

Sandian part of first US group to visit top secret Krasnoyarsk-26 nuclear facility in Siberia

Safety study takes Dave Carlson to underground complex

By Ken Frazier

Lab News Managing Editor

Fourteen time zones of travel, a stay in a secret nuclear base inside a Siberian mountain, eating bear meat in the forest.

It wasn't exactly a regular Sandia work week, but Dave Carlson, Manager of Assessment Technologies Dept. 12333, experienced it all recently as a member of the first group of American officials allowed to enter and tour the top-secret underground nuclear facilities inside a mountain near the "closed city" of Krasnoyarsk-26 in central Siberia.

He was one of 13 government and contractor scientists under the auspices of the DOE Defense Program's Office of Special Projects to make the unique site visit. It was all part of an urgent technical effort to exchange radiochemical operational safety information and involve counterpart Russian scientists in joint safety programs.

The delegation was headed by F. Charles Gilbert of the Office of Special Projects in Washington. Besides Dave, three other New Mexico scientists, Steve Agnew, Sam Pillay, and Harold Sullivan, all of Los Alamos National Laboratory, were also in the group.

Dave's no novice at such things. He says it was his fourth trip to Russia, but definitely his first time to the Krasnoyarsk-26 installation. "It was a very interesting trip," he says, with typical Sandia understatement "It was a privilege to be among the first people to go there."

Traveled for 45 hours

Getting there was itself a challenge. "It's a difficult place to get to," he notes. "The logistics were pretty poor."

The delegation began with two days of meetings in St. Petersburg (formerly Leningrad), Russia. Dave met them there on the second day, arriving from England where he was meeting with British weapons scientists. To get to Krasnoyarsk-26 from St. Petersburg, they first traveled westward to Frankfurt, Germany. The next stage was a nine-hour flight east to Novosibirsk, in Siberia. From there they took a train eastward for 14 hours to the large city of Krasnoyarsk. And from the train they had two more hours of travel to Krasnoyarsk-26, the secret city near the site, on the Yenisey River.

"It was 45 hours of travel overall," says Dave. "I crossed 14 time zones."

The group was at Krasnoyarsk-26 for the better part of four days. "It's kind of like Cheyenne Mountain," Dave says, referring to the underground site of the North American Air Defense Command near Colorado Springs. "It's drilled into a mountain. It took 10 years of labor to carve out all the tunnels. We went about a mile-and-a-half deep into the mountain and 600 feet underground."

Last March *Pravda* announced that several of the sites that house Russian nuclear institutes would be renamed. Krasnoyarsk-26 was officially renamed Zheleznogorsk, but the old name is still preferred and used.

Dave says the Russians do essentially two things at Krasnoyarsk-26:

(Continued on page 4)



RUSSIAN WORKERS atop an underground nuclear reactor at the Siberian secret city of Krasnoyarsk-26. The reactor was one of three built there in the 1950s and 1960s for manufacturing nuclear weapon materials. Two are now shut down. Sandia's Dave Carlson (12333) was a member of a DOE radiochemical safety delegation that visited this facility in November, the first US officials allowed into Krasnoyarsk-26. This photo is from the Russian book *Atom-Town*, given to the American visitors.

Galvin report on future of national labs to be issued Feb. 1

Exactly on schedule, the Galvin Task Force report on the future of the DOE national laboratories is to be presented by chairman Bob Galvin at a public meeting in Washington Feb. 1.

Galvin's presentation to the Secretary of Energy Advisory Board is expected to take most of the morning. Sandia President Al Narath will attend.

Copies of the draft report will be given out at the meeting, which will be at a Washington hotel and is open to the general public. The national labs will get copies that day also, both electronically and by overnight delivery, and plans are under way to make it available on the World Wide Web/Mosaic over the Internet as well.

According to DOE, there will be an opportunity for public comment at the meeting, and written comments may be sent to the Board later.

