

Cesium-trapping materials take the 'rad' out of radwaste

Cage-like molecular structures may help clean up Hanford tanks

By John German

Lab News Staff

It's hard to imagine fractions of an angstrom making much of a difference to anybody. After all, an angstrom — the unimaginably small unit of measure used to describe wavelengths of light — spans a mere ten-millionth of a millimeter.

But deep inside the decaying walls of 177 underground storage tanks near Hanford, Wash., where 60 million gallons of goeey, warm, radioactive muck promise to cost the Department of Energy \$50 billion in cleanup costs, fractions of an angstrom may soon make a big difference.

Sandia researchers, along with materials specialists at Texas A&M University, have developed materials known as crystalline silicotitanates (CSTs) that can extract cesium — historically one of the most difficult radioisotopes to separate — from the nonradioactive constituents of radioactive waste. The CSTs' unique trapping abilities are based on subtle atomic-level spatial differences between crystalline lattice planes, or layers.

The new CSTs are expected to dramatically reduce the cost of cleaning up tank waste at DOE's Westinghouse Hanford site, DOE's top environmental remediation priority, as well as other sites where radiocesium presents a cleanup headache, says

Norm Brown of Hanford Environmental Technology Dept. 6624. (See "Tanks in poor and deteriorating condition" on page 4.)

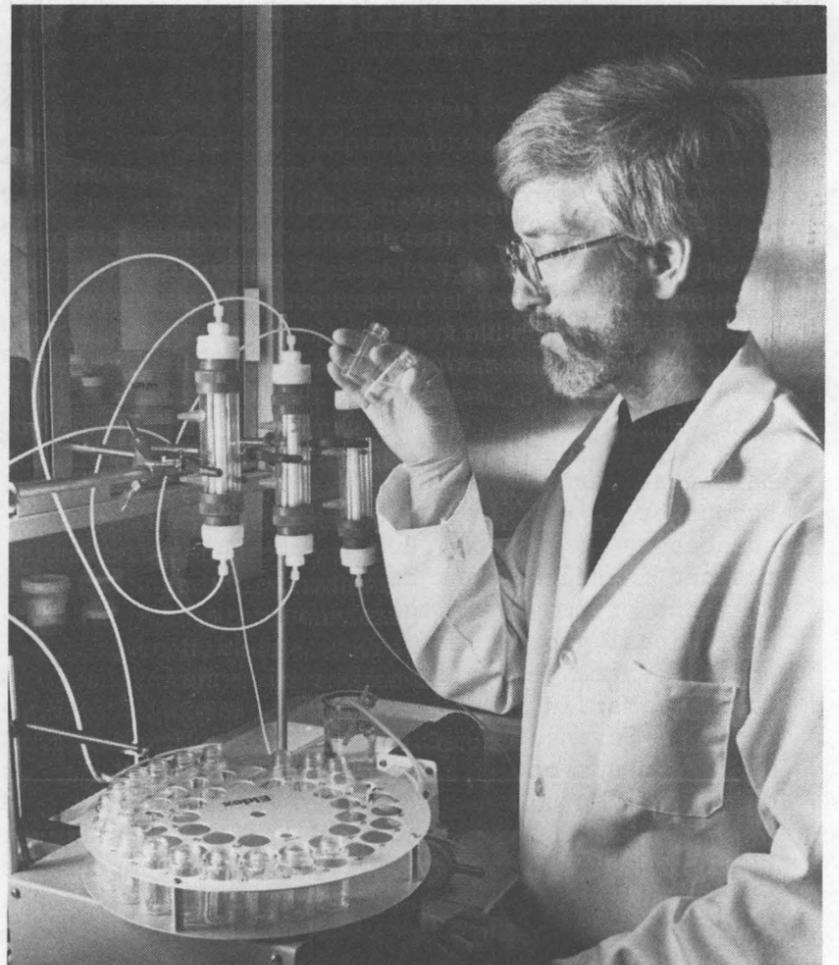
In March Sandia signed a cooperative research and development agreement with UOP (formerly Universal Oil Products) to commercialize the CSTs. (See "Agreement boasts some technology transfer 'firsts' for Sandia" on page 4.) UOP will begin manufacturing a CST powder for radwaste cleanup by late this summer.

An ion for an ion

Silicotitanates are among a class of materials known as "ion exchangers" that can swap ions (charged atomic particles) from within their molecular structures for other, similarly charged ions of a different species. Ion exchangers in home water softeners, for instance, release salt ions into incoming, iron-rich water and accept iron ions into their molecular structures. The result is slightly saline ("soft") water that's virtually iron-free.

Sandia began studying titanates, forerunners of silicotitanates, in the mid-1970s as ion exchangers to extract radionuclides in solution for radwaste cleanup applications. Early titanates were found to be useful for separating strontium and plutonium from high-sodium waste (such as that at Hanford), but not much help

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ION CATCHERS — Researchers at Sandia and Texas A&M, including Dan Trudell (6212), have engineered new crystalline silicotitanate materials that can extract radioactive cesium ions from the nonradioactive constituents of radioactive waste. Cesium has historically been one of the most difficult radioisotopes to remove from sodium-bearing waste such as that contained in underground tanks at the Hanford "tank farm," DOE's top environmental remediation priority. (Photo by Randy Montoya)

Study finds no evidence of radiation experiments on uninformed Sandia human subjects

By Howard Kercheval

Lab News Staff

A four-month review that considered enough active and archived Labs records to fill more than 43 standard 50-foot railcars, as well as other material, found no instances of human subjects being intentionally exposed to controlled substances or toxic materials at Sandia and only one of intentional exposure to ionizing radiation.

And that approved procedure, says principal investigator Bernie Kenna of Entry Control/Systems Engineering Dept. 5848, involves volunteer employee subjects receiving about the amount of X-ray exposure they would experience being outside a house for three seconds, rather than inside a house — about an additional three microrems.

That experiment, which began early this year and is expected to conclude before this time next year, uses a low-energy X-ray backscatter system that produces an image of the subject and any objects carried by the subject. It is designed to help researchers

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Among other things, the task force interviewed 34 retirees and former Sandians for pertinent personal knowledge.

Sandia National Laboratories **Sandia** LabNews

Vol. 46, No. 12

June 10, 1994

Early cleanup sought for some Labs hazardous waste sites

'We know the problems and we know how to clean them up'

Sandia is seeking permission from the Environmental Protection Agency (EPA) to clean up certain hazardous waste sites years ahead of schedule.

Warren Cox, Manager of Environmental Restoration Project Dept. 7581, says Sandia wants EPA to agree with the Labs' plan to begin "voluntary corrective measures," or VCMs, immediately on selected sites contaminated with low-level radioactivity and chemical waste.

"We know the problems at these sites and we know how to clean them up," he says. "Although the risks at these sites are very low, these measures will further reduce the potential

impacts to people and the environment."

The VCM process would allow Sandia to use environmental remediation funds more effectively and would help reduce the overall schedule for completing cleanup at Labs sites, adds Warren. Cleanup could begin immediately and would take several months. The voluntary actions would not preclude further cleanup if EPA deems it necessary.

Early cleanup is requested for these sites:

- Disposal trenches near Kirtland Air Force Base golf course — During the late 1950s or early 1960s, several sealed radioactive sources

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6 Sandians, teams to receive Employee Recognition Awards tomorrow night

8 Crane bolt replacement operation keeps Labs cranes, hoists working

This & That

Why I hate acronyms - I haven't always hated acronyms - only since they began uncontrolled breeding in an attempt to take over the Earth. Here's a particularly offensive little headline from a recent DOE contractor newsletter: "DOE DP VIP visits LV." YUK!

* * *

What a judgmental bunch! - Sandians continue to uphold our tradition of strongly supporting education in many ways. Jim Leonard (12611) reports that 89 of the 340 volunteer judges at this spring's Regional Science and Engineering Fair at the University of New Mexico were Sandians, and 12 Sandians chaired panels of judges for the fair's subject categories. Jim is Sandia's representative on the fair's steering committee. Literally hundreds more Sandians in New Mexico and California served as science fair judges at local schools this year.

* * *

Speaking of support for schools - It's nice to see that Martin Marietta, our management and operating contractor, is such a generous supporter of education. The company just provided \$1.2 million to fund an academy to keep New Mexico elementary teachers and administrators trained in science and mathematics (see story on page five), and that's only one of many ways the company is supporting education and educational groups near both of our major sites.

To name just a few more since it started managing Sandia last October, Martin Marietta has contributed thousands more dollars to the Regional Science and Engineering Fair (see previous item), to the New Mexico Museum of Natural History and Science, to reward "at-risk" high school students who turned their lives around (Thunderbird awards, *Lab News*, May 13), and to fund scholarships for Sandians' children (*Lab News*, May 27). In California, the company has also given Thunderbird awards, funded a minority mentoring program at Chabot College, contributed to a 4-H summer science camp, and more.

* * *

Who's more insulted? - During recent congressional hearings about alleged cover-ups of potentially damaging studies by the tobacco industry, I heard someone on TV say the industry was using a bunch of PR (public relations) people and lawyers to mislead congress. With a few friends in each profession, I couldn't help wondering which group was more offended at being lumped with the other.

* * *

Quick spelling quiz - What's the most frequently misspelled two-letter word? There shouldn't be many, right? But somewhere around five percent of the people who submit classified advertisements to the *Lab News* preface them with a statement like this: "Please run this add in the next issue."

Actually, add isn't misspelled, but it's the wrong word. The short form of advertisement is "ad," only one d. Now that I've noted this, we'll be rejecting all advertisements that come in saying, "Please run this add. . ." OK, OK, just kidding! What we're really going to do is publish a list of "add submitters'" names every six months! Just kidding again, but I'm sure you're grateful for this free lesson and that we'll never again get another "add."
- Larry Perrine

Sandia LabNews

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Sandia National Laboratories, a prime contractor to the US Department of Energy, is operated by Sandia Corporation, a wholly owned subsidiary of the Martin Marietta Corporation.

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Published Fortnightly on Fridays by
Employee Communications Department 12660

MARTIN MARIETTA

Fun & Games

Soccer - Registration for Sandia Soccer Association summer recreational league is due June 13. This recreational, non-competitive summer soccer league is open to all Sandia employees and dependents and all members of SERP, including DOE. Send registrations to Louis Restrepo at MS 1141. Include name, mail stop, phone, skill level, and whether you wish to volunteer to referee or be a team captain.

* * *

Golf - The Cystic Fibrosis Association fund-raising golf tournament will be held June 17 at the Paradise Hills Golf Club, with a shotgun start at 1:30 p.m. Format is a four-person scramble. Entry fees are \$100 per person or \$500 for a corporate team. Entry fees include greens fees and cart, live auction, dinner, and entertainment. For more information, contact Ginny Clark (5402) on 857-0434.

* * *

More Golf - The Erin Trujeque Annual Memorial Golf Tournament will be Friday, July 8, at the UNM Championship Course. Registration opens at 6:30 a.m. Entry fee is \$85 for adults and \$15 for juniors, and includes the golf, cart (adults only), beverages, lunch, party, and more. The tournament was established in memory of Erin Trujeque, who died of cancer in 1985. The tournament benefits the New Mexico Children's Cancer Fund. For more information and registration forms, call John Ledwith (2013) on 821-9154, Diana Trujeque on 865-4896, Richard Pena on 866-0344, or Edd Bush on 884-8061

President's quarterly dialogue sessions begin next Wednesday

Sandia President Al Narath will address employees during quarterly dialogue sessions June 15 at the New Mexico site and June 30 at the California site. Sessions were originally planned for early May but were postponed because of last-minute scheduling conflicts.

