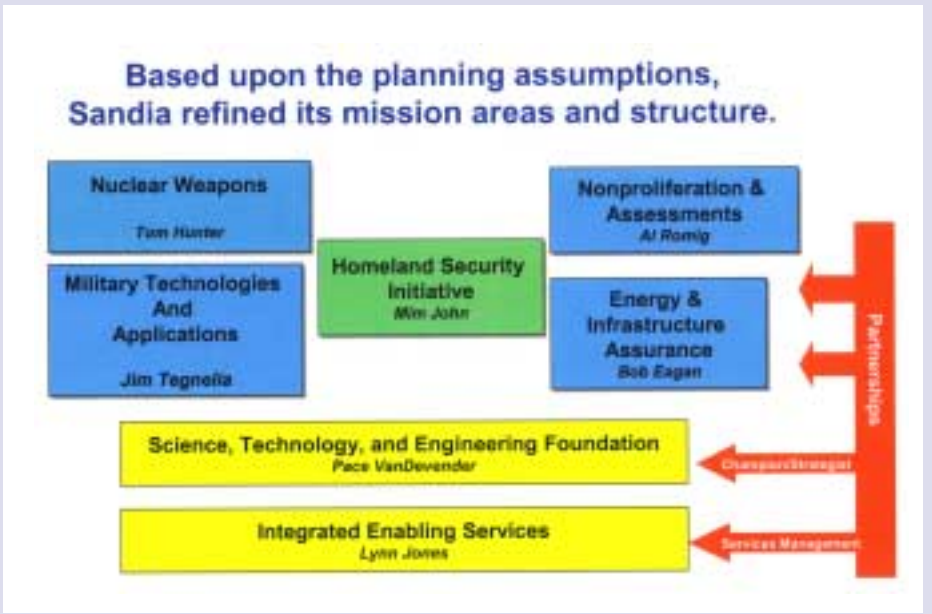
(Continued on next page)

Seven SMUs: This year's strategic planning yields 'evolutionary' changes to Labs' structure

Tom Hunter's Nuclear Weapons Strategic Management Unit (SMU) is one of the seven such units Sandia's Laboratory Leadership Team (LLT) established during its annual strategic planning this year.

This structure, which defines how the Labs organizes its lines of work and support, is not significantly different from what had been in place for the past several years. As Executive VP Joan Woodard has said, however, the changes better "align our structure with our intent" and "will simplify internal processes and improve emphasis on strategic issues."

The SMU structure and the responsibilities of each unit also validated "the Labs' core vision defined in 2000 strategic planning as appropriate now and for the foreseeable future," Joan adds.



"And," she explains, "we structured the SMUs as an outgrowth of our planning assumptions, which challenged us to view the world and our role in it five, ten, and 15 years into the future."

Simply put, Sandia manages its mission and support work through SMUs. There are different kinds — four "business" SMUs, along with single "initiative," "foundation," and "service" SMUs.

Also emerging from strategic planning 2003-style:

- A clear statement that a national security lab must look at where and how technology can address root causes of conflict.
- A pronouncement that science, technology, and engineering form the foundation upon which the Labs is built.
- A declaration that partnerships are an integral part of how the Labs does business and that technology maturation, commercialization strategies, and acquisition of best engineering and business practices from commercial partners are critical to achieving mission success.
- A firm decision that the importance of homeland security nationally requires even greater emphasis within Sandia as illustrated by establishment of a management unit devoted to that work.

Here is a list of the SMUs, along with the VP owner and a short description of their missions:

Nuclear Weapons Business — Tom Hunter. Lead the Nuclear Weapons Complex in establishment and maintenance of an appropriate deterrent through a safe, secure, reliable, and affordable stockpile, now and in the future.

Military Technologies & Applications Business — Jim Tegnelia. Supply defense customers with advanced technologies and engineered systems that further the overall transformation of the US military capability. Simultaneously enrich the broader capability of Sandia to meet its national security mission.

Nonproliferation & Assessments Business — Al Romig. Reduce the threat to the US from proliferation of and use of weapons of mass destruction, while providing performance and vulnerability assessments of both US and foreign technical capabilities along with development of associated assessment tools and technologies.

Energy & Infrastructure Assurance Business — Bob Eagan. Develop and implement technologies and systems to ensure access to safe, secure, reliable, and clean supplies of energy and other critical resources, such as food and water, that underpin a nation's ability to grow and develop and to sustain the needs of its people.

Homeland Security Initiative — Mim John. Develop tools and establish capabilities to help render the nation immune to the threat of terrorism, to allow the US to understand threats in real-time and anticipate actions, and to reveal vulnerabilities.

Science, Technology, & Engineering Foundation — Pace VanDevender. Create the new science, engineering, and technology that enable Sandia's business SMUs to help protect America's security and freedom by recruiting and retaining exceptional staff, securing superior infrastructure, and partnering strategically.

Integrated Enabling Services — Lynn Jones. Provide a great work environment that enables people's best performance, while providing a system of integrated services that is sufficiently agile, productivity-focused, hassle-free, and worth the cost to enable success of current and future Sandia missions.

— Rod Geer

Up-in-a-flash GPP building wins award from regional contractors' magazine

Bldg. 753 went from concept to completion for Weapons Program customer in just eight months

If you're like most Sandians who enter Tech Area 1 through the turnstile gate north of Bldg. 802, you've probably been pretty impressed by how quickly the new Integration Studies and Support Group (ISSG) building (Bldg. 753) went from bare ground to completion.

You're not alone in your admiration. *Southwest Contractors Magazine* has just awarded the ISSG building project its architectural award for New Mexico design/build projects under $5 million.

The ISSG Building, which went from design to occupied in just eight months at a cost of $1.9 million, was constructed under Sandia's Design/Build General Plant Project (GPP) construction process. That relatively new (for Sandia) approach has delivered on its promise of expediting the design and construction of new buildings at Sandia.

BLDG. 753 under construction in May, and . . .

Ed Sanchez of Facilities Projects Dept. 10286 and Sandia's project manager for the ISSG building, says the architectural award is a gratifying validation of the Labs' decision to use the "design/build" approach.