Under the press of changing global conditions, Secretary of Energy Hazel O'Leary announced on Feb. 2, 1994, that she had commissioned a Secretary of Energy Advisory Board Task Force on Alternative Futures for the DOE National Laboratories, and named former

(Continued on page 7)

Sandia LabNews

Vol. 47, No. 2 January 20, 1995

 Sandia National Laboratories

Compressed workweek coming to Labs; employees have several options

Divisions 4000, 5000, 6000 to pilot new schedule starting Feb. 3

By Mary Hatheway

Lab News Writing Intern

Three-day weekends may soon be the norm for many Sandians. After months of planning, Human Resources Div. 3000 is set to implement a compressed workweek pilot at Sandia that would give eligible employees every other Friday off or half a day off every Friday.

The new compressed workweek policy applies only to full-time Sandia employees, according to Susan Harty (3531), compressed workweek team leader, but she stresses that par-

ticipating in the program is strictly optional.

"Sandia's standard business hours will continue to be 8 a.m. to 4:30 p.m., and anyone who wishes to work the current schedule is free to do so," Susan says. "The compressed workweek is a policy that has been successfully implemented at many government agencies, including DOE, and it's an option we would like to offer to our employees."

Susan cites increased employee productivity and morale, like that experienced by the 30 companies on a compressed workweek that the

(Continued on page 6)

This & That

Sandia's "real movers" - I asked employees to contact me if they think they may have the record for the most moves at the Labs during the past 10 years or the most office locations since joining Sandia. From the responses, it's evident that I should have stated that short-term temporary locations occupied by "floaters" don't qualify. Also, some folks could have stated their responses more clearly, but here are the "real movers" who spoke up.

- Larry Nelson (2631) has had 17 different office locations since joining Sandia in 1959 but has moved only once in the past 10 years.
- Tamara Orth (13412) has been in 15 offices since 1984.
- Both Carol Stocks (13100) and Marylee Adams (12900) have been in 13 different offices since 1983.

Other notable movers: L. Mason Blaich (1301), who has been at Sandia only five years, has had 12 offices, but has been in the same one for the past three years; this means he had 11 offices in his first two years. Diana Sorenson (1101) has moved eight times since March 1988 and is scheduled to move into the new Integrated Materials Research Laboratory soon. Mark Koch (9133), who has been at the Labs only 41 months, has had six offices.

* * *

Same set of crayons in it, Mike? - Speaking of records, Mike Ford (5822) called to ask if anyone at the Labs has had his or her desk any longer than he has. Mike says he has had the same lovely "government gray" steel desk since joining the Labs in 1964. Anyone?

* * *

More parking spots? - Did you notice that it was a little easier to find a parking spot on Jan. 2? Here's one reason: 122 Sandians retired on Dec. 30 and 31. And during the entire month of December, 142 employees retired - approaching 1.7 percent of the total Sandia work force.

* * *

Still going, and going, and... - While we've had our share of retirements lately, other long-time employees continue at Sandia. Someone called early this month to report that Merrill Jones (9215) was celebrating his 70th birthday. That reminded me that it's been a while since we published a list of Sandians with the most years of service. As of Jan. 5, Roy Crumley (10232) had the record at 47.4 years, and Merrill was second with 46.5 years. See item below for a list of Sandians with 40 years or more. Thanks to Lynne Powell (3512) for the list.

* * *

The funny lab - Another in the continuing series of strange names/addresses that show up on Sandians' mail - this one on some junk mail sent to Tom Evans (2313) and submitted to us by department secretary Collette Herrick: Sandia Nth Laf.

* * *

A message here? - An anonymous Sandian reports that there's a long wait list of folks who want to check out a certain new book from the Sandia/New Mexico Tech Library. The title: "Dealing with People You Can't Stand - How to Bring Out the Best in People at Their Worst." I'm not sure what this means, but I thought it was worth reporting.

- Larry Perrine

Feedback

Idling engines expensive, dirty

Q: Recently, on my way to work, I found a pickup left idling outside Bldg. 821. I find this disturbing on several counts. First, there was money going out the exhaust pipe; and second, the air pollution generated by this idling vehicle caused me concern. Customers question our use of their money when they see such waste, and this is just one of several times I've found vehicles idling.