Particular topics will be the status of strategic planning and the new information architecture effort, and a question-and-answer period will follow. All employees are encouraged to attend.

New Mexico sessions will be held Wednesday, June 15, in the Technology Transfer Center (Bldg. 825) at 8:30 and 10 a.m. Employees with last names beginning A-M should attend the 8:30 a.m. session; N-Z the session at 10. Another session will be held at 1:30 p.m. in the BDM Bldg., primarily for employees located there.

California sessions will be Thursday, June 30, at 1 and 2:30 p.m. in the Building 904 auditorium. Employees with last names beginning A-M should attend the 1 p.m. session; N-Z the session at 2:30.

TLC program sponsors Saturday health fairs at Sandia Credit Union

Preventive Medicine and Employee Assistance Dept. 3335's Total Life Concept (TLC) program will hold a Health Fair at the Sandia Laboratory Federal Credit Union's (SLFCU) Juan Tabo office the next two Saturdays, June 11 and 25. TLC staff members will offer several health-screening tests to active and retired Sandians and family members. Screenings include cholesterol testing and blood pressure checks. Samples of low-fat snacks will be available, and you can score nutrition and stress life-styles with a fast, computerized questionnaire. Wear comfortable, loose-fitting clothes if you plan to attend the fair on June 25 so you can have your body fat percentages measured.



SLFCU is also offering three evening classes for the family in July at the Juan Tabo office in the basement conference room, 7-9 p.m. On July 13, Betty Caponera (3335) will talk about "Teen Stress." Learn ways to help your teenagers increase their abilities to deal successfully with stress. Lisa Herzig (3335) will discuss "Kids Eat Too" on July 19. Find out the latest information about nutrition requirements for children and learn ways to get them to eat healthy foods. On July 28, Linda Duffy (3335) will talk about "Family Fitness."

Retiring and not shown in LAB NEWS photos: Arlen Baldwin (2222), Vernon Marsh (2882), Charlotte Gilmer (10604), Carl Longerot (2277), Betty Gray (3531), Wayne Corbett (1341), and Jerry Foley (1434).

Take Note

Retiring and not shown in LAB NEWS photos: Arlen Baldwin (2222), Vernon Marsh (2882), Charlotte Gilmer (10604), Carl Longerot (2277), Betty Gray (3531), Wayne Corbett (1341), and Jerry Foley (1434).

Congratulations

To Sara Lanham (8613-3) and Glenn Peterson, a daughter, Nicole Elizabeth, April 5, 1994.

To Jaye (5913) and David (9217) Bullington, a daughter, Tracy Nicole, May 20.



Sandia helps diamond-tipped tools make the cut

Testing Crystallume's coated cutters

Working under the National Machine Tool Partnership program funded by DOE, Sandia scientists have teamed up with an innovative private company to test the performance of new diamond-coated tungsten carbide cutting tools.

Developed by Crystallume of Menlo Park, Calif., a leader in the emerging field of chemical vapor deposition (CVD) diamond coatings, the coated tools are used today in nonferrous machining applications that require extended wear and higher productivity.

"Crystallume wanted to conduct extensive testing on the diamond-coated tungsten carbide cutters they make, and our group — which performs research on machine tool design — had the facilities and equipment to do the job," says Andy Hazelton of Manufacturing Initiatives and Center Integration Dept. 8205. "The company is using the data we generated to verify the effectiveness of its tools, make design improvements, and enhance the process that deposits the diamond coating on the carbide."

According to Andy, Crystallume also selected Sandia to take advantage of the expertise provided by staff metallurgists, chemists, analysts, and machining employees at the California site.

"To test their diamond-coated products, we took a billet of work material, mounted Crys-

tallume's cutting tool insert into a tool holder, took standard cuts, and measured the forces," Andy says. "We also collected samples of the chips from the cuttings and studied them under the microscope to find out how well the tools worked. As a result of this project, Crystallume hopes to enhance its ability to compete with these advanced products in the cutting tool marketplace."

In addition, tests by several US manufacturers have shown that Crystallume diamond-coated tools last 15-30 times longer than conventional cutting tools, and perform at cutting speeds up to six times greater than those commonly used today.



DIAMOND-SHARP VIEW: Andy Hazelton (8205) examines tool wear through the microscope, with, from left, John Herb of Crystallume, Tim Gilbertson (8284-1), Chip Steinhaus (8205), and Paul Wright of UC Berkeley.

Andy points out that tungsten carbide cutting tools, a \$3 billion industry worldwide, have long been the workhorse of the machining world. For 10 years, industry researchers attempted to coat tungsten carbide tools with diamonds, but achieved little success due to poor adhesion qualities. Finally, in 1991, Crystallume became the first company to solve this problem, and it is currently scaling up its production systems to meet customer demand in the automotive, aerospace, and other key industries. —Michael Sheehan

Sandia California News

Human subjects

(Continued from page 1)

determine the effectiveness of systems being developed to detect contraband.

It is a DOE-sponsored experiment that followed Sandia Human Studies Board (HSB) requirements for informed consent, and the DOE guidance in 10 CFR Part 745 and DOE Order 1300.3, Protection of Human Subjects.

Protocols documenting each human subject experiment "currently are approved on an annual basis by the HSB and by DOE headquarters," says the report, issued by the 22-member Human Subject Experimentation Task Force, which began its study in early January.

The task force did not uncover any evidence that Sandia sponsored or participated in any experimentation involving the deliberate exposure of human subjects to controlled substances or toxic materials, it says.

Medical, scientific experiments

The task force was formed in response to DOE Secretary Hazel O'Leary's Dec. 23 announcement of an independent review of human medical and scientific experiments conducted under the auspices of DOE and its predecessor agencies.

Although Sandia was charged with identifying experiments involving intentional exposure to ionizing radiation, controlled substances, or toxic chemical substances, the task force actually reviewed all identified occurrences of possible human experimentation at Sandia.

During the course of its investigation, task force members:

- Either reviewed, or had certified on the basis of personal knowledge of someone directly responsible for them, the contents of nearly 276,000 cubic feet of records — enough to fill more than 43 railcars.

- Used key word, subject matter, author name, and other methods to search data bases of inactive and archived records — 121 cubic feet of which were reviewed page by page.

- Used key word and index searches to identify material in more than 73,000 Sandia-prepared reports in the Technical Library — including 127 SAND Reports and other library materials identified through the key-word search, inactive files, and recollections of former Sandians that were reviewed in detail.

- Interviewed 34 retirees and former Sandians for personal knowledge that may have been pertinent to the investigation of human experimentation at Sandia.

The review identified a number of experiments involving the use of toxic materials, but task force members found that anyone exposed to such materials was required to wear appropriate protective clothing to preclude actual exposures.

Two interesting bits of information also turned up. Many individuals recall a "Monk Schwartz memo" — Siegmund "Monk" Schwartz was President of Sandia from 1960-66 — that had established a policy that Sandia would not participate in any human subject experimentation involving ionizing radiation.

In addition, one long-time Sandian recalled that Highland High School students may have

been employed in the mid 1950s and assigned to collect debris that could have included depleted uranium. (Depleted uranium is the substance remaining after U-235, the isotope used in weapons production, has been extracted from uranium ore; once considered harmless and used in such common applications as weighting desktop tape dispensers, the substance is used less today in view of heightened concerns over safety issues. Sandia has used depleted uranium in various types of rocket-sled tests and other field tests over the years.)

No documentation for recollections

Despite what task force members were told about the Monk Schwartz memo, they were unable to find any written evidence supporting the existence of such a document.

Evidence about Highland High School students was equally inconclusive. The task force found documentation that a number of people under the age of 18 were employed in the late '50s, but there was no evidence that any of them were the subjects of experimentation or exposed to job risks "outside the scope of normal employment duties."

The task force report, submitted to DOE by Labs President Al Narath May 23, concluded that with the exception of the DOE-approved ongoing backscatter experiment involving extremely low-level X-rays, there is no evidence that Sandia ever sponsored experiments deliberately exposing human subjects to ionizing radiation, controlled substances, or toxic materials.

Cesium trappers

(Continued from page 1)

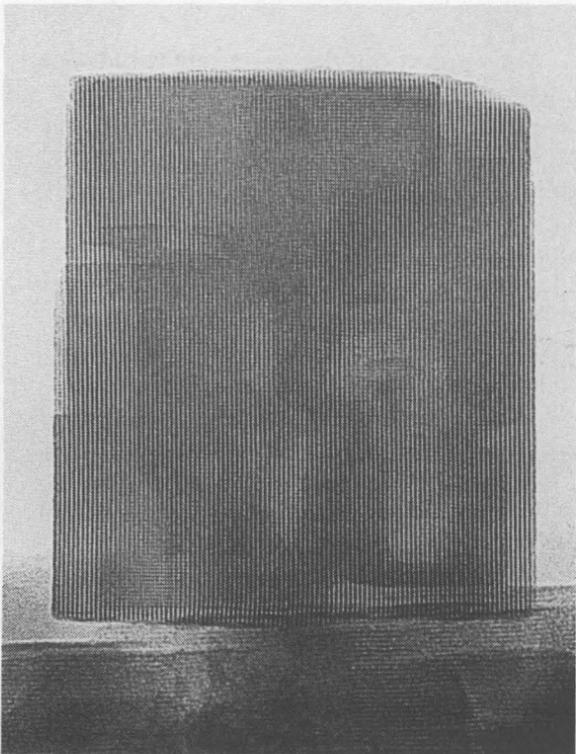
in nabbing cesium. Silicotitanates later showed promise as catalysts for turning coal into liquid fuels (coal liquefaction) as well.

Research on both fronts led to a new development a few years ago, when Sandia chemist Bob Dosch (dec.) and Texas A&M researchers Ray Anthony and C.V. Philip set out to design a crystalline form of the material — a “crystalline silicotitanate” — that would exhibit high selectivity for certain ions and lead to a more efficient coal liquefaction process. Elmer Klavetter of Process Research Dept. 6212 began coordinating CST work after Bob Dosch died in March 1993.

A choosy new radioisotope catcher

The researchers believed a crystalline silicotitanate would act as a molecular trap, its cage-like molecular structure capturing ions small enough to reach vacant bonding sites within the structure and rejecting larger ions. By varying the elemental composition of a CST, openings in the structure could be adjusted within fractions of an angstrom, thereby determining which ions fit and which didn't.

In early 1992, researchers in Depts. 6212 and 6624 surmised that a CST that could selec-



PHOTOMICROGRAPH of crystalline silicotitanate material shows the cage-like molecular structure that allows the material to capture ions small enough to reach vacant bonding sites within the structure, such as cesium, and reject slightly larger ions, such as sodium.

Tanks in poor and deteriorating condition

Sitting silently at the bottom of 177 underground storage tanks at DOE's Westinghouse Hanford site resides the by-product of 50 years of nuclear materials reprocessing — 60 million gallons of warm, highly radioactive mixed waste.

The chemical makeup of most tanks is uncertain due to years of poorly documented waste management. Complex chemical reactions inside some tanks cause episodic buildups of explosive gases. One tank is nicknamed the “hydrogen burp tank.”

Many of the tanks' walls are deteriorating. Currently 67 of the 149 single-shelled tanks are presumed to be leaking. “The condition of the tanks can best be described as poor and getting worse,” says Norm Brown (6624), a member of the DOE “Red Team” that completed a 1992 independent technical review of the Hanford tank farm.