Under that approach, he says, a customer (Nuclear Weapons Program Integration Center 9700 in the case of the ISSG building) works with Facilities to develop the criteria for its required space. With those specs in hand, Facilities works with a pre-approved contractor to both design and build the project, eliminating the middle step in the old design-bid-build process.

. . . BLDG. 753 TODAY, occupied by the Integrated Studies and Support Group of Nuclear Weapons Program Integration Center 9700.

Ed says Bldg 753 is just the latest in series of design/build success stories: Bldgs. 750, 751, and 752 are among recent examples of projects that have used that approach.

The 8,000-square-foot building at the northwest corner of G Ave. and 7th St. will house approximately 25 people.

Ed says modestly that his job as project manager on the award-winning project was to "keep things moving." He offers lots of credit for the project's success to the contractor, Albuquerque-based HB Construction, and to the members of his own team in several Facilities organizations.

"Our engineering and architectural groups worked hand in hand, in very close collaboration, with HB, from day one," says Ed, "and our Construction and Inspection team was in the field every day making sure everything was always moving forward and built correctly."

Ed says the *Southwest Contractors Magazine* award is "good for Sandia's image" as an institution that works well with the local contractor community, and provides "a nice boost" for HB Construction, as well.

Southwest Contractors Magazine covers all aspects of the commercial construction industry in Arizona, Nevada, and New Mexico. An article about ISSG will be published in its December issue.

— Bill Murphy

Tom Hunter

(Continued from preceding page)

instituted modern manufacturing management practices that we're also very proud of.

In Weapons Engineering, the key areas of effort right now are the two Lifetime Extension Program projects, the W76 and W80, which for Sandia are basically comparable to full-scale engineering and development activities [of past ground-up weapon development programs].

LN: *Oh really. They're that broad?*

Tom: Absolutely. Particularly for the W76, which is a fully integrated arming, fuzing, and firing system. So, there are two major activities that have the general content of a full-scale engineering development, for which we are maintaining a very active presence. Then there are advanced concepts and underlying technologies — guidance control, earth-penetrating technologies — which we continue to pursue.

LN: *This is all under the hat of weapons engineering?*

Tom: Yes. And I want to cap it off with a couple of things: Under modeling and simulation, we've made significant progress in aligning our modeling and simulation development and application capabilities to the needs of the weapons engineering community. At the same time, too, we're reestablishing ourselves in the high-performance computing arena — we're currently acquiring the Red Storm system, which when it comes on line will be — at least for a time — the fastest computer in the US.

In science and technology, there are several areas where I think we've had significant achievements. The work in microelectronics and microsystems continues to be pacesetting for the country and is one technology area in which we play a very prominent role in everything from radiation-hardened microelectronics to the use of microsystems and micromachines.

The work in materials science is very important; it's strongly supportive of the weapons engineering program generally and the Lifetime Extension Program efforts specifically.

Of course, our work in pulsed power has led to some remarkable achievements in the ability (without wanting to get too technical here) to do compression of fusion targets. And in the work on equation of state and materials, isotropic compression experiments have basically revolutionized the way in which one does high-pressure determination of material behavior.

A "mission vs. task" orientation

LN: *Changing gears a bit, here's something else we've asked other VPs: What keeps you awake at night?*

Tom: Well, let's see. There are a number of things that I think merit a lot of serious thought. One is that we do end up with a global situation for which this nation is surprised, potentially disadvantaged, and not prepared for. And it seems to me that could occur if we become too rigid in the way in which we manage the nuclear weapons complex.

LN: *Okay.*

Tom: And too, we need to make sure we're working in the proper management regime. That is to say, we must have and maintain the ability within the Laboratory to think outside the box and be more observant, as opposed to simply responding to a series of tasks defined by our customers. It's the difference between mission and task. Having a mission as a Laboratory, or having a set of tasks — that worries me.

Having a mission [as opposed to a series of tasks] puts a level of personal accountability on everyone associated with the Laboratory, the leaders and the staff, to know that they have more than to do their daily job. They have to look at a broader spectrum of issues.

Another thing: In a transformational time in our history, as a nation and as a Laboratory, I'm concerned that we need to be at the forefront of the transformation, and be more agile and more robust.

Now, of course, I continually am concerned about our stewardship for the nuclear weapons stockpile. If there are issues that occur, we've got to be sure we understand them and get them resolved. When they do occur we've got to be sure we can say to the nation with confidence that the weapons are safe, secure, and reliable. So that's a very, very weighty responsibility that we have to take very seriously. We have to think about it all of the time; we simply can't ever let other issues take precedence over our core mission.

LN: *What do you consider the most rewarding part of your job and the most frustrating.*

Tom: I saw that coming. Well, let's see. The most rewarding part of the job is clearly teamwork that has an impact. The ability for the laboratory to team together, particularly across the Nuclear Weapons Leadership Council to achieve a common goal with the other laboratories for example, is very rewarding.

The other thing that's rewarding is to be able to represent Sandia in numerous outside forums. Being engaged in the national debate, representing Sandia, is extremely rewarding because we have an excellent reputation and we're viewed as people who deliver and who think deeply.

Another one is the new staff. We've made a deliberate effort to bring new staff into the weapons program. We've seen significant new blood in the Laboratory and they bring ideas and energy that we really need.

The frustrating part? That goes back to what keeps me awake . . . I just don't want us, as a nation or a Laboratory, to be caught off-guard. We are a large organization and must always be prepared to realign ourselves with national priorities. It is essential that the laboratories remain in a position that allows us to assure the nation that no technological surprise will put our nation in great peril. Another area is the transition to a new relation with the NNSA. It has proven to be quite complex, but through an excellent partnering with the SSO and NSSA headquarters, we are making good progress to define interfaces, roles, and clear expectations for performance. We must not relent on our efforts to complete this transition.

LN: *Finally, I want to make sure I give you a chance to say anything else that you want to touch on.*

Tom: An important theme in my mind is that the nation depends on us for this core function on nuclear weapons. In a very fundamental, if sometimes unstated way, accountability, personal accountability, comes with this territory at every level of the Laboratory. Sandians have always embraced that accountability because the stakes are so high. There is a profound appreciation that these weapons are clearly a thing that could change mankind forever.