In the case of this particular vehicle, I just turned off the engine. However, several things could be done to combat this problem:

- The keys of a vehicle found idling with no one in attendance could be taken and sent to the motor pool.
- If the driver of an idling vehicle refused to turn off the vehicle, his/her name and vehicle license plate number could be sent to the motor pool with a note explaining the situation.
- The motor pool staff could levy a fine on the offending organization and driver, then reward the finder of the vehicle.

I believe this would help with a potential public relations problem as well as a financial problem.

A: Thank you for your concern. You are right about the real harm done to engines and air quality, as well as potential public relations problems.

There is a Sandia policy - SAND 91-1464 titled "General Traffic Regulations for Sandia National Laboratories, Albuquerque" dated August 1991 - which states: "When leaving a vehicle unattended, the ignition will be turned off and the keys will be removed. The parking brake will be set, with automatic transmissions left in park and manual transmissions left in first gear. If parked on an incline, the front wheels will be turned to roll toward the curb."

Signs posted on buildings at Sandia warn drivers to turn engines off because of nearby fresh air or air conditioning system intakes. It is permissible, however, to idle an attended vehicle during the winter months to defrost the windshield, provided the vehicle is not in one of the posted areas.

I believe Sandians are responsible people who may not have realized the adverse effects of an idling vehicle. To draw attention to the problems associated with leaving a vehicle idling and to educate vehicle users, I highlighted this in a recent issue of *Roadrunner* (Sandia's fleet management publication), and asked that it be routed to all vehicle users.

Shawkeet Hindi (7614, recently retired)

Software transfer difficult issue

Q: We update our software on a very regular basis and remove out-of-date software that is no longer useful to us. It is perfectly good software, but we don't have a way to get it to a potential user. At one time there was a group that solicited old software and contributed it to the public schools. (Software publishers had agreed to such practice.)

I have no idea whether this is still a valid practice and no way to know how to donate it if it is. Could you please look into this and publish such information? Since Sandia is such a strong supporter of schools, this would be an excellent way to help many students. If no central point for this recycling is established, nothing will happen.

A: You are correct in believing transferring no-longer-useable software to schools would benefit students, but there are a number of complicating factors surrounding the transfer of personal computer software that make it impractical to implement a recycling plan at Sandia. All Sandia property acquired either through direct DOE funding or through DOE-approved programs is owned by the US government and must be disposed of according to DOE regulations. Also, DOE has been coming down hard on Sandia for unauthorized gifts to

(Continued on next page)

Sandia LabNews

Sandia National Laboratories

An Equal Opportunity Employer

Albuquerque, New Mexico 87185-0413
Livermore, California 94550-0969
Tonopah, Nevada • Nevada Test Site • Amarillo, Texas

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.

Larry Perrine, Editor505/844-1053
Ken Frazier, Managing Editor844-6210
John German, Writer844-5199
Howard Kercheval, Writer844-7842
Randy Montoya, Head Photographer844-5605
Mark Poulsen, Photographer/Production844-0421
Janet Carpenter, Publications Administrator844-7841
Nancy Campanozzi, Secretary844-7522
Mary Hatheway, Writing Intern845-0845
Barry Schrader, California Reporter510/294-2447
Nancy Garcia, California Reporter510/294-2932
Lab News 505/844-7841 fax 505/844-0645

Published Fortnightly on Fridays by
Employee Communications Dept. 12622, MS 0413

MARTIN MARIETTA

Employees with 40 years or more of Sandia service

(As of January 5, 1995)

Name	Org.	Years
Roy Crumley	10232	47.4
Merrill Jones	9215	46.5
Howard Devaney	2641	46.2
George Walker	12367	46.0
Marcelia Samuelson	7613	46.0
Richard Jones	2753	43.9
John Souza	5151	43.5
Horace Poteet	5913	43.2
Don Odell	2486	43.1
Ruth Brooks	3525	43.0
Gilbert Leyba	2412	42.8
Walbert Levy	1144	42.7
Don Larson	1511	42.7
Maury Karnowsky	1831	42.5
Donald Robbins	2782	42.3
Jacob Aragon	7435	42.2
Walter Dalby	5111	41.9
Glenn Elliott	9225	41.6
Gordon Boettcher	2565	41.5
Allan Fine	7733	41.1
Frank Comiskey	7616	40.5
Stanley Spray	12331	40.5
Al Iacoletti	1010	40.4