Tank waste typically consists of three

layers: a layer of sludge at the bottom, covered by a layer of water-soluble salt-cake, and topped by a layer of liquid waste. Radioactive cesium-137, the primary gamma radiation emitter and heat producer, is concentrated in the top two layers.

Cesium-137 is particularly problematic at Hanford for two reasons. One, because of its relatively short half-life (30 years), it will cause temperature rise in the tanks for 150 years or more, contributing to gas generation and tank deterioration. Two, it hampers cleanup by contaminating waste treatment equipment. Removing cesium first minimizes the amount of high-level waste that ultimately must be disposed of, says Norm.

Current estimates to clean up the Hanford site range from \$50 billion to several hundred billion dollars. “This is DOE's most pressing and difficult environmental remediation problem,” he says.

tively capture cesium might be useful for cleanup applications at Hanford. (Cesium has impeded cleanup efforts at Hanford because every radioactive cesium atom in the tanks is accompanied by 100,000 nonradioactive but chemically similar sodium atoms. Traditional ion exchangers used for radwaste cleanup can't efficiently distinguish between the two.)

Sodium doesn't fit

Fortunately, says Elmer, the two elements (cesium and sodium) don't appear by themselves in the Hanford tank waste. Each combines with water to form a slightly different-sized molecule. “The sodium-with-water molecules are slightly larger than the cesium-with-water molecules,” he says.

That subtle difference allowed the researchers to engineer a material with a propensity for cesium.

The new CSTs are designed so that positively charged cesium ions from waste must travel down narrow ‘channels’ in the CST molecular structure to reach three vacant, negatively charged bonding sites. The slightly larger sodium molecules don't fit.

The researchers found that a CST with exactly 7.8 angstroms between lattice planes exhibits the greatest selectivity for cesium. Lattice spacings of slightly more or less reduce the degree of selectivity significantly, Elmer says.

“We ran through dozens of formulations,” he says. “Experience tells you what formulations might work, but until you try

you don't know what really does work.”

Two ways to treat tank waste

Using the new CSTs, waste inside the Hanford tanks can be treated in two ways, says Norm Brown. One method is to pump a tank's liquid contents out through a column containing the CSTs, trapping the radioisotopes in the column. The other is to dilute the top two layers of waste, then mix in powdered CSTs and other ion exchangers. The CSTs would trap the radioisotopes and sink to the bottom.

In either case what's left over is millions of gallons of relatively benign aqueous waste and a small amount of solid CST material highly contaminated with radionuclides. The goal is to reduce the cesium concentration in the liquid waste from 10 parts per million to 1 part per billion, allowing it to be disposed of as low-level radioactive or mixed waste. The highly contaminated solid waste could then be vitrified (melted into hard, glassy logs resistant to leaching) and stored in a federal high-level waste repository.

Tests show the new CSTs to be about 100 times as efficient at trapping cesium as other commercially available radionuclide-removal agents, which significantly reduces the volume of high-level radioactive waste that must eventually be vitrified and stored.

“At \$1 million per high-level waste canister, the less waste the better,” says Elmer. (\$1 million is the estimated cost for each large canister of high-level waste to be removed,

(Continued on next page)

Agreement boasts some technology transfer ‘firsts’ for Sandia

The recent cooperative research and development agreement (CRADA) with UOP (formerly Universal Oil Products) boasts a few technology transfer “firsts” for Sandia, says Vic Chavez of Technology Applications Dept. 4212.

It was the first CRADA to result from a competitive selection process, in which a CRADA partner was formally chosen from several candidate companies that expressed interest in a specific Sandia technology.

Thirty-three companies responded to a March 1993 advertisement in *Commerce Business Daily* requesting an industry partner to help commercialize crystalline silicotitanates (CSTs) for radwaste cleanup. UOP was selected from two finalists based on site visits and for-

mal proposals submitted to a Sandia/Texas A&M evaluation team.

“That's important because it represents true fairness of opportunity,” says Vic. “By initiating a cooperative, objective search to find the most qualified industry partner, Sandia provided an opportunity for all interested companies to participate.”

It's also the first time a Sandia CRADA used internal funds from the Laboratory Directed Research and Development (LDRD) program, he says. Other CRADA funding came from DOE and Westinghouse Hanford. (Radwaste applications for the CSTs were developed with LDRD funding as well.)

Under the 18-month, \$1.1 million CRADA signed March 2, UOP will begin

manufacturing CSTs for radwaste cleanup by late summer. Initially the CSTs will be produced in powder form, but by early 1995 UOP hopes to begin producing them in some other form — pellets, spheres, or columns — that can more easily be handled and stored.

As part of the agreement, UOP gets exclusive license to produce CSTs for radwaste cleanup applications. Sandia and Texas A&M will share royalties. Further development of CSTs for catalyst and absorbent applications is expected to lead to future technology transfer opportunities.

UOP, a joint venture company between Union Carbide and Allied Signal, manufactures ion exchangers, catalysts, and molecular sieve absorbents.

Martin Marietta funds New Mexico math & science academy

Will begin training elementary school teachers, administrators next year

The Martin Marietta Corporation has teamed with the University of New Mexico, the New Mexico Department of Education, and the Governor's Office to bolster math and science education in elementary schools throughout the state.

The new program creates an endowed Martin Marietta/UNM Mathematics and Science Teachers Academy for Professional Development, which will help keep elementary teachers and administrators up to date with developments in the fast-changing fields of science and mathematics.

Initial funding comes from a \$1.2 million grant from Martin Marietta, Sandia's management and operating contractor. The State Department of Education is providing \$35,000, and UNM is donating in-kind support, primarily classroom space and staff. The academy will seek additional funding from the state legislature and the National Science Foundation to ensure its existence beyond an initial five-year start-up period.

The academy's program will consist each year of a three-week summer academy, followed by monthly seminars throughout the school year at which teachers and administrators can continue to develop content and curriculum plans. The first summer academy, consisting of 40 elementary school teachers and administrators, is planned for July 1995. The first summer academy will be conducted at UNM, and future ones will rotate to other state-supported colleges and universities.

Details about the academy were released at a May 23 Albuquerque news conference.

"I welcome Martin Marietta as a major partner in strengthening math and science education in New Mexico," said Gov. Bruce King, whose office has been involved in planning the academy.

State Superintendent of Public Instruction Alan Morgan said the partnership "signals a

This is the fourth math and science academy Martin Marietta has helped establish.

new charter for public education in New Mexico by having the private sector financially assisting in an effort to improve the quality of education in our public schools."

UNM President Richard Peck said the university was honored to be a partner in the program, which he said "will improve instruction in math and science for the multicultural population in New Mexico."

"Martin Marietta and Sandia are committed to making the math and science academy a success," says Sandia President Al Narath. "Our economic prosperity and national security depend on a technically literate citizenry, and this academy will help to realize that goal."

This is the fourth math and science academy Martin Marietta has helped establish. The others are in Tennessee, Maryland, and Florida, and about 400 teachers and administrators have already benefited from those programs.

Charlie Emery, VP for Human Resources 3000, and Jerry Langheim, Director of Public Relations and Communications 12600, led the establishment of the new academy in New Mexico, and they have continuing oversight responsibility for its curriculum and financing. Both came to Sandia last fall from Martin Marietta and are familiar with the programs in the other states.

The Martin Marietta/UNM Mathematics and Science Teachers Academy for Professional Development will be coordinated by Anne Madsen, a UNM College of Education faculty



BIG BUCKS FOR EDUCATION — Gov. Bruce King (left), first lady Alice King, and University of New Mexico President Richard Peck (right) accept a king-size ceremonial check for \$1.2 million that will help finance the Martin Marietta/UNM Mathematics and Science Teachers Academy for Professional Development. Sandia Executive VP Jim Tegnalia (second from right) presented the check in the name of Martin Marietta and Sandia during a special ceremony at Albuquerque's Los Padillas Elementary School May 23.

member. It will be closely aligned with the Systemic Initiative in Math and Science Education, a five-year, statewide program begun in 1992 that focuses on integrating science, math, and technology instruction in grades K-8.

— Chris Miller

Early cleanup

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were buried in the trenches as part of a training exercise. Based on interviews with former employees, one or more thorium sources may still be buried there. One trench is eroding into an adjacent arroyo. It is believed that further erosion might bring a source to the surface.

- Tech Area 2 uranium calibration pits — Four 4-ft-by-8-ft concrete culverts were buried on end between 1978 and 1984 to test various instruments. One contains uranium oxide buried in six feet of sand; one contains eight feet of sand that was saturated with 750 gallons of uranium nitrate; one is filled with a chromium sulfate solution; and the fourth is empty. The Labs wants to remove the pits' contents and any contaminated soil surrounding them and fill them in with fresh soil.

- Tech Area 3 gas cylinder pit — Used from 1963 to 1984, the six-ft-deep, 80-ft-by-180-ft pit contains approximately 20 gas cylinders that may contain lithium hydride, picric acid, and other reactive, explosive, or toxic materials.

- Former underground storage tank in the Coyote Test Field — Because groundwater at the site is estimated to be only 50 to 80 feet below the surface, Sandia wants to assess the extent to which petroleum has migrated through the soil surrounding a 500-gal. fuel oil storage tank removed in 1989. If soil analysis confirms the need for significant cleanup, natural bacteria may be used to "eat" the petroleum.

- Cleanup of surface soil and debris with elevated radiation levels — Based on a recently completed surface radiation survey, metal fragments from explosive testing will be removed from approximately 40 sites, along with small amounts of soil surrounding the fragments. After removal, remaining soils will be scanned for radiation.

Cesium trappers

(Continued from preceding page)

vitrified, and stored.)

CSTs are also a "catch-all," he says, meaning they can trap a variety of radioisotopes in addition to cesium — strontium, plutonium, and uranium to name a few. "There are commercially available ion exchangers that can trap strontium and plutonium," he says, "but CSTs catch all those plus they trap cesium."

Norm says CSTs have potential uses at Hanford, across the DOE complex, and at commercial nuclear reactors where cesium contamination is a problem. Los Alamos and Pacific Northwest Laboratory are considering using CSTs as retardation barriers and seals to prevent radionuclide releases from repositories and other storage sites.

Several other DOE facilities have expressed interest in the CSTs for radioactive waste cleanup in soil and water, including Oak Ridge, Savannah River, Argonne, and Idaho National Engineering Lab. Tests are ongoing at various DOE facilities to determine the usefulness of CSTs for other waste cleanup applications. UOP may be targeting some for-

eign applications as well.

"So far the CSTs have worked well over a broad range of waste conditions," says Elmer. "We've seen good results for everything we've tested for."

Managers: Development of CSTs a team effort

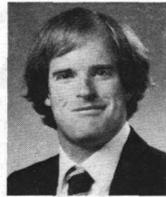
Howard Stephens, Manager of Process Research Dept. 6212, says development of crystalline silicotitanates (CSTs) for radwaste cleanup was a team effort. In addition to Bob Dosch (dec.), Norm Brown (6624), and Elmer Klavetter (6212), several other Sandians deserve credit: Jim Krumhansl (6118), Dan Trudell, Linda McLaughlin, Tina Nenoff (all 6212), and a host of others in Materials and Process Sciences Center 1800.

"This project is an excellent example of a national laboratory working together with a university and industry to provide a solution to a national need," says Larry Bustard, Manager of Hanford Environmental Technology Dept. 6624.