So, as the world changes, we need to think about a transition where the same psychological weight and personal accountability that has always underpinned the nuclear weapons program is carried forward, even when nuclear weapons may not dominate the laboratory the way it does today.

We need to prepare for that transition and not lose that absolutely essential sense of stewardship and accountability as we deal with a broader range of customers.

Mileposts

New Mexico photos by Michelle Fleming


Kerry Sturgeon
35 1736


Dan Appel
30 14402


Mary Cocco
25 4224


David Trujillo
25 2665


J.E.R. Turner
25 15272


Robert Benner
20 9224


Linda Dubbert
20 6525


Cynthia Kajder
20 10262


Arian Pregenzer
20 5320


Gene Roseth
20 5742


Barry Spletzer
20 15200


Grant Heffelfinger
15 1802


Ruby Hsia
15 2542


Kristina Kominek
15 12111


Leonard Malczynski
15 6010


Karen Page
15 12334

Management Promotions

James Chapek from Manager to Level II Manager, International Physical Protection Group 5350.

Jim has worked in the area of security research, development, implementation, and training since he joined Sandia in 1972. For the past five years Jim has worked in a nuclear nonproliferation program, Materials Protection, Control, and Accounting (MPC&A), which has the responsibility for assisting the Russian Federation in securing its weapons-usable nuclear materials. He is managing a group that includes the MPC&A program, international borders and maritime, and radiological threat reduction, programs that have the common goal of reducing the risk to the United States of nuclear and radiological terrorism.


JAMES CHAPEK

Jim has a BS in electrical engineering from the University of New Mexico.

* * *

John Feddema from DMTS to Manager, Intelligent Systems Controls Dept. 15211.

Since joining Sandia in 1989, John has performed research on a wide range of robotics projects including multi-fingered hands, flexible robot arm control, whole arm obstacle avoidance, sensor fusion, micro-surgery and micro-assembly robotics, and decentralized control of cooperative robotic vehicles.

John was promoted to Distinguished Member of Technical Staff in 1998.

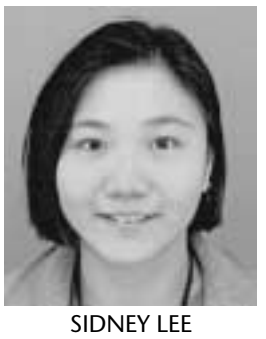
He has a PhD in electrical engineering from Purdue University.


JOHN FEDDEMA

* * *

Sidney Lee from Team Leader to Manager, WFO Partnership Business Office Dept. 10513.

Sidney joined Sandia in 1993. She has worked in the areas of Work For Others (WFO), Environmental Restoration & Waste Management, and Energy & Critical Infrastructure SBU since she joined Sandia. Three years ago, she returned to the WFO area as the team led for Partnerships Center, and recently she formed the WFO Partnerships Business Office. Now, she is responsible for the business management of WFO and Partnerships. Her responsibilities include accounts receivable and closeout oversight of all WFO agreement types as well as other related WFO activities. She also serves as a CFO-matrixed business services manager to the Corporate Business Development & Partnerships Center.


SIDNEY LEE

Sidney has a BBA in accounting and financial management and an MBA in taxation and international management, both from the University of New Mexico.

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Marcus "Jim" Martinez from PMTS, Advanced & Exploratory Systems Dept. 2131, to Manager, Inertial Systems Dept. 2334.

Jim joined Sandia in 1994. The DOE and DoD communities recognize him as a subject matter expert for Hard and Deeply Buried Targets (HDBT) and Agent Defeat Weapons (ADW). His most recent work was spent developing new earth-penetrating-weapon technologies for ADW and HDBT. Jim performed subsystem and full-scale hardware testing to prove new weapon technologies. He was System Integration and Warhead project lead for the DoD/DOE Phase 6.2/6.2A Robust Nuclear Earth Penetrator (RNEP) planning effort.


MARCUS "JIM" MARTINEZ

Jim has a BS and an MS in mechanical engineering, both from the University of New Mexico.

* * *

Bob Martinson from PMLS, Division 2000 CFO Customer Resource Dept. 10515, to Manager, CFO Direct Customer Support Dept. 10015.

Bob joined Sandia in September 1992. He has worked in Auditing, Logistics, Procurement, and Electronic Systems centers.

Before joining the Labs, Bob worked for Ford Motor Company, Fluor, and in public accounting. His experience includes finance, operations, marketing, treasury, and auditing.

Bob earned a BA from Fort Lewis College in Durango, Colo., and an MBA from the University of Colorado at Boulder. He holds an active CPA license in California. Bob is also a part-time accounting instructor at Albuquerque Technical-Vocational Institute.


BOB MARTINSON

Recent Patents

Eric Parker (15311), Stephen Rosenthal (1644), Michael Trahan (5914), and John Wagner (15311): Particle Analysis Using Laser Ablation Mass Spectroscopy.

James Fleming (1749): Micromachined Cutting Blade Formed from {211}-Oriented Silicon.

Peter Dudley and Bert Tise (both 2341): Multiplexed Chirp Waveform Synthesizer.

John Bruce Kelley (6245), Wei-Yang Lu (8754), and Fred Zutavern (15333): Acoustic Sensor for Real-Time Control for the Inductive Heating Process.

Philip Rodacy and Pamela Walker (both 2552): Field Kit and Method for Testing for the Presence of Gunshot Residue.