Microbes chewing up underground oil spill problem

Oil-eating bacteria tapped for bioremediation of 60,000-gallon Sandia/California spill

By Nancy Garcia

California Reporter

Sandia/California is throwing a dinner party. The main course is diesel oil, and the guests are several zillion soil-dwelling bacteria, who will chomp their way through almost 60,000 gallons of the black goo over a five-year period.

In January 1975, an underground fiberglass pipe delivering diesel fuel used to heat buildings at Sandia was punctured accidentally. By the time oil was seen bubbling to the surface two weeks later, the spill had spread 80 to 100 feet along a trench on the surface.

The depth of the spill was of greater concern. The underlying material at the spill site is porous silt, sand, and gravel, deposited eons ago. Below these deposits is one of the huge aquifers that underlie the Livermore Valley. The oil threatened to seep down almost 100 feet, and could eventually reach the water table.

"We had to take action to clean up the spill," says Alexandra (Sandy) Leo, a geologist who is deputy project manager for Environmental Protection Dept. 8642's Environmental Restoration Project. "After almost four years of research, we have determined that bioremediation is by far the best alternative. We'll simply help nature take its course."

Helping Mother Nature

Bioremediation cleans up contamination by letting microbes break down pollutants. In California, Sandy and her team will rely on several types of bacteria already present in the soil to handle the bioremediation job. These bacteria usually break down plant matter. Now, steps are being taken to increase their numbers so they will also consume the oil in the spill area.

"While we talk about the bacteria 'eating' the oil, what they really do is secrete an enzyme that breaks it down," Sandy explains. "Through extensive fertilizing, aerating, and watering, we'll increase the bacteria population, so that they start feeding on the oil."

Just aerate, spread a little fertilizer, and turn on the sprinkler, right? Wrong. Because of the depth of the spill and numerous other factors, a sophisticated system comprising 24 wells and a pump-and-treatment station has been set up above the spill. The system includes an infiltration galley, which is an underground irrigation grid that wets down the first 10 feet or so of soil.

Then the real work starts.

The system mixes nutrients — nitrogen,



BIOREMEDIATION WELLHEAD — Sandy Leo and Jon Meeks (both 8642) prepare to pump nutrients down one of four wellheads used for aeration and nutrient injection at the fuel oil spill site being cleaned up through a bioremediation technique.

phosphorus, and potassium — and delivers the soup to four shallow injection/withdrawal wells, four deep injection/withdrawal wells, and one central well. The water circulates through the wells, delivering nutrients and moisture.

Then, the water returns to the pump-and-treatment plant, where it is cleaned. New nutrients are added and an aeration system lets the water "breathe" so it releases carbon dioxide emitted by the bacteria and picks up fresh oxygen.

The process will be repeated until diesel oil concentrations drop from as high as 20,000 parts per million (ppm) to below the 50 ppm threshold allowed by the state Environmental Protection Agency.

The remaining 15 wells carry equipment for Sandy and her team to monitor the cleanup. The instruments will feed data back to a computer for analysis. Although such bioremediation schemes are not new, monitoring will be extensive.

"We'll collect an awful lot of data to understand what's going on," Sandy says.

"The great thing about bioremediation is that, once the cleanup is finished, the oil is gone," she adds. "There is nothing harmful left. In addition to being the most thorough method, bioremediation is also the least expensive. Mother Nature basically knows what she's doing."

Unsavory options

Sandy isn't just partial to Mother Nature. Her department conducted extensive bench-scale studies in the lab before presenting its findings to the San Francisco Bay Regional Water Quality Control Board, the agency with the final word on cleanup plans.

An alternative plan was to dig up the contaminated soil, wrap it, and haul it to a hazardous waste disposal site. Estimated costs ran more than \$35 million. And, according to Sandy, the problem wasn't really solved.