First annual Employee Recognition Awards ceremony tomorrow night honors Sandians, teams



Judy Odinek
1153



Jess Wilcoxon
1153



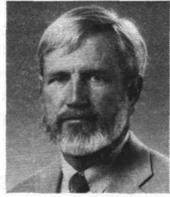
Johnny Biffle
1425



Diana Sorenson
1701



Frank Zanner
1833



Raymond Harrigan
2102



Alan Morimoto
2172



Robert Bugos
2334



George Samara
1103



Robert Bickes
2653



Jeanette Denaple
2654



Randy Normann
2663



Patrick Walter
2757



Danisha Peterson
4112



Robert Huelskamp
4112



David Nokes
5091



Frances Sanchez-Conroy
5102



Brian Joseph
5161



Paul Page
5502



David Skogmo
5838



Shirley Tormey
6000



Ronald Jacobson
6111



James Neal
6113



Sarah Sharpton
6352



Ajoy Moonka
6471



Richard Nygren
6531



Cathleen Ehgartner
6641



Ken Sorenson
6642



Charlene Harlan
6907



Mark Harrington
6907



Milrene Goodloe
7145



Irene Silva
7151



Michael Lanigan
7155



Glenda Gentry
7254



Cal Sifre-Soto
7433



Ronald Coonen
7435



Michael Patton
7435



Carol Fronczek
7583



John Vitko
8102



Nina French
8113



Phillip Kegelmeyer
8117



James Spoonemore
8284



Roger Busbee
8411



Brenda McFarland
8522



Debra Nissen
8601



Sheryl Buck
8644



Monte Nichols
8716



Ginger Common
8800



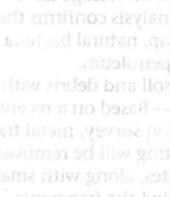
Bobbi Jackson
9215



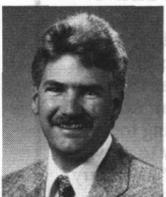
Russell Abbink
9225



Janice Montoya
9299



Paul Cooper
9333



Pat Reilly
9342



Paul Merrillat
9401



John Rowe
9432



Steven Wagner
9432



Edward Graeber
9614



Jake Romero
10328



Jennifer Crooks
10401



Gary Concannon
10501



Lori Parrott
12610



Janice Bauer
12820



Carolyn Lange
12830

Seventy-four individual Sandians and 23 additional Sandians representing teams will receive the first annual Employee Recognition Awards tomorrow night, June 11, at a formal Recognition Night dinner and reception at the Marriott Hotel. The Sandians and their spouses or guests will be treated to a dinner and an awards ceremony.

Sandia President Al Narath and Executive VP Jim Tegnalia will present each recipient with a pin symbolizing the award, which recognizes outstanding service to Sandia and the nation. Recipients will also receive a framed certificate. Also expected to participate are three Martin Marietta Corporation executives: Tom Young, President and Chief Operating Officer; Dan Peterson, Vice President for Washington Operations; and Phil Giaramita, Vice President of Public Affairs.

Jerry Langheim, Director, Public Relations and Communications 12600, and Charles Emery, VP for Human

Resources 3000, organized the awards program.

"This is the first recognition night at Sandia," Al says, "the first time we are sharing in what has become a tradition at Martin

Marietta. We will be recognizing accomplishments by individuals and teams who have contributed to Sandia's success in 1993. This work has helped make Sandia, in my opinion, a world-class national laboratory."

Jerry says the awards recognize "the talent, industry, and experience that make Sandia one of the premier R&D labs in the country."

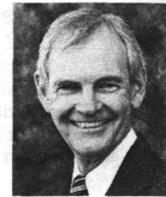
The 74 individual recipients are named and pictured here. The awards to Dick Brodie and Jake Jacobs are posthumous.

Of the 23 teams to receive awards, seven have not been announced previously. Here are those teams and their members:

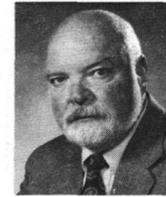
Noninvasive Blood Monitoring Team: Kathleen Alam, David Haaland, Howland Jones (all 1823), and Edward Thomas (12323).

Synthetic Aperture Radar and Automatic Target Recognition Team: Numerous individuals from Organizations 1424, 2334, 2335, 2343, 2344, 2345, 2664, 2863, 5912, 9102, 9131, 9133, 9135, and 9137.

Virtual Collaborative Environment Team: Ray Harrigan (2102), Colin Selleck (2111), Brady Davies, Michael McDonald (both



Dick Brodie



Jake Jacobs

2161), Bruce Whittet, Luis Martinez (both 1954), and Ivory Alexander (1955).

Diversity Leadership Teams: Bob Eagan (1700), Bill Dawes (3020), Mike Robles (3600), Berweida

Learson (3612), Donna Martin (10200), Warren Siemens (4200), and Mike DeWitte (12650).

Tritium Shipping Container Team: Mark Kincy (2172), Pete Stromberg (2484), Vincent Zarrella (2486), Brian Joseph, David Humphreys (both 5161), Myra Chavez, Dale Hill, Ramon Pacheco, Robert Stinebaugh, Allen York (all 5165), and Lynn Fitzpatrick (10222).

Synthetic Aperture Radar Signal Processing Team: Dennis Ghiglia (1423), Charles Jakowatz, Paul Eichel, Thomas Prevender, Paul Thompson, and Daniel Wahl (all 5912).

STARS (Strategic Target System) Navigation, Guidance, and Control Team: Chuck Borgman, Earl Creel, Corey Cook, Todd Criel, Rance Edmunds, Fred James, and John White (all 9132).

The 16 other teams honored had been named last November as recipients of the first Sandia President's Quality Awards. Team members and citations were listed

(and several team photographs published) in the December 3, 1993, *Lab News*.

The teams: Center 1800's Team for Support of the WIPP Gas Generation Program; the Intel Tank Failure Team; the Laboratory Directed Research and Development (LDRD) Process Management Team; the Robust, Wide-Range Hydrogen Sensor Technology Team; Specialty Metals Processing Consortium Project Team; the Development, Delivery, and Evaluation of Program Development Course Team.

Also, Total Life Concept (TLC) Program Team; Team That Developed a Process for a Nationwide Two-Way Teleconferencing Video on Quality Principles to DOE Stakeholders; Environmentally Conscious Soldering Initiative Team; Facilities Accelerated System Team.

Also, Team for Leadership Training at Sandia/California; Tritium Research Laboratory Transition Project Team; Sandia/California Explosive Safety Assurance Process Team; Sandia/California Team for Assessment of Compliance; Hermes III Operations Team; and the Satellite Payload Modification Team.



Jeffrey Tsao
1311



Jeffry Sniegowski
1325



Peter Dean
1951



Steven Gossage
1954



Rochelle Lari
2000



Dawn Bishop
1112



Samuel Dengler
2483



Jose Padilla
2486

Vincent Zarrella
2486

Labs' anti-crime technologies get Congressional look

Bingaman, Schroeder, Schiff see Sandia demos

By Ken Frazier

Lab News Managing Editor

Crime is high on the agenda of national and personal concerns these days, and technologies that Sandia and other national labs are adapting to help law enforcement officers got a high-profile demonstration at Sandia last week.

For two hours, Senator Jeff Bingaman (NM), Representative Patricia Schroeder (Colo.), and Representative Steve Schiff (NM), accompanied by local and national news media, were treated to demonstrations of foams to subdue unruly prisoners, sensors to keep officers' guns from being used against them, monitors to track probationers, roll-out retractable spikes to stop fleeing vehicles, and encryption and authentication techniques to ensure secure electronic financial transactions.

They saw the use of virtual reality technology to help plan and train for anticrime raids, computer technology to study accident-prone intersections, and sensor technology able to detect vapors from explosives at the less-than-6-parts-per-trillion level.

Schroeder requested demos

These are just some of the technologies being examined by the National Institute of Justice, the research arm of the Department of Justice, to apply research already done at the nuclear weapons labs to the fight against crime.

Sandia President Al Narath and Dennis

Miyoshi, Director of Nuclear Security Systems Center 5800, hosted the event.

David Boyd, Director of Research for the National Institute of Justice, says the demonstrations were at Pat Schroeder's request. As a prominent member of the House Armed Services Committee, she asked where she and her colleagues might see some of the new technological ideas for aiding law enforcement. "I decided a good place would be Sandia," says Boyd. He got in touch with Dennis Miyoshi, who set up the demonstrations.

Most came from Sandia, but there were several from the Idaho National Engineering Laboratory (including the retractable spikes). Los Alamos National Laboratory's nonlethal weapons program had a representative present as well.

"We're only looking at a very tiny part of



FOAM FOR FELONS — Tom Goolsby (9611, left) demonstrates Sandia's aqueous foam, potentially useful in subduing prison riots, to visiting Congressional delegation and hosts. Next to Tom are, from left, David Boyd of the National Institute of Justice, Sandia VP Gerry Yonas (9000), Dennis Miyoshi (5800), Representative Pat Schroeder, Senator Jeff Bingaman, and Representative Steve Schiff.

what can be done for law enforcement," Boyd told the dignitaries. "We're trying to leverage existing technologies. We're trying to meet national needs in a positive way." He added: "We've been especially pleased with the support from Sandia."

Schroeder echoed that. She said she was surprised at how much has been done in the year since she and Senator Bingaman were last at Sandia.

"Jeff and I were out here a year ago, and it's really been fast-forwarded.

"Sandia really has been very good. They have been flexible. They went out and started running right away. No one had to jump start them."

She repeated an analogy from David Boyd about the relative lack of crime fighting technology: "Today our law enforcement officers look like Wyatt Earp, except that they have a car instead of a horse."

"We need force-multipliers," she said — technological aids to tip the balance of power from the criminal to the law officers.

Expects 'tremendous enthusiasm'

She and Bingaman emphasized that it makes sense to apply research from the national labs — most of it already paid for by taxpayers — in a new way.

Referring to the so-called smart gun and other new technologies, she said, "Once the word gets out, I think there'll be tremendous enthusiasm. You're going to find law-enforcement personnel all over the country wanting this equipment."

Dennis Miyoshi told the delegation that Sandia's traditional emphasis on safety, security, and reliability as applied to nuclear weapons has a "lot of very close analogies" to technological needs of law officers. The "smart gun," which embodies user-recognizing-and-authorizing safety technology to prevent an unauthorized person from using an officer's gun, is one example he cited. He said Sandia is applying its systems engineering approach to a variety of law enforcement and criminal justice issues.

"I think it went very well," Dennis said after the event. "I think we can make valuable contributions to this important national need, building upon our DOE-sponsored capabilities and facilities."

Bureaucracy-busting earns Greg Mann a DOE award

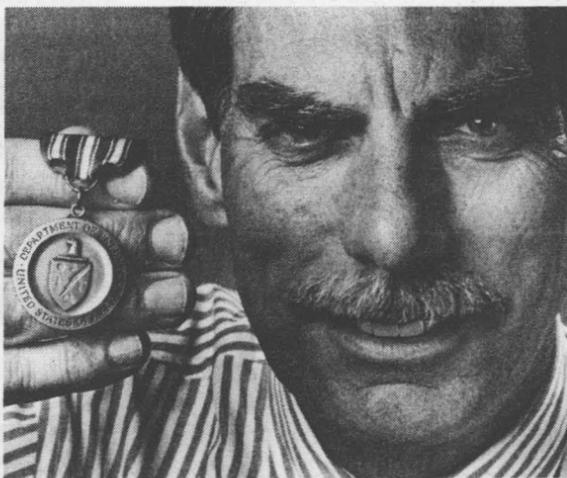
Greg Mann, Strategic Development Program Office 4503, recently earned a DOE Exceptional Service Award for reengineering a DOE departmental directive system for DOE Orders and Directives. This effort initially eliminated 42 DOE directives out of more than 300.