Sandia Classified Ads

How to submit classified ads

DEADLINE: Friday noon before week of publication unless changed by holiday. Submit by one of these methods:

- **E-MAIL: Michelle Fleming (classads@sandia. gov)**
- **FAX: 844-0645**
- **MAIL: MS 0165 (Dept. 12640)**
- **DELIVER: Bldg. 811 Lobby**
- **INTERNAL WEB: On Internal Web homepage, click on News Center, then on Lab News frame, and then on the very top of Lab News homepage "Submit a Classified Ad." If you have questions, call Michelle at 844-4902. Because of space constraints, ads will be printed on a first-come basis.**

Ad rules

1. Limit 18 words, including last name and home phone (If you include a web or e-mail address, it will count as two or three words, depending on length of the address.)
2. Include organization and full name with the ad submission.
3. Submit ad in writing. No phone-ins.
4. Type or print ad legibly; use accepted abbreviations.
5. **One ad per issue.**
6. We will not run the same ad more than twice.
7. No "for rent" ads except for employees on temporary assignment.
8. No commercial ads.
9. For active and retired Sandians and DOE employees.
10. Housing listed for sale is available without regard to race, creed, color, or national origin.
11. Work Wanted ads limited to student-aged children of employees.
12. **We reserve the right not to publish an ad.**

MISCELLANEOUS

AIR HOCKEY TABLE, commercial quality, 7-ft., w/electronic scorer & accessories, excellent condition, $625. Arnold, 837-0628.

GARAGE DOOR, single car, metal, w/all parts, folding-type, perfect condition, $100 OBO. Saavedra, 864-9626.

DOT MATRIX PRINTERS, $20 ea.; tubular twin bed, white, $25, w/mattress, $60; Compaq iPAQ w/printer, $275. Schwerkoske, 821-0835.

MANZANO ARCHERY CLUB, 3-D target shoot, Oct. 11, registration 8-9 a.m., adults $15, youth $7, under 12 $5, call for base entry procedures. Reed, 883-2818.

PINBALL MACHINE, Chicago Coin's Top Ten, 5-ball, works well, $250. Schneider, 270-4941.

JEEP SOFT TOP, '87-'95 Wrangler, Besttop Supertop, tinted & clear windows, includes hardware & instructions, $375. Hunt, 858-1927.

SOFA & LOVE SEAT, solid oak frames, w/cushions, $250; coffee table, $50; excellent. Schindwolf, 831-1940.

CANNING SUPPLIES: canner rack, jar lifter tongs, mason lids, 7 assorted jars w/rims, $10 OBO. Compton, 899-0679.

BALLET BAR, free-standing, 2 adjustable bars, $75 OBO; DirectTV dual LNB dish, 2 receivers, free. Hamilton, 379-0339.

LAWN MOWER, 3.5-hp, rear bag, runs well, $35. Lenberg, 266-8988.

SOFA, mauve velvet, curved button back, toss pillows, matching love seat, excellent condition, $75 both. Weaver, 296-0992.

ESTATE/MOVING SALE, 903 Loma Linda SE, Oct. 17-19, furniture, kitchenware, exercise equipment, TV, stereo, everything. Harcourt, 268-0218.

TIMESHARE, Fairfield Pagosa, 2-bdr., tri-level, fireplace, Nov. 14-21, 2003, between Wolf Creek/Purgatory Ski resorts, $475. Hernandez, 831-1191.

DOVES, 2 male, tan & white, wings are clipped, cage included, to a happy home, paid $100. Sanchez, 315-5075.

COMPUTER DESK, large armoire, light oak veneer, desk swings out for extra work space, excellent condition, $275. Serna, 899-9618.

COMPACT HOME GYM, 155-lb./310-lb. weight stack, 4' x 2', 80 different exercises, arms, legs, chest, back, abs, cardio, $300. Klein, 797-2407.

VACUUM CLEANER, Sears, heavy-duty, Power Plus, w/attachments, works fine, $35. John, 345-4006.

ENTERTAINMENT BOOKS, benefits Shandiin Child Development Center, can deliver on base or pick up at center. Flores, 845-5013.

HUNTING ACCESSORIES: camouflage binocular cases, new, $6; range finder cases, $8; padded scope cases, $10; fanny packs, $15. Gibson, 332-2714.

POOL TABLE, 4' x 8', Murrey, 1-in. slate top, great shape, $950. Duncan, 271-2718, www.swcp.com/duncan.

ORLEY WOOD STOVE, excellent condition, $400. Stubblefield, 298-2991.

COMPUTER, dual processor, Anthlon MP2000+, 1GB DDR RAM, 120GB HD, DVD, CDRW, $500; 17-in. LCD monitor, $300, both $725. Rankin, 866-210-0159.

PROPANE BARBECUE, tank not included, good condition, $50; deep cut band saw, $100; concrete vibrator, never used, $150. Dwyer, 271-0741.

SKI RACKS, Yakima, $60; Nissan mounts extra, $15; women's mountain bike, 19-in. Raleigh, like new, $75. Porter, 463-9451.

OLYMPIC WEIGHTS BENCH, curl bar, bench press bar, steel weights & collars, 16 weights, $300 OBO. Chavez, 861-0712.

SOLAR HEATERS, 5, used, 4' x 8', 3 for water, 2 for air, $75 ea.; body building machine, Weider brand, $75. Krein, 899-8312 or tpkrein@aol.com.

TIMESHARE, Orlando, 5-star resort, sleeps 5-8, week of Dec. 28, $1,000. Williams, 875-1262, ask for Kim.

CHAIN-LINK GATE, 2-pc., 70"H x 81"W, two 91-in. support poles, $50. Szydlowski, 332-8018, ask for Marilynn.

COUCH & CHAIR, brown, soft vinyl, seats 2, solid wood frame, very comfortable, good for spare room, $150. Murphy, 892-0288, ask for Ann.

BEDROOM SET, Drexel Chatham Oaks, 4-poster bed, armoire, 2 nightstands, excellent condition, appraised at $1,500, make offer. Branstetter, 890-6431.

FILL DIRT, rich, 2-3 pickup truck loads, you haul, free. Washburn, 294-5921, ask for Linda.

ENTERTAINMENT CENTER, 3-pc., formal, Drexel Chippendale, walnut/mahogany, glass shelves, lights, paid $1,200, asking $600. Willette, 296-5640.

CLASSICAL GUITAR STAND, Yamaha, electric tuner, picks, extra strings, book, makes a great Christmas gift, $150. Stein, 323-4975.

SKIS/BOOTS, 2 pair, Rosignol 160 & 170, w/Soloman bindings, used twice, excellent condition, $75 ea. Buteau, 856-7705.