Greg led a 50-person team representing national labs, contractors, and the nuclear weapons manufacturing complex as part of his work on a bureaucracy-reducing effort that began two years ago. Sandia President Al Narath and other national lab directors told then-Secretary of Energy James Watkins that a lot of money was being spent on outdated or overlapping efforts with DOE directives and orders. As a result, Watkins formed the Implementation Steering Group of the Undersecretary of Energy, which chartered the Directive Improvement Team led by Greg.

"The DOE order system was in bad shape," says Greg. "There wasn't a control system in place. Anyone in DOE Headquarters could issue orders that burdened field and contractor operations."

Radio Sandia goes FM again

Radio Sandia's Bruce Hawkinson (12662) reports that the station has been authorized a new FM frequency and plans to begin broadcasting on it late next week, probably June 16. Actually, Radio Sandia will begin simulcasting at that time, continuing to broadcast on 1610 AM while beginning its new signal at 87.9 on the FM dial. The station broadcasts Sandia-related news 24 hours a day every day. Radio Sandia's original FM frequency was cancelled in mid April because of a signal conflict with another local station.



GREG MANN (4503) shows the DOE Exceptional Service Award he received for reengineering a DOE departmental directive system for DOE Orders and Directives.

"The team's accomplishments are in line with President Clinton's goal of reducing government paperwork by 50 percent," says Greg. "A second wave of directives is now being reviewed. Each DOE sector is making a commitment to assess its requirements and looking for opportunities to make the system simpler and less costly. The target is a 50-percent reduction in DOE requirements."

This is the first time this award has been given to a DOE contractor. The other three recipients of this year's awards were DOE employees.

Other Sandians on the team included Tom Poteat (12911), Terry Olascoaga (10101), John Didlake (5375), and Anton West (8414).

Crane operation proves can-do attitude still prevails

Teamwork turns fastener replacement into a success story

By Janet Carpenter

Lab News Staff

How did you spend your holiday break last December? Skiing, playing golf, relaxing with friends, visiting relatives out of state? Approximately 45 Sandia employees and contractors, including management and inspection, were getting up before the sun and heading to Sandia to work on a project to get critically needed cranes and hoists into acceptable working order.



When fasteners of the type used to construct the cranes and hoists purchased and installed by Sandia showed up on a US Customs list of suspect (uncertified) fasteners made outside the US, DOE decided that the suspect fasteners in all DOE facility cranes and hoists had to be replaced.

Because of worker safety concerns, DOE directed that, beginning Dec. 14, 1993, Sandia lock out and tag out 250 of the 1,000 cranes until the suspect fasteners were replaced with certified fasteners of traceable origin. That shut-down would have a programmatic impact to Sandia of an estimated \$1 million a day until the fasteners were replaced, the cranes were inspected, and DOE approved operations. Teams worked 10-hour days, six days a week, during the holiday break. Teamwork across the Labs and across DOE/Kirtland Area Office (KAO) and DOE/Albuquerque Operations Office resulted in 80 percent of the cranes and hoists on the initial list prepared by the Line Implementation Working Group (LIWG) being brought back up by Feb. 1.

Safety first

"Safety was of utmost importance," says Reggie Tibbetts, Supervisor of Crane, Hoist, and Rigging Team 7813-3. "We started project planning in the weeks before the holiday break, and we met our goal of 100 percent safety."

Beginning each day at 7 a.m. with a safety meeting and discussions about the previous day's results and problems and the current day's work plans, Sandia, DOE, and contractor employees and Y-12 plant crane inspectors were at work before most of us were throwing back our bedcovers. Some were picking up heavy torque wrenches when we were picking up our first cup of coffee.



TENS OF THOUSANDS of fasteners are kept in order by Bernard Alexander (right, 7813) for use in the Operation Crane Rescue Project. Each fastener and component can be traced to its manufacturer. Project leader Reggie Tibbetts (7813) is on the left.

To find out which cranes and hoists were most critical, Sandia's Working Group was asked to identify the most important cranes and hoists. The list grew to 108, but the top 25 most critical cranes, such as those used to handle hazardous material and those at the Annular Core Research Reactor (ACRR) in Area 5, needed to be completed right away.

While cranes and hoists were being prioritized, training began. Technical skills had to be the highest available. Fastener training was provided to all tradespeople. Replacement bolts were ordered and inspected by a team of contractors in Arizona. More than 200,000 fasteners and components were projected. By Feb. 1, 27,600 fasteners had been installed, and the work continues on a contract basis.

Outstanding service honored

To recognize their extraordinary efforts, Sandia President Al Narath personally presented certificates of appreciation to team members on Feb. 24. The certificates read: "In appreciation for outstanding service impacting all programs across Sandia by providing support to the Cranes and Hoists Suspect Fasteners Replacement Project. The operation was accident-free and accomplished under a demanding and unforgiving schedule."

"Teamwork, a corporate value, makes this a true success story," says Ed Williams, Manager of Facilities Shared Systems Dept. 7813. "No individual group could have done it alone. Employees from Facilities Operations and Maintenance, members of the Metal Trades Council, contractors, machine repair people, Martin Marietta Energy Systems, DOE, and Sandia management all worked together. A better understanding of operating procedures and sharing the resulting plans with other DOE facilities are benefits of this effort."

Plan developed for DOE facilities

Ed says the procedures and plans developed for the crane rescue will save other DOE contractors plan development costs and help avoid costly shutdowns. Line organizations



PRECARIOUS PERCH 30 feet above the floor — Sandia tradesmen Richard Parker (7814, left) and Mike Pacheco (7813) are harnessed to a high-bay bridge crane in Bldg. 820 as they tighten a fastener using a torque wrench. Richard and Mike are two members of the Operation Crane Rescue Project that worked on critically needed cranes and hoists during the last holiday break. Reggie Tibbetts, Supervisor of Crane, Hoist, and Rigging Team 7813-3, watches from below.

now include cranes and hoists in their Preliminary Hazard Assessments and Preliminary Hazard Classifications.

"These people sacrificed major portions of their holiday vacation so Sandia could maintain schedule commitments on a variety of projects," says Ed Graham, Director of Facilities Operations and Maintenance Center 7800. "I am proud of the professionalism they showed in attacking this critical problem, and, of course, I'm proud of the results."

The project resulted in an intensive acceptance process for fasteners — a Suspect Fasteners Management Plan for Cranes and Hoists has been developed by Sandia and approved by DOE/KAO.

Cranes and hoists project team members

Cranes and Hoists Suspect Fasteners Replacement Project Team members include: Milt Clauser (1001); Terry Lovato (2011); Bob Mattison, Gilbert Portillos, Richard Wright, and Robert Hawk (all 2482-1); Lynn Jones (7000); Albert Bendure and Zeferino Banda (both 7258); Craig Hauber and Paul Fleming (both 7732); Ed Graham, Jr., Ed Williams, Jr., Reggie Tibbetts, Jr., Bernard Alexander, Richard Dramer, Robert Kelley, Robert Whittet, Steven Schneider, Thomas Vigil, Harold Wade, Sam Anaya, Michael Pacheco, Robert Smyth, Robert Urias, Al Santistevan, Brian Guernsey, Chris Knight, Danny Baca, Mario Candelaria,

Richard Parker, Frank Moore, Richard Hammond, Shannon Letourneau, Jim Smith, and Orlando Griego (all 7800); Rick Osburn, Diane Farish, Bob Greenwood, Chris Montoya, Eric Rogers, Hank Kuhfeldt, Levi Hoover, Mike Gallagher, Mike Hebron, Rick Knotts, Rusty Martinelli, and Tom Bender (all Diversified Inspection); Cliff Suljak, Mike Pavolic, and Don Paulino (all Interstate Assessment Technologies); Kirk Westfall (contractor, 7813); Jeanne Michael (8643); Jerry Letz and Joe Madrid (both 10101); Darold Nelson and Dwayne Tackett (both Y-12 Plant); and Michelle Chavez and Jessie Brooks (both DOE/KAO).

Forum compares Sandia's benefits favorably with those of other, similar large organizations

Videotapes available; Lab News to print questions and answers

By Howard Kercheval

Lab News Staff

Sandia Human Resources representatives told employees attending a video-linked forum at the New Mexico and California sites that Sandia's benefits compare favorably with those of large companies and other DOE contractors, and that they do not expect any part of the Labs' pension funds to be sent to the federal government.

Videotapes of the two-hour forum are available at the Technical Library in New Mexico and from the Benefits Organization (Bldg. 911) in California. The *Lab News* will begin publishing questions and answers from the forum in our June 24 issue (see box).

The May 25 forum followed by a little more than a month a recommendation by DOE's Office of Inspector General (IG) in Washington that several hundred million dollars in what it called excess assets be returned to the federal government to help offset the budget deficit (*Lab News*, April 29).

That recommendation drew immediate opposition from many Sandians and from all five members of New Mexico's congressional delegation. DOE's Albuquerque Operations Office, which earlier expressed opposition to the IG's recommendation, is expected to issue its final recommendation to DOE Headquarters sometime this month.

Funds 'raid' vehemently opposed

In a letter to DOE Secretary Hazel O'Leary, Senators Pete Domenici and Jeff Bingaman and Representatives Joe Skeen, Bill Richardson, and Steve Schiff said, "We will vehemently oppose any effort to raid Sandia's 'excess' pension funds."

They wrote, "Sandia's sound management of its pension plans has saved taxpayers' money by removing the need for the federal government to make continuing contributions. Rather than being criticized, Sandia should be heralded for its success, and serve as an example to others."

The forum was moderated by California Programs VP John Crawford (8000), who was joined in California by Human Resources VP Charlie Emery (3000); Pat Smith, Director of Human Resources and Business Operations Center 8500; Charles Mika, Manager of Pension Fund/Benefit Program Management Dept. 3542; and Jo Ann Sandelin, California Benefits and Retirement Planning Counselor (8522). Albuquerque participants included Deputy Chief Financial Officer Gary Riser (10000D); Ralph Bonner, Director of Human Resources Center 3500; and Mark Biggs, Senior Planner, Insurances and Pension (3542).

Sandia compares favorably with peers

Answering written questions submitted before and during the forum, they referred to information from the opening presentation to emphasize Sandia's favorable ranking when compared with peer research and development organizations and other DOE contractors.

A 1993 survey by Hewitt Associates, a benefits consulting firm, compared and ranked the benefits received by retirees from major US industrial firms and R&D groups. Fifteen high-tech firms were surveyed for salaried-employee benefits and 20 major industrial firms for hourly-employee benefits. Sandia was not included in this survey, but when Sandia

Questions being sorted, combined for answers

Beginning in the June 24 issue, the *Lab News* will publish questions and answers stemming from the May 25 forum on the Labs' retirement funds and other benefits. Mark Biggs (3542) says the number of questions has declined markedly since the forum, but that nearly 200 had been submitted before it took place. Many others were submitted during the forum.

Because many of the questions address the same, or closely related, issues, Sandia's benefits specialists will combine them, and a single answer to each basic question will be provided. That process is under way now.

retirees' benefits are compared with those of the companies surveyed, Sandians' post-retirement benefits consistently rank within the top six.

Salaried Employees — Sandia's Retirement Income Plan would rank between 4th and 5th of the plans of the 15 firms surveyed, savings plan between 3rd/4th, life insurance above 1st, health care 4th/5th, and *all* post-retirement benefits together 3rd/4th.