FIREPLACE, cast-iron insert, extremely efficient, produces lots of heat w/small amount of wood, $250. Denney, 877-9788.

CHROME BRUSH GUARD, FOR '94-'02 full-size Dodge truck, good shape, $225 OBO. Thatcher, 730-3005.

TWO-HORSE TRAILER, "Miley," good condition, 2 saddle doors, 6' 6" high, 5-6-ft. wide, good tires, $1,395. Eisenberger, 877-7041.

WHEELCHAIR, folding, lightweight, $60. Ashcraft, 884-4934.

POLYETHYLENE TANK, 1,000-gal., turn on/off probes, in/out, overflow fittings, potable water, used 2 mos. Wright, 281-6652.

COFFEE & END TABLES, oak, $100 for all 3; Nautilus exercise & weight equipment, new, $175. Barr, 281-1858.

DUTCH RABBITS, 3 black, 1 tortoise, good pets, $10 ea. Flores, 296-7919.

DISHES, Pfaltzgraff, Perennials, "Tea Rose," 45-pc. service for 8, 6 serving pcs., 3 canisters, new, still in box, $100. DesJardins, 821-2744.

BIRD CAGE, large, queen-size, California Cages, white w/top perch & skirt, $200 OBO. Martin, 286-1699.

AEROSMITH/KISS TICKETS, great seats, negotiable price. Maestas, 480-8976.

NORDIC SKI TRACK, 20th Anniversary, w/computer, excellent condition, $100; DP Airgometer stationary bike, good condition, $50. Lee, 332-8247.

FIREWOOD, piñon, you cut & haul, free. Rexroth, 350-0879.

WHITE MOUSE, cage, cute, running wheel, food, drinking bottle, $30. Ruby, 821-0982.

CRIB, Childcraft, natural maple, w/large drawer, $250; Thule ski/snowboard rack, $75. Salazar, 243-8168.

FURNITURE: round breakfast table, 4 chairs, coffee table, all glass TV stand, bargain price, $150. Reyes, 264-1311.

HOME GYM, Image, all parts & papers, perfect condition, you haul, $200 OBO. Cox, 385-4661.

PROPANE TANK, 250-gal., valves are good, $450. Nelson, 828-2755.

BABY CRIB, portable, $25; heavy-duty stroller, $20; infant exercise saucer, $15; all in very good condition. Fitzgerald, 884-4607.

FURNITURE: Drexel, Georgian Court, triple dresser, lingerie chest, drop-leaf table, 3-pcs., excellent condition, $1,700. Harris, 858-0667.

HUGE YARD SALE, clothes galore, household items, dolls, many misc. items, Oct. 17-18, 8 a.m.-3 p.m., Menaul/Wyoming. Langwell, 293-2728.

ROTO-TILLER, Sears Craftsman, 24-in., 5.0-hp, front tine, <1 hour run time, 2 yr. extended warranty, $300. Landron, 296-4039.

BIG SCREEN PROJECTION TV, 45-in., 8 yrs. new, wonderful picture & sound, serviced recently, $500. Cocain, 281-2282.

LOVE SEAT. Martinez, 890-3225, ask for Melinda.

PEKINESE, purebred, male, 1 yr. old, neutered, black & white, no papers, needs good home, best offer. Cormican, 400-1821.

TABLE SAW, 8-in., $40; coffee table, w/glass top, $35; 8-ft. fluorescent light, w/3 bulbs, $32, gas motor, 2-hp, $30. Garcia, 888-3686.

BABY STUFF: crib, bassinette, clothes, diaper disposal, car seat, all excellent condition, call for prices. Pope, 291-1272.

COMPUTER JOYSTICK, like new, $25. Boyd, 821-4780.

GAS DRYER, Whirlpool, 7-cyl., super-capacity, brand new, excellent condition, $175. Rogers, 489-2621.

NASCAR TICKETS, 2, Phoenix International Raceway, Petty section, Nov. 2, price reduced, $100 OBO. Green, 898-3791.

VANITY, 4-drawer dresser, 1940's-style, art deco "waterfall-style", located on base, $300 OBO. Hill, 980-3867.

CRAFT SHOW, NM Quilters Assoc., 10/17, 9 a.m.-5 p.m., 10/18, 9 a.m.-4 p.m., Indian Pueblo Cultural Center. Rogulich, 298-5261.

SHOP AIR COMPRESSOR, Sanborn, 5-hp, 60-gal., heavy-duty, $800; Binks industrial paint booth, $750. Highland, 877-0673.

CHEVY TRUCK WHEEL SET, Firestone SteelTex Radial A/T, LT245/75R16E, polished chrome steel, w/lugnuts, dustcaps, $500 OBO. Arquitola, 796-0430.

GOLF CLUBS, Ping ISI-K, 3 thru pitching wedge, red dot lie, excellent condition, $300 firm. Ortiz, 610-3278.

REFRIGERATOR, Amana, w/icemaker; GE dishwasher, GE electric cooktop, $100. Clement, 293-1416.

FURNITURE/HOUSEHOLD ITEMS, from 2-bdr. condo, excellent/new condition. Lewis, 821-6688, after 6 p.m.

FURNITURE: single bed, box spring & frame, $100; 5 oak bookshelves, range in size & price. Shul, 821-4075.

COUCH, large, seats 4, Southwestern pattern, beige w/earth tones, good condition, $125. Oberkampf, 292-4366.

DINING ROOM TABLE, w/6 chairs, 2 leaves, 42" x 65", excellent condition, $175. Knapp, 294-6359.

SWIVEL BARSTOOLS, 2, Bruener's, custom-made, light gray fabric, $60 ea. OBO. Eager, 299-6874.

DECORATIVE CARVED POLES, 4, pine, "rope-style," 8"x10', $75 ea.; Sony home theater system, receiver, 4 speakers, excellent condition, $100. Dobbs, 899-0789.

CHINA CLOSET, 5'11"H x 5'4", glass doors, 2 lights, 3 glass shelves, enclosed lower cabinets, $300. Jensen, 891-2491.

DUAL-RECLINER LOVE SEAT, leather, Flexsteel, maroon, minor cosmetic flaws, $300. Jones, 203-2338, http://rjones420.home.comcast.net.

DOWNSIZING SALE: beautiful large sofa, coffee table, hide-a-bed, queen-size bed, many decorator items. Henderson, 299-6083

TRANSPORTATION

'99 JEEP GRAND CHEROKEE, 4WD, 4-dr., ~40,775 miles, bids accepted through Oct. 17, right to refuse bids, sold as is. SLFCU, 237-7384.

'93 SATURN SL2, 4-dr., standard transmission, silver, new tires, great stereo, $2,700. Gallagher, 263-4369.

'85 TOYOTA COROLLA SEDAN, 4-dr., 154K miles, runs well, $1,000. Knight, 565-8105.

'98 SATURN SL1, 4-dr., forest green, 1 owner, 85K miles, runs great, $3,600. Welle, 822-0933.

'98 FORD F150, short bed, 80K miles, excellent condition, must sell, $6,900. Dinh, 344-9216.

'96 VW JETTA, 4-dr., 5-spd., AC, red, sporty & reliable, 96K miles, $5,300 OBO. Cassady, 924-2154.

'97 CHEVY SILVERADO, Z-71, 5.7L, 3-dr., loaded, new shocks, 112K miles, $10,995 OBO. Griego, 264-3512, ask for Daniel.

'99 FORD TAURUS SL, 41,600 miles, 6-cyl., 4-dr., call for test drive or more information, $6,800 OBO. Young, 271-7746 or 463-0422, ask for Kay.

'03 GALANT, PW, PL, CD, ABS, tint, silver, Carfax, remote, factory warranty, 6K miles, save $4,000, $17,000 OBO. Natha, 453-6345.

'98 IZUZU RODEO, silver, alarm, AM/FM/CD, standard transmission, 2nd owner, 111K miles, $6,000 OBO. Aragon, 720-1717.

'90 VOLVO 740GL, 4-dr., silver, looks good, 187,700 miles, runs well, $1,900 OBO. Brooks, 255-7551.

'00 BRAVADA, AWD, leather, new tires, 85K miles, $10,000 OBO. Prior, 281-5532.

'99 SATURN SL, 4-dr., 5-spd., 1.9L SOHC, AC, AM/FM, platinum/gray, 58K miles, hardly used due to illness, owe $6,000, asking $5,500. Baca, 345-6082.

'88 FORD F250 XLT LARIAT, 4x4, 7.3 diesel, 5-spd., long bed, well-equipped, 200K miles, exceptional condition, $4,500. Thibeau, 281-5143.

'96 AUDI A4 QUATRO, 2.8L, V6, 5-spd., loaded, pearl white, 68K miles, excellent condition, $12,999 OBO. Ogden, 350-3350.

'93 HONDA DEL SOL, FWD, AC, white, 1 owner, 113K miles, excellent maintenance & condition, $4,000 firm. Hardesty, 275-3905.

'00 TOYOTA TACOMA, 4x4, Xcab, white, TRD. pkg., CC, bed liner, loaded, 46K miles, outstanding condition, $18,950 OBO. Avila, 281-1200.

'03 MUSTANG COBRA, convertible, supercharged, 400+ -hp, very fast, sonic blue, 3,500 miles, excellent condition, $31,000. Season, 293-5006.

'88 MAZDA 626 DX, sedan, standard, AC, sunroof, CD, mechanically great, good body, 210K miles, $1,050. Hauer, 232-9240.

'00 DODGE INTREPID, V6, AT, PS, PL, cruise, alarm, 12-CD changer, white, 74K miles, $8,750. Riggin, 869-6231.

'99 HONDA CIVIC EX COUPE, 40K miles, Kelly Blue Book $12,000, plus over $10,000 aftermarket receipts, call for details, $13,800 OBO. DeBassige, 710-3775.

'99 FORD MUSTANG GT, V8, 5-spd., PW, PL, PS, CD/cassette, new tires, $12,000. Rule, 884-8762.

'95 GMC SIERRA 2500 SLE, ext. cab, diesel, long bed, loaded, 1 owner, 48K miles, excellent, $10,350 OBO. Baker, 856-6228.

'97 BUICK LESABRE, loaded, all power, alarm, 1 owner, 89K miles, below book, $6,000. Berry, 898-1400.

'01 FORD F150, 4x4, Supercrew, 4-dr., tow pkg., bed liner, AM/FM/CD, 65K miles, great shape, $18,250. Babb, 228-5225.

'00 FORD EXPLORER LIMITED, 4-dr., AT, AWD, loaded, heated seats/mirrors, sunroof, 6-disc CD, leather, 54K miles, $13,000. Dukes, 604-0615.

'94 PLYMOUTH GRAND VOYAGER, loaded, almost new tires, 1 owner, all records, 57K miles, $6,000. Furnish, 884-6626.

'98 LINCOLN CONTINENTAL, power everything, phone, 6-disc changer, recent tune-up & brakes, black, 80K miles, runs great, $9,800. Rondelli, 890-5972.

'87 VOLVO SEDAN, AT, PW, 130K miles, good tires, good condition, $900 OBO. Neff, 292-2481.

'92 CHEVY 20 CONVERSION VAN, w/ or w/out '94 self-contained 2 4-ft. trailer, both kept garaged. Harrison, 821-9099.

'97 CROWN VICTORIA LX, 4-dr., ivory, excellent condition, $6,850. Bertsch, 873-0925.

'98 HONDA PASSPORT, 4WD, AT, hitch, sunroof, leather, Blaupunkt CD, excellent condition, 75K miles, $15,000 OBO. Key, 293-2773.

RECREATIONAL

'91 CRUISE AIR, 35-ft., 2 AC, TV/VCR, Steer Safe, new awning, very clean, well kept, $24,900. Garcia, 864-6060.

SUNLITE POP-UP CAMPER, older model, sleeps 4, heater, stove, water pump, 12VDC or 110VAC, $850. Wilder, 345-0670.