Hourly Employees — Similar results are found when comparing hourly Sandia employees' post-retirement benefits. Sandia's Pension Security Plan would rank between 4th and 5th of the plans of the 20 firms surveyed, savings plan 5th/6th, life insurance above 1st, health care 5th/6th, and *all* post-retirement benefits together 3rd/4th.

(Note: These survey figures and comparisons cover only the *employer-paid* portion of post-retirement benefits).

Adjustments up more than 90 percent

To a number of inquiries about retiree cost-of-living adjustments, panel participants pointed out that from 1974 through 1991, Sandia retirees received ad hoc increases that, when the compounding effect is figured in, amount to more than a 90 percent increase.

Charlie Emery said when he announced retirement plan changes to employees on April 25 (*Lab News*, April 29) that Sandia's Board of Directors discussed the issue of ad hoc increases for current retirees, but took no action.

In a question-and-answer section of a spe-

cial bulletin announcing the changes, he said, "An important factor behind that decision was the low rates of inflation since the last increase. Another factor was the general absence of increases granted by private-sector companies to their retirees in the same period. . . . Sandia will continue to monitor changes in inflation and industry patterns."

To inquiries about Sandia's executive-level supplemental pension plans, participants explained that these plans were adopted by the Labs during the 1980s and were based on similar benefit plans at AT&T, then the Labs' management and operating contractor.

Mark says the supplemental plans now cover only 18 retirees at a total of \$28,553 a year, for an average benefit of \$132 per month per covered retiree.

Among other information provided in answer to questions submitted prior to the forum:

- Changes in retirement benefits calculations announced in April increased the actuarial accrued liabilities of the pension plans by approximately \$154 million.

- Sandia established its pension plans to be permanent, supports their continuation into the future, and "vigorously opposes" the IG recommendations.

- Assets that support Sandia's pension plans belong to the Sandia Pension Plans Trust, a legal entity separate from the Sandia Corporation, Martin Marietta, and DOE. They are held in trust and can be used only for pension plans, for as long as they exist.

- Sandia is not aware of any precedent for DOE or any other federal government agency terminating the pension plan of an active contractor to reclaim surplus pension plan funds.

The letter from the five members of New Mexico's congressional delegation also addressed the latter point, saying, "We are also very concerned that implementing the recommendation of the Inspector General would establish a precedent for raiding 'excess' pension funds. . . . Clearly, as in the case of Sandia, private-sector pension funds have experienced exceptional investment gains in the last 10 years.

"Responsible administration of those plans requires that available excesses be maintained to allow for future contingencies. Under no circumstance should this administration advocate a policy that, if implemented by the private sector, would clearly increase the risk to pension fund viability and jeopardize the livelihood of future retirees."

Fun & Games

Bowling — SANDOE Bowling Association March Bowlers-of-the-Month include: Scratch — Ron van Theemsche (2883), 647; and Frances Baca, 516; Handicap — Perry D'Antonio (12324), 588 and 684; and Eileen Marek, 507 and 648.

Golf — The Sandia Women's Golf Association (SWGGA) season kicked off with the nine-hole Easter Ball Hunt Tournament at Puerto del Sol April 9. Awards were earned by Ann Wilkey (2151), first low net; Jo Cunningham (10212), second low net; Marlene Shields (2742), first low gross; Sandy Monroe (1845), second low gross; Betty Worley (ret.), first low putts; Minnie Shurick, second low putts; and Karen Varga, third low putts.

An 18-hole tournament was held at Cochiti on April 16. Team low-net-score prizes went to Renae

Perrine (6200) and Jim Rice (6500), first; Karen (6500) and Jerry Smith (7914), second; Mary Ann Cunningham (10402) and Janet Nelson, third; Tracy Frear (1832) and Gwen Lunsford, fourth; and Minnie and Jim Shurick (ret.), fifth. Debbie Tricoglou (2486) received the closest-to-the-pin prize on hole 7, and Mary Cocco (5500) on hole 17. Participation awards went to Tanya McMullen (9401) and Yvonne Batchelor (9401), and chip-in awards to Minnie Shurick and Kathleen Geene (5908).

Boating — Learn to design and build your own unsinkable fiberglass/foam composite boat in five days in a class June 20-24 (Monday-Friday, 8:30 a.m.-5:30 p.m.). For more information, call the Personal Enrichment Program Coordinator of UNM Continuing Education on 277-1151.

Sandia Classified Ads Sandia Classified Ads Sandia Classified Ads Sandia Classified Ads

MISCELLANEOUS

- ALVAREZ CLASSICAL GUITAR, w/soft case, great for beginner, \$350. Wedemeyer, 296-2573.
- PARROT, blue-fronted Amazon, w/cage, 3 yrs. old, talks and whistles. Hebron, 291-9639.
- 386SX16, coprocessor, 1MB RAM, 2 serial/1 parallel, 5-slot/3-bay case, 100-watt supply, no drives, \$150 OBO. Glaser, 293-8110.
- FRAM AIR FILTERS, Model CA2740, fit Honda & Mazda cars, and Ford & Mazda trucks, \$4/ea. or \$7.50 for two. Schkade, 299-7439.
- COMPUTER, Atari 800XL, Model 1050, disk drive, joysticks, books, video adapter, software, 30 plus games, new condition, \$250. Hughes, 883-8784.
- BIG-SCREEN TV, GE, 45-in., oak cabinet, four-speaker stereo surround-sound, dual VCR hookups, external speaker jacks, \$700. Armstrong, 254-9230.
- RIVER ROCK, 1"-2", already piled, you load & haul, free; engine cover, for '70s Beetle, \$35. Madole, 298-6081.
- ALUMINUM VALVE LOUVERS, for Corvette, original 283/327, \$100; auxiliary gas tank, for '80-size Jeep Cherokee, \$100. Larsen, 292-7301.
- DIAMOND RING, brilliant cut, 1.25 carat, w/6 bagets (.59 ct. tw), 18K gold, appraised at \$12,000, asking \$4,000. Roseth, 856-6964.
- BED, queen-size, includes mattress, box spring, and steel frame, all in nice condition, \$150; Brother electric typewriter, w/memory, \$90. Duvall, 881-4406.
- GIRL'S SKATES, size 5-1/2, very good condition. Sparks, 884-5644 or 880-0324.
- REDWOOD PATIO CHAIRS, three, w/cushions, one is a rocker, \$35. Tilgner, 821-7551.
- TOW DOLLY, w/ straps, tail-lights, \$600. Disch, 299-8171.
- SABRE SAW, Craftsman, w/blades; soldering gun, Craftsman, heavy-duty. Pitti, 256-1629.
- ORGAN, Holiday Deluxe, w/Lowrey Symplifier Model TLOKV, and Wurlitzer piano pre-spinet 88 keys. Macielek, 821-5335.
- CAMERA OUTFIT, Olympus OM10-FC, 35mm body, 50mm lens, 135 soft telephoto, 80-210 zoom macro, w/cases, \$300. Lujan, 266-7484.
- COMPUTER, 286/12Mhz, 32MB HD, 3-1/2 & 5-1/4-in drives, 14-in. VGA monitor, 1MB RAM, software included, \$500 OBO. Tafoya-Porras, 898-4459.
- VACUUM CLEANER, Kirby Generation 3, clutch drive, all attachments, extra bags, excellent condition, \$400; exercise bike, \$25. Henderson, 281-8271.
- FORMAL DRESS, black velvet, w/white ruffle, size 9, accessories available, \$75; long bed camper shell, \$100. Estill, 883-1531.
- ELECTRIC RANGE UNIT, almond, w/oven, microwave, and hood, black glass doors, excellent condition, \$390. Banks, 291-1794.
- WATERBED, custom oak frame w/bookcase headboard, \$70; wrought iron lounge chairs, w/cushions, \$22/ea. Hanson, 298-2120.
- '80 FIFTH WHEEL, Royals International, 40-ft., washer/dryer, AC, queen-size bed, live-in or travel, \$11,500 OBO. Skogmo, 898-9140.
- STAINED-GLASS EQUIPMENT, \$50 OBO. Garcia, 298-9554.
- DOG, collie/golden retriever mix, male, 2 yrs. old, current shots, neutered. Miller, 823-1070.
- STRING TRIMMER, McCulloch Eager Beaver, 285 BC, less than two hours usage, 28cc engine, \$75. Moyer, 828-9214.
- GUNS, Luger, P-38, Astra 400, Ruger target pistol, SKS, M1 carbine, 303 British, Marlin .22-cal. rifle, more. Pryor, 294-6980.
- COLLECTIBLE PLATES, make reasonable offer; bird, owl, and waterbird sets; animals; Fred Stone horse plates. Locher, 256-3406.
- COMPUTER MEMORY, 1MB, SIMMS, 70NS, 8MB total, \$30 each. Forster, 293-7231.
- TANDY 6000 XENLX SYSTEM, external hard drives, external/internal floppies, four terminals, extra floppies, cables, free. Mozley, 265-2625 days or 299-4204 evenings.
- LAWNMOWER, Craftsman electric, side bagger, like new, used very little, \$150 OBO. Mooney, 822-1600.
- RIFLE, 270 Winchester BDL, Bushnell 3x9 scope, sling, gun case, shells, like new, used once, \$550 firm. Woodward, 293-4369.
- TRAILER HITCH, Class 1, for '84-'94 Jeep Cherokee, Valley Model 6187, new, never installed, \$30. Stevens, 293-5704.
- PLAYER PIANO, for refurbishing, \$150; child's bicycle seat/carrier rack combo, Rhode Gear, \$45; aquarium stand, \$25. Ukena, 275-7275.
- PRINTER, Panasonic KX-P1524, 24-pin, wide-carriage, dot-matrix, high-quality printing and graphics, like new, \$150. Caskey, 294-3218.
- RIMS, four, GMC/Chev. S-10, Crager, chrome w/blue center, \$150. Perez, 837-2011.
- CAMPER SHELL, fits Ford short wide, red on white aluminum, insulated, crank windows/vent, new lock, \$400 OBO. Le Tourneau, 265-0987.
- GARAGE SALE, June 11-12, 8 a.m., 403 General Stillwell NE, Wyoming/Copper area, toys, kids clothes, etc. Tyree, 275-3968.
- CRIB, mattress, sheets, used, \$50. Chemistruck, 281-8789.
- OXYGEN TANK, large, regulator, new \$600, \$150; ten Soma waterbed tubes, for king-size bed, new \$250, \$50. Pershall, 281-0159.
- REFRIGERATOR, 17 cu. ft., bottom freezer, \$125; electric range, 30-in., \$50 or \$150 for both. Very good working condition. Simons, 296-0974.
- MAN'S WOODEN VALET, good condition, \$15. Jackson, 293-0262.
- CHINA SET, for 12, Rosenthal Continental, Japanese Blossom pattern, classic modern, w/platinum trim, complete w/serving pieces. Wagner, 823-9323.
- CHILD'S PEDAL TOYS, \$200/ea.; '40 girl's bike, \$150; armoires, \$475 and \$650; tilt-top tea table, \$500; other antiques. Martin, 296-8154.
- CAB-OVER CAMPER, 9.5-ft., self-contained, stove, refrigerator, \$1,200. Ukena, 275-7275.
- NORDICTRACK PRO, 3 years old, excellent condition, \$450. Patton, 898-3524.
- APPLIANCES, double ovens, self-cleaning, \$175; electric cooktop, \$50; hood, \$25; stainless steel sink/faucet/disposal, \$60; cabinet doors. Kiphart, 889-8848.
- BEDROOM SET, king-size, five pieces plus springs and mattress, solid construction, \$900 OBO. Connor, 293-7608.
- GUITAR, Applause GTX, \$250; Peavey bass, \$275; Peavey amp, \$350; Yamaha acoustic, \$75; amp, \$50, pedal, \$35, excellent condition. Dubois, 256-9165.
- COLEMAN STOVE, \$20; Coleman lantern, \$10; three summer sleeping bags, \$10/ea., Schwinn, 3-sp., 24-in., boy's bicycle, \$35. Lieberman, 299-7739.
- '50s JAZZ CDs, mostly Miles and Coltrane, also Bird, Brownie, Kenton, others, \$8/ea. Pfarrer, 299-6521, leave message.
- PRICKLY-PEAR CACTI, small, you dig 'em, you keep 'em. Sobollik, 292-3959.
- GARAGE SALE, neighborhood association, Saturday, June 18, 8 a.m., many families, follow signs, Tramway east on Lomas or Copper. Fogelson, 296-0620.
- FURNITURE, heavy dark oak, youth bunks w/mattresses, captains bed w/mattress, two chests w/bookshelves, student desk, \$175 ea. OBO. Connor, 268-1682.
- LITTLE TIKER'S TURTLE SANDBOX, \$15; Evenflo one-step carseat, \$12; boy's clothes, size 6-24 mos., \$1 ea. Weed, 823-2396.
- AUTO PARTS for '74 Datsun 610, \$50. Smith, 299-6873.
- FISHING HUT CAMPER, Mitchell, for full-size truck, with jacks, \$650. Jolja, 869-5946.