5TH WHEEL, 37-ft., 3 slide outs, 2-ton AC, 5.5 KW generator, ent. & comp. center, extras, $58,750. Rogers, 286-2143.

'02 HONDA CBR 954, re/black, Brother exhaust, garage kept, >500 miles, excellent condition, must sell, $9,200 OBO. Smith, 259-9441.

'79 CHEVY MOTOR HOME, low mileage, lots of extras, $8,900. Rehjon, 265-7799.

'98 WILDWOOD TRAVEL TRAILER, 19-ft., tandem, AC, awning, shower/bath, microwave, excellent condition, $6,900 OBO. Olguin, 450-9237.

'88 HARLEY-DAVIDSON SOFTAIL, custom color & rims, drag bar, back seat, frame dropped, 60K miles, $11,000. Gallegos, 480-5228.

DUAL-SUSPENSION BIKE, specialized A-1 ground control, size L, great condition, $375. Jones, 203-2338, http://rjones420.home.comcast.net.

'01 KAWASAKI ZR-7S, still under factory warranty, 3,200 miles, mint condition, $4,500. Colborg, 604-4915.

'98 HARLEY-DAVIDSON, Suicide Shift, custom chopper, Evolution motor, meticulous engineering, see online. Micono, 280-4629, www.chopfather.com.

'86 BOUNDER RV, 31-ft., Chevy 454, new tires, awning, generator, AC, microwave, 45K original miles, $10,500. Beck, 281-3908.

'02 HONDA CBR600F4i, yellow/black, garage kept, 600 miles, must sell, $6,000 OBO. Maestas, 228-0636.

5TH WHEEL HITCH, Reese 16K Kwik-slide hitch & base rails for short bed truck, $600. Schmitt, 281-6002.

REAL ESTATE

MANZANO MOUNTAIN CAMP, RV, view, Ponderosa, rock, peace & quiet, 1 hour from Albuquerque. Gatto, 298-8493.

10 WOODED ACRES, 2/5-acre adjoining lots, private community, Sandia Knolls, must sell both, below market value, $75,000. Smith, 286-8558 or 281-9297.

2-BDR. HOME, 2 baths, furnished den, everything new, decorated by Leishmans, Peppertree Compound, temp assignment, lease $1,600. Hanks, 250-8021.

3-BDR. HOME, 1 bath, Mossman, hardwood floors, fireplace, pitched roof, Wyoming/Moon, exceptional condition, $109,500. Malcomb, 294-6975.

3-BDR. EAST MOUNTAIN HOME, 2 baths, 1,855 sq. ft., 2.45 acres, Magic Valley, 2 yrs. old, $224,000. Feldner, 286-8157.

MOBILE HOME, w/land, & garage workshop, Elephant Butte Lake, $38,000. Martin, 869-1212.

4-BDR. HOME, 1-3/4 baths, LR, FR, DR, breakfast area, 1,910 sq. ft., 2-car garage, large lot, $136,000. Lin, 821-6183.

WANTED

FIAT CONVERTIBLE TOP, used. Crafts, 343-0773.

HOUSE TO SIT , Albuquerque area, Jan.-Feb., experience senior sitter, no fee. Otey, 916-608-9153.

WOOD & BUILDING MATERIALS, aid disabled, low-income man to build shed. Sanchez, 242-5074.

HP-17B CALCULATOR. Chavez, 265-7331.

GOOD HOME, black lab, 7 mos. old, very playful, good w/kids. Ziska, 270-0869.

SPANISH TUTOR, conversational, for struggling high school student. Smith, 890-3292.

EMISSIONS COMPONENTS, '75 Ford F100, 360 air pump manifold, air pump bracket. Chavez, 242-1677.

NANNY, Big Brother/Big Sister, transporting & in-home care for teen, housekeeping, meals, car & references, Westside. Weeks, 401-0786.

CHORAL MEMBERS, The Harmony Project, SATB Community Service Chorale, auditioning all sections, rehearsals Mondays 7:30-9:45. Werling, 410-9981, ask for Julie.

HOUSE SITTING, newlyweds, looking for long term, after the first of the year. Ashwill, 888-3562.

MUSICIANS, join bass player interested in playing the blues. Hammond, 823-9619.

SYBERIAN HUSKEY, or Alaskan Malamute puppy, papers not required. Armijo, 552-9762, ask for Lisa.

KEYBOARDS, donated to new teacher, for handicapped students. Rodacy, 293-2668, ask for Melissa.

CAMPING & BACKPACKING GEAR, to be donated by OA Cheyenne Chapter to needy Boy Scouts. Mileshosky, 266-5901.

PET CARRY-ON TOTE, rent or borrow, airline-approved, for puppy. Roseth, 856-6964.

APPLE-HEAD CHIHUAHUA PUPPY, any color, male, will wait for upcoming litter, reasonable price. Fleming, 237-0908.

LOST & FOUND

LOST: since July 20th, tan/white Chihuahua, pink spots on chest, neutered male, goes by "Milo." Martinez, 610-0993.

Hunger is not an incurable disease

Roadrunner Food Bank, a United Way agency, helps feed the hungry in New Mexico

What will breakfast be today? Should it be toast and cereal or yogurt and a banana? This seems like such a meaningless question. Who cares?

The sadness of it all is that there are people in our community who cannot make that statement. To them it is not what do I eat, but when do I eat. If they eat now they cannot eat later. They have little to eat.

According to the Roadrunner Food Bank, a United Way agency, childhood poverty in New Mexico is at 27.1 percent. There are 62,000 children a year served through the different agencies and pantries. New Mexico ranks No. 1 in childhood poverty, No. 1 in food insecurity (not knowing where the next meal is coming from), and No. 3 in actual hunger. The population of Rio Rancho is close to 54,000. That is also the number of people needing assistance during the year. One out of six people in New Mexico need help each week.

Food for Kids, a program initiated three years ago, furnishes meals to 1,200 kids in 23 schools in New Mexico. This is great, but what about the rest of the week? Some children go hungry on weekends. Through the Food for Kids Program backpacks are filled with food that children can serve themselves. The backpacks are used so that the children are not teased. When the program first started there were instances where the child would not eat — the food was always given to another sibling. Now if it is known there are young children in the home, there is enough food packed for them also.