Deadline: Friday noon before week of publication unless changed by holiday. Mail to Dept. 12660, MS 0413, or fax to 844-0645.

Ad Rules

1. Limit 20 words, including last name and home phone (the *Lab News* will edit longer ads).
2. Include organization and full name with each ad submission.
3. Submit each ad in writing. No phone-ins.
4. Use 8 1/2" by 11-inch paper.
5. Use separate sheet for each ad category.
6. Type or print ads legibly; use only accepted abbreviations.
7. One ad per category per issue.
8. No more than two insertions of same "for sale" or "wanted" item.
9. No "for rent" ads except for employees on temporary assignment.
10. No commercial ads.
11. For active and retired Sandians and DOE employees.
12. Housing listed for sale is available for occupancy without regard to race, creed, color, or national origin.
13. "Work wanted" ads limited to student-aged children of employees.

FOUR-PERSON SPA, excellent condition; microwave cabinet, other miscellaneous furniture, modern and antique. Fisher, 881-8072.

OFFICE AND COMPUTER DESK, "L"-shaped, special printer paper storage, light walnut, very nice, \$200. Hanks, 867-1745.

VGA COLOR MONITOR, \$175; recliner, \$60; truck bedmat; .22LR semi-auto pistol; smoker; bar stools; rabbit hutch, baby rabbits. Parr, 837-1719.

SANTA FE OPERA TICKETS, "Tosca," Saturday, Aug. 20, 9 p.m., Section 2, great seats, \$56 ea. Nagel, 242-7832.

CONSOLE ORGAN, Thomas, double-deck, w/bench and music, excellent condition, \$1,400 new, will sell for \$400. Lloyd, 299-7153.

MXD-200 GOLF CLUBS, 1, 3, 5, all graphite woods, Yonex copy, \$175; 4-drawer Bassett chest, cherry wood, \$75; Scott SF-1 spreader, \$30. Stang, 256-7793.

VACATION RENTAL, Coronado Beach Resort, Coronado, Calif., luxury condo, adjacent to the Hotel Del Coronado, available 6/26 - 7/3, sleeps four, \$800. Jackson, 510-831-0826.

KING-SIZE WATERBED, Hybernation Series, premium waveless, heater, \$150; toddler bed and mattress, \$30; computer desk, \$30. Johnson, 899-8410.

DRESSER AND MIRROR, 1940's vintage, walnut finish, waterfall style, \$200; solid-pine chest of drawers, \$75; queen mattress, box spring, frame, headboard, \$750. Lloyd, 298-6490.

'86 POP-UP TENT TRAILER, Coleman Chesapeake, sleeps six, awning, curtains, tire and gas tank covers, \$2,000. Knapp, 294-6359.

WINDSURFER, 13-ft. long, 30-in beam, BIC, \$225. Gage, 293-1707.

ROOT FEEDER, Ross Model 1200B, new in box, \$20. Martel, 293-1892.

MOVING SALE, oak dining, \$300; oak coffee & end tables, \$200; king-size waterbed, w/6-drawer pedestal, \$150. Hindman, 291-1520.

MAC COMPUTERS: Classic 4/40, \$600; Mac IICX 8/80, w/keyboard and color monitor, \$1,000; printers, B&W or color. Martinez, 266-2967.

WEIGHT SET, w/bench, \$75 OBO; dining room table, w/4 chairs and leaf, good condition, \$150 OBO. Aronson, 898-8893.

ANTIQUA SOFA, chair, and ottoman, burgandy, \$300 OBO; 100-yr.-old steamer trunk, \$150; one-person car-top boat loader, \$15; gasoline lantern, in box, \$20. Hayes, 299-1200.

TRANSPORTATION

- '92 GEO CONVERTIBLE, red, AC, cruise, AM/FM cassette, fun, economical (45-50 mpg), 52 K mostly highway miles, super condition, \$6,950. Kercheval, 1-864-6549.
- '92 CHEV. CAVALIER RS, 2-dr., AC, 5-sp., 25K miles, \$6,500. Campbell, 856-9195.
- '81 CADILLAC SEDAN SEVILLE, good body, runs well, good motor, needs rear end, \$800 OBO. Holcomb, 861-0638.
- '91 FORD THUNDERBIRD, red w/gray interior, AC, JBL stereo, low miles, \$9,700 OBO. Pavlides, 269-4947.
- JET BOAT, 18.5-ft. Nordic Bubble Deck, 460 Ford, Berkeley pump, tandem trailer w/new tires, \$5,500. Cotter, 897-1470.
- '78 F-100, 302, 3-sp., 1/2-ton, shell, AM/FM, good tires and body, \$1,700 OBO. Krivitzky, 897-9104 after 6 p.m.
- '77 TRANS AM, many extras, Enke wheels plus original wheels, carpet, extra engine, three carburetors, \$2,000 OBO. Estill, 883-1531.
- '87 SABLE GS WAGON, 8-passenger, AT, PS, PB, AC, AM/FM cassette, 90K miles, well-maintained, \$3,950. Glaser, 293-8110.
- '90 DODGE GRAND CARAVAN SE, dual AC, many extras, 61K miles, \$12,900; '69 VW Bug, FM cassette, \$1,900. Thompson, 292-2877.
- '88 TOYOTA SUPRA TURBO, Targa top, 5-sp., red/gray, 80K miles, all maintenance performed, perfect condition, \$9,500. Baca, 271-2962.
- MOUNTAIN BIKE, 22-in., Mongoose, IBOC comp, Shimano LX, w/speed shifters, computer, good condition, \$100 OBO. McMurtry, 298-2155.
- NISSAN BUYERS, coupon worth \$750 toward purchase, will take \$500 cash or trade. Roeschke, 266-8988.
- '84 TOYOTA CELICA GTS, 5-sp., PS, PB, AC, cruise, sunroof, AM/FM cassette. 114K miles, \$2,625 OBO. Samlin, 877-5771.
- BOAT, '88 Bayliner, 19-1/2-ft., I/O, open bow, low hours, year-round enclosed storage, superb condition, \$7,400. Wilder, 856-1676.
- BOAT, 18-ft., I/O, 110-hp, rebuilt engine, cover, and canopy, runs great, \$1,800 OBO. Wernicke, 237-9332.
- KID'S BIKE, 16-in. Trail Model, Roadmaster, high seat post and sidewinder seat, red w/white trim, \$50 OBO. Lenfest, 292-5780.
- '67 COUGAR 289, AC, \$2,300; '73 Capri, 4-cyl., \$500. Ukena, 275-7275.
- '86 CHEV. NOVA, 4-dr., white, good condition, \$2,500 OBO. Jolja, 293-2853.
- '89 BUICK REGAL, 2-dr., AT, AC, PW, PDL, cruise, stereo, black, clean, 73K miles, \$1,775 below NADA, \$5,100. Moore, 764-8489.
- '88 NISSAN PATHFINDER, 4x4, SE-V6, black, excellent condition, 117K highway miles, loaded, 5-sp., sunroof, very clean, \$11,300 OBO. Johnson, 836-2886.
- '90 DODGE RAM CONVERSION VAN, AT, AC, AM/FM cassette stereo, microwave, TV, refrigerator, toilet, stove, sleeps 2, seats 6-8, 26K miles. Cocco, 298-3113 or 856-1580.
- '78 OLDS CUTLASS SUPREME, AT, AC, V8, low miles, great shape, \$1,350; girl's 10-sp. bicycles, 24-in. and 26-in., \$45/ea. Doughty, 296-4142.
- '92 FORD EXPLORER XLT, burgundy, At, V6, PR, AC, AM/FM cassette, 4x4, new tires, 44K miles, great condition, \$18,000. Purcell, 281-1761.
- '90 MITSUBISHI GALANT GS, fully loaded, AC, cruise, silver-gold, cloth interior, 42K miles, \$9,000. Biggs, 265-3036.
- BOAT, aluminum, 12-ft., flat bottom, 7.5 hp gas motor, electric trolling motor. Bukaty, 345-4691.
- '87 DODGE CARAVAN SE, 5-sp. standard, AC, 7-passenger, roof rack, 71K miles, \$6,200. Lockwood, 821-6331.
- '92 CHEV. S-10 TAHOE PICKUP, 4.3L, V6, low miles, great condition; Fuji roadbike, 12-sp., Suntour components, excellent condition, \$150. Johnson, 899-8410.
- '85 HONDA ACCORD, 4-dr., manual transmission, 90K miles, PB, PS, AC, AM/FM cassette, cruise, great condition, \$3,250. Marrs, 821-5144.
- '87 SUZUKI SAMURAI CONVERTIBLE, 4x4, hard & soft tops, AC, heat, rebuilt engine, transmission, new clutch. Jones, 873-8478.
- '80 TOYOTA SUPRA, manual transmission, one owner, lots of extras, must see. Metz, 881-1110.

REAL ESTATE

- 4-BDR. HOME, on 7.7 acres, Fox Hills compound, detached double garage/workshop, barn, pasture, outstanding views, off Frost Road, priced in the 260's. Zanner, 281-1789.
- 2-BDR. MOBILE HOME, open plan, quiet family park outside Eubank Gate, good condition, clean, \$10,900. Myers, 271-1525.
- 3-BDR. HOME, 2 baths, near Gibson/San Pedro, 928 Cardenas SE, brick, double garage, pitched roof, fireplace, sprinklers, \$99,000. Lambert, 292-8417.
- 4-BDR. HOME, Northeast, 1,800 sq. ft., 2 baths, La Cueva district, 2-car garage, security alarm system, \$1,100/mo. (Aug. '94-Aug '95). Schwartz, 856-0836.
- 4-BDR. HOME, 2-1/2 baths, 2,600 sq. ft., contemporary Southwest, landscaping, two fireplaces, wet bar, city and mountain views. Romero, 821-3113.
- 3-BDR. HOME, SE Heights, 1-3/4 baths, 1,435 sq. ft., wood deck, custom wood interior, sprinklers, corner lot, excellent condition, \$110,000. Martin, 292-4871.
- 2-BDR. TOWNHOUSE, 1 bath, gas fireplace, attached garage, near base, assume w/ qual. 7.5%, \$64,300. Wilson, 266-3688.
- 5-BDR. HOME, 2-3/4 baths, 2,800 sq. ft., sunroom, pantry, large backyard, Constitution and Chelwood, \$169,900. Greenwood, 275-8832.
- CONDOMINIUM, at Purgatory/Durango, Colorado, 2-bdr., 1,500 sq. ft., by owner, owner will carry note, \$76,000. Hanks, 867-1745.
- 4-BDR. HOME, custom Mossman, sewing/game rooms, oversized garage, darkroom, vaulted LR/DR, storage, new stucco and roof, \$209,500. Benham, 881-2593.

WANTED

- USED DRUM SET, name brand. Douglas, 281-9843.
- ROOM DIVIDER, reasonable. Sparks, 884-5644 or 880-0324.
- BABYSITTER, for three children, 1, 10, & 11 yrs., one night per week, prefer responsible 14-16-yr.-old girl. Marek, 275-2792.
- CHEST OF DRAWERS, for young boy's room, finished or paintable. Underhill, 294-1775.
- BEEKEEPING EQUIPMENT, hive bodies, supers, smokers, hats, gloves, veils. Any condition. Neal, 281-7686.
- ABOVE-GROUND SWIMMING POOL, prefer large size. Pershall, 281-0159.
- MOTOR, Evinrude, 75-hp, V4, any condition, others considered. Roeschke, 266-8988.
- BOOKS OR TAPES, on positive attitude, self-help, motivational, leadership skills. Wiseley, 298-3195.
- MALE SIAMESE CAT, for breeding with female Siamese cat. Purcell, 281-6394 or 281-1761.
- SOMEONE TO COMMUTE WITH, from Rio Grande/Indian School area to Area I. Abeyta, 247-0191.

WORK WANTED

- PART TIME WORK, tree trimming, stump removal, haul-away junk. Estill, 883-1531. Ask for George, Jr.
- HOUSESITTING JOBS, experienced college senior, references, reasonable. Caskey, 294-3218. Ask for Susan.

Kids' bingo tonight, jazz next Friday, and a Father's Day feast June 19

Coronado Club activities

TONIGHT IS Kids' Bingo Night at the Club. Bring your youngsters as early as 5 p.m. for the buffet, cartoons, and movies. The bingo itself starts at 7 p.m. There'll be a free hot dog and Coke for each kid playing bingo. Winners receive prizes. The cost for kids to play is \$2.50, but children with a birthday in June can play free, and they'll also get some other goodies.

THE SECOND Sunday brunch and tea dance of the month is on June 12. Brunch is served 10 a.m.-2 p.m. The cost is \$6.95 for adult members, \$1 for kids 4-12. Reservations are recommended. Then you can dance the afternoon away to the music of Joe Sais and the Showcase Band, 1-4 p.m.

EVERY THURSDAY evening this month is regular Bingo Night. Card sales and a buffet

begin at 5:30 p.m., early bird games at 6:45.

ITS HOT — the Red Hot Chile jazz band, that is. This group from Santa Fe led by Jere Corlett will play Friday, June 17, 7-11 p.m. The group plays "gut-bucket, rock-bottom, come-home-to-mama style of old-time, slush-pump jazz." And every performance is unique. If that's not enough, the dinner menu that night includes filet mignon or grilled halibut (each two for \$14.95), or the all-you-can-yet buffet, \$6.95.

HONOR DAD by bringing him to the Father's Day Brunch, June 19, 10 a.m.-3 p.m., with seating times of 10 a.m., 11:30 a.m., and 1:30 p.m. only. Cost is \$8.95 for adults, \$4.95 for children 4-12, and free for children 3 and under. The entertainment on the patio from 2-5 p.m. is by Bob Weiler and Los Gatos. Pool admission on Father's Day is free to all members.

Making the Caremark prescription drug plan work for you

The following is provided for employees and retirees by Health Planning & Administration Dept. 3543.

On Jan. 1, Sandia integrated all prescription drug claims processing for Medical Care Plan (MCP) participants through the Caremark Prescription Drug Plan. Participants now have the convenience of electronic claims submission when purchasing covered prescription drugs through the Select Network pharmacies (KMart, Wal-Mart, Smiths, or Longs, in California). If using a non-select pharmacy, participants submit the MCP claim form with the completed prescription portion to Caremark Prescription Service, Box 686005, San Antonio, Texas 78268-6005. And for participants using maintenance or long-term medications, the Caremark mail-order service is available and requires only a \$7 or \$12 copayment. For complete details about the Prescription Drug Plan, refer to Appendix E of the Medical Care Plan Summary Plan Description.

Improvements in progress

During the transition to electronic filing, Caremark has experienced datatape production difficulties, causing claim backlogs and lost claims. Also, there have been programming errors that caused tax reimbursement errors and duplicate reimbursements. The tape production process from Caremark has been revised and programming changes implemented to correct these claim errors. Therefore, electronic claims will now be reimbursed within 10-15 days from submission date at the pharmacy. And, identification and correction of previous errors is in progress. If you are concerned whether your claim has been submitted electronically, call the customer service unit listed below.

In addition, Caremark recognized that the general customer service line provided by Caremark was inadequate to resolve the range of questions from Sandia participants during our transition to an integrated plan. Therefore, Caremark has committed a dedicated customer service unit to provide expertise in resolving Sandia customer questions. To access the Sandia customer service unit for claims questions (not mailorder), call 1-800-841-5550, enter "2" for claims and request the Sandia Unit. Direct all prescription drug claim questions to Caremark's Sandia Unit, not Mutual of Omaha. As of July 1, Sandia will have a dedicated 800 number for direct access to the Sandia customer service unit.

Tips for using the drug plan

If you use a select pharmacy:

- The Select Pharmacies in Albuquerque (KMart, Wal-Mart or Smiths) have agreed to sell prescription drugs at the lower of the Sandia negotiated price, a competitor's lower advertised price, or the pharmacy's lower in-store price. When purchasing your

prescription, provide the pharmacist with your usual price from another pharmacy or the advertised price before the sale and ask for the lowest price.

- Be aware that when you request a price comparison, the pharmacist must enter the query as a sale, which will be sent electronically if the entry is not reversed immediately. To avoid this error, use the above method of price shopping or verify that the pharmacist has reversed the entry.

- For retirees on Medicare, electronic filing means that the prescription drug purchase will be filed automatically against your deductible on the date of purchase. You do not have an option to hold the claim until your deductible has been met with other Medicare-related charges unless you purchase out-of-network or through a non-Select pharmacy.

If you file your own claims:

- File your prescription drug claims using the Medical Care Plan claim form and mail to the Caremark address (see first paragraph). To ensure accurate processing, request that your pharmacist complete the prescription drug portion of the MCP claim form. If you are attaching a receipt, verify that the information requested on the form is included on the receipt. If the information is not complete, call your pharmacist to obtain the missing information.

- If you have used a Select pharmacy, do not also file a paper claim. This results in an extra processing charge for Sandia. If you are unsure whether the electronic claim has been filed, call the customer service unit listed below.

If you use the mail-order services:

- Mail-order services are for participants using maintenance medications requiring long-term use. Remember that the copayment of \$7 for generic and \$12 for brand name drugs does not apply against your deductible or against the MCP stop-loss provision. If your 90-day prescription requires that you take a dosage that exceeds the 300-pill maximum, you will be required to purchase two, 90-day prescriptions and pay two co-payments. In these situations, you may choose not to use the mail order if the cost is greater than using the Select Pharmacy or another retail pharmacy.

When calling customer service for prescription drug plan:

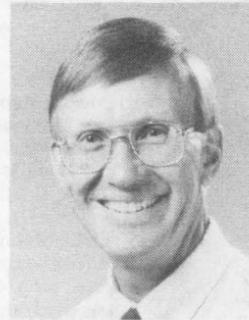
- Call Caremark, 1-800-841-5550 (7:30 a.m. - 4:30 p.m., M-F) and enter "2" for questions about paper or electronic claim status.

- Call Caremark, 1-800-841-5550 (7:30 a.m. - 9:30 p.m., M-F) and enter "3" for mail-order claim questions.

- Call Caremark, 1-800-344-8075 (24 hours a day, 7 days a week) for refill orders on mail-order prescriptions.

- Do not call Mutual of Omaha about status or problems with prescription drug claims.

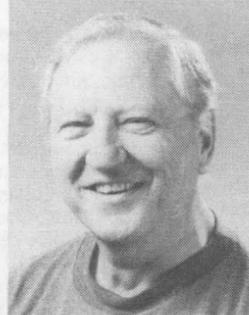
Recent Retirees



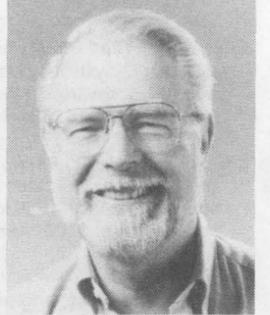
Al Giddings
2345 33



Ron Zottnick
12361 36



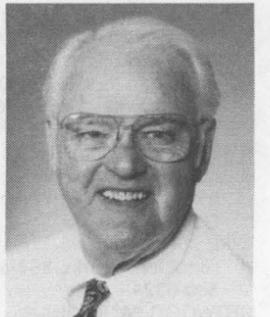
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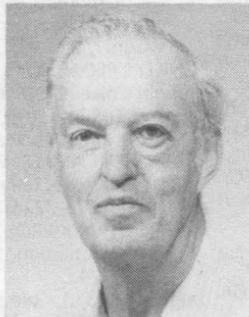
Warren Miller
6351 37



Edgar Boeck
5512 32



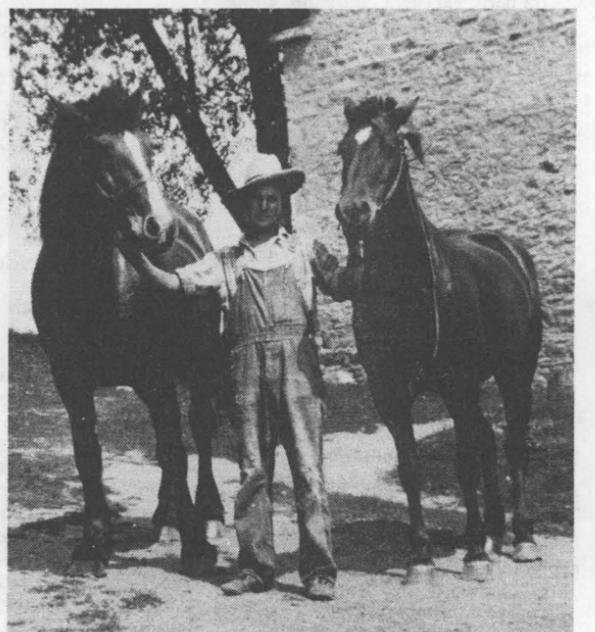
Matt Connors
8526 42



John Mitchell
9602 35



Tom Poteat
12911 35



Favorite Old Photo

This photo of my dad, Marvin Taylor, was taken in about 1935 when he was working as a farmhand in eastern Iowa for \$35 a month. The farm had no tractor. They used draft horses (Morgans), and Dad was responsible for their care. Dad's currently almost 80 and still going strong. He lives in Morley, Iowa, right near where he grew up.

— M. Keith Taylor (5514)