What toll does going hungry take on children? For starters it robs them of a childhood. Never mind that they don't develop, are prone to illness, and don't feel normal. The horn-of-plenty seems to have gone right past them.

More than 600 agencies throughout the state are served through the Roadrunner Food Bank. These are agencies like Meals on Wheels, and numerous shelters and food pantries. Six different agencies pick up food every half hour at the warehouse.

Roadrunner Food Bank receives 6 percent of its funding from the United Way of Central New Mexico. Less than 1 percent of its total budget is used for overhead. The bulk of the funding is spent on transportation, including refrigerated trucks to transport the perishable goods. To help this many people, volunteers and donations are always needed.

According to Melody Wattenbarger, executive director of Roadrunner Food Bank, their long term goal is not like any other business's. They would like to lock the warehouse doors and never open them again. That would mean that the cure for hunger has arrived. But until that happens, there is always the Roadrunner Food Bank. For more information on the Roadrunner Food Bank go to http://www.rrfb.org/

ECP stories by Iris Aboytes
Photos by Bill Doty

The OPQC Community Outreach Team and Corporate Community Involvement will be teaming for the Roadrunner Food Drive Oct. 2-Nov.15. Look for boxes in your building. Posters throughout the Labs describe the items needed and the ways to help. Contact Darlene Leonard at 844-8024 or Monica Lovato-Padilla at 844-5512 for information.

Sandia's ECP campaign begins Oct. 20

Sandia's Employee Contribution Plan (ECP) campaign runs Oct. 20-Nov. 7. John Merson (6000) is chairman of this year's campaign. John believes in giving Sandians the tools to make their own choice.

"There should be joy in giving," says John. "There is no gift too small. It is together that all of our small gifts can make the greatest difference. I would like to encourage everyone to share their experience in giving personally with others.

In this age of e-mail and voicemail, the face-to-face connection has been lost. By giving we change the story, as we ourselves change.

If you have questions, call John at 844-2756 or Juanita Sanchez (12660) at 844-1307. Juanita is in her 12th year as Sandia's ECP Program Manager. For more information on this year's campaign go to www-irn.sandia.gov/event/ecp/training/trainingindex.html.

Who/what is the United Way of Central NM?

United Way of Central New Mexico was founded in 1934 as the Albuquerque Community Chest. It has operated since that time as an organization run by local volunteers whose purpose is to build a stronger community through the efforts of a diverse group of volunteers and donors.

United Way of Central New Mexico is, and always has been, a local organization. All local United Ways across the US are local organizations run by local volunteers. For each of those 1,400 United Ways, United Way of America serves as a trade association. The United Way of Central New Mexico became affiliated with the United Way of America in 1972.

In 1992, Bill Aramony was president of United Way of America trade association. He was fired and later convicted of misusing funds for his personal benefit. He was in prison for eight years, the full term allowed by law, and was released last year. Many people still mistakenly believe that local United Ways are chapters of United Way of America. This is not true nor has it ever been true. United Way of America has no influence or control over United Way of Central New Mexico.

United Way's Corporate Cornerstones Program underwrites administrative costs, allowing 100 percent of the money donated by individuals to go to help the people in the community who need it most. No donations go to pay for administration.

Each year more than 200 volunteers provide a rigorous, informed, and fair review for programs that seek United Way funding. It is their task to inspect, ask questions, and get answers.

Anna Nusbaum (9612) is chair of the Community Impact Council, and Pam Catanach (12650) is one of 18 panel chairs of the Community Fund Review Panel. Programs are examined for need, efficiency, effectiveness, and financial accountability. This process, unique to United Way of Central New Mexico, provides quality assurance on behalf of all donors.

As a service to the donor, those who wish may designate all or part of their gift to any 503(c)(3) human service agency, program, or federated campaign. In either case, the donors decide. Any donor is welcome to participate on the citizen review panels. Call 247-36781 or go to http://www.uwcnm.org/ for further information.

What is the United Way Community Fund?

When you give money to charity you expect the charity to spend your money wisely, on services that make a difference — the biggest difference possible. You want accountability and quality insurance. You want to empower those who are least able to help themselves.

One of the most powerful ways to help our most vulnerable neighbors is through the United Way Community Fund. By combining your gift with others, more can be done. The United Way Community Fund is focused on service to the most vulnerable people in Central New Mexico. Its primary focus areas are: increasing self-sufficiency, improving health and wellness, and helping children and families succeed.

In giving through the Community Fund, you are giving the gift of power — the power of self-sufficiency, health, and wellness, and the power to strengthen children and families. It was through the Community Fund that Lewis Bird was helped. See the Sept. 19 *Lab News* article at www-irn.sandia.gov/newscenter/news-frames.html

Hunger is not an incurable disease

Roadrunner Food Bank, a United Way agency, helps feed the hungry in New Mexico

What will breakfast be today? Should it be toast and cereal or yogurt and a banana? This seems like such a meaningless question. Who cares?

The sadness of it all is that there are people in our community who cannot make that statement. To them it is not what do I eat, but when do I eat. If they eat now they cannot eat later. They have little to eat.

According to the Roadrunner Food Bank, a United Way agency, childhood poverty in New Mexico is at 27.1 percent. There are 62,000 children a year served through the different agencies and pantries. New Mexico ranks No. 1 in childhood poverty, No. 1 in food insecurity (not knowing where the next meal is coming from), and No. 3 in actual hunger. The population of Rio Rancho is close to 54,000. That is also the number of people needing assistance during the year. One out of six people in New Mexico need help each week.

Food for Kids, a program initiated three years ago, furnishes meals to 1,200 kids in 23 schools in New Mexico. This is great, but what about the rest of the week? Some children go hungry on weekends. Through the Food for Kids Program backpacks are filled with food that children can serve themselves. The backpacks are used so that the children are not teased. When the program first started there were instances where the child would not eat — the food was always given to another sibling. Now if it is known there are young children in the home, there is enough food packed for them also.

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