"With this type of disposal, you don't get rid of the problem," she says. "You just haul the contaminated dirt away somewhere, and it becomes somebody else's problem."

Sandia California News

Solvent slushing — washing the soil with solvents — was also briefly considered. However, most of the solvents worked so poorly in laboratory testing that slushing was discarded as an option. Sandy says plain water worked as well, or better, than most commercial solvents tested.

Likewise, soil venting — injecting air into the soil to evaporate the pollutant — was also rejected. While that particular method worked well with gasoline, it had little impact on the heavier, more viscous diesel oil.

The water table problem

For much of the time since the diesel spill, California had dry weather. The water table was low, and no one considered pollution of the aquifer an imminent threat. Then, it began to rain. The ground water rose, finally reaching the contaminated soil.

"Because of our monitoring efforts, we caught the problem immediately," says Sandy. "We established a pumping station to recirculate water from the aquifer, cleaning it and containing the plume to a very small area."

The entire plume is centered inside the boundary of the California facility and has not approached any off-site wells.

After reviewing the findings generated by Sandy's department, the Water Quality Control Board determined that bioremediation was by far the best method for dealing with the spill. Currently, the department is operating a pilot system in the center of the contaminated area to fine-tune the cleanup effort, which will extend to the whole plume in two years. The costs?

"This is still one expensive dinner party," says Sandy. "It will cost almost \$5.5 million to feed these microbes for the next five years or so. But in the long run, it will be well worth the investment. We'll have well-fed bacteria, and oil-free soil and ground water."

(Continued from preceding page)

schools. The concern is that not all schools have an equal chance to acquire such property.

License agreements represent contracts between Sandia and the distributor. In many cases the distributor specifically prohibits transfers to third parties. Some manufacturers will allow transfers if the receiving party agrees to the terms of the license. However, we do not have an effective method of ensuring that the receiver will abide by the terms of the license, and there is no way to be sure that transferred software will not be unlawfully copied after it leaves Sandia. Some companies in the US have been taken to court by software manufacturers for willingly or unwittingly violating software piracy laws. We believe that it would be in Sandia's best interest to avoid such exposure.

Herb Pitts (13400)

Krasnoyarsk-26

(Continued from page 1)

make satellite systems and process nuclear materials to make plutonium. "They reprocess both commercial fuel and defense material to separate out material for weapons." The closest analogy in our nuclear weapons complex? "It's kind of like a combination of the Hanford and Savannah River plants," he says.

Visited control room, reactor area

The American scientists entered the control room and reactor area and toured one of the three original plutonium production reactors. Of those reactors, one was shut down in 1992, the one visited by the team was currently not operational — although it could be restarted within two months, according to the Russians — and the third reactor continues operations, providing heat and electricity to the city of Krasnoyarsk-26.

Most of the team had expertise in radionuclide safety. Dave's interests are in safety assessments, risk assessments, and systems analysis.

(Continued on next page)



SANDIAN AT SECRET SITE — Dave Carlson (12333) amid the vast spent fuel storage area of the unfinished RT-2 commercial nuclear fuel reprocessing plant at Krasnoyarsk-26 in Siberia. Construction of the plant, on top of the mountain, has been delayed indefinitely.



AERIAL VIEW of a portion of the secret city of Krasnoyarsk-26 and the mountain behind it that contains underground nuclear fuel processing facilities. Dave says the entire city, with its population of 100,000, and the mountain are enclosed within a triple wire fence.



THIS STATUE outside a building in the city of Krasnoyarsk-26 shows a man holding an atom.



CONTROL ROOM for the three reactors inside the mountain at Krasnoyarsk-26. The group was briefed here before visiting the reactor area.

(Continued from preceding page)

"We were trying to understand what they do from a safety standpoint and in risk analysis and see about areas of possible collaboration.

"We were allowed to see certain things," Dave says, "such as the reactors and the turbine room. But still other things were off limits." He says the team was allowed to take pictures outside the site but not inside. Their visit was videotaped by the Russians, however, and delegation members were given copies.

Although conditions were hardly luxurious, their Russian colleagues were hospitable, Dave says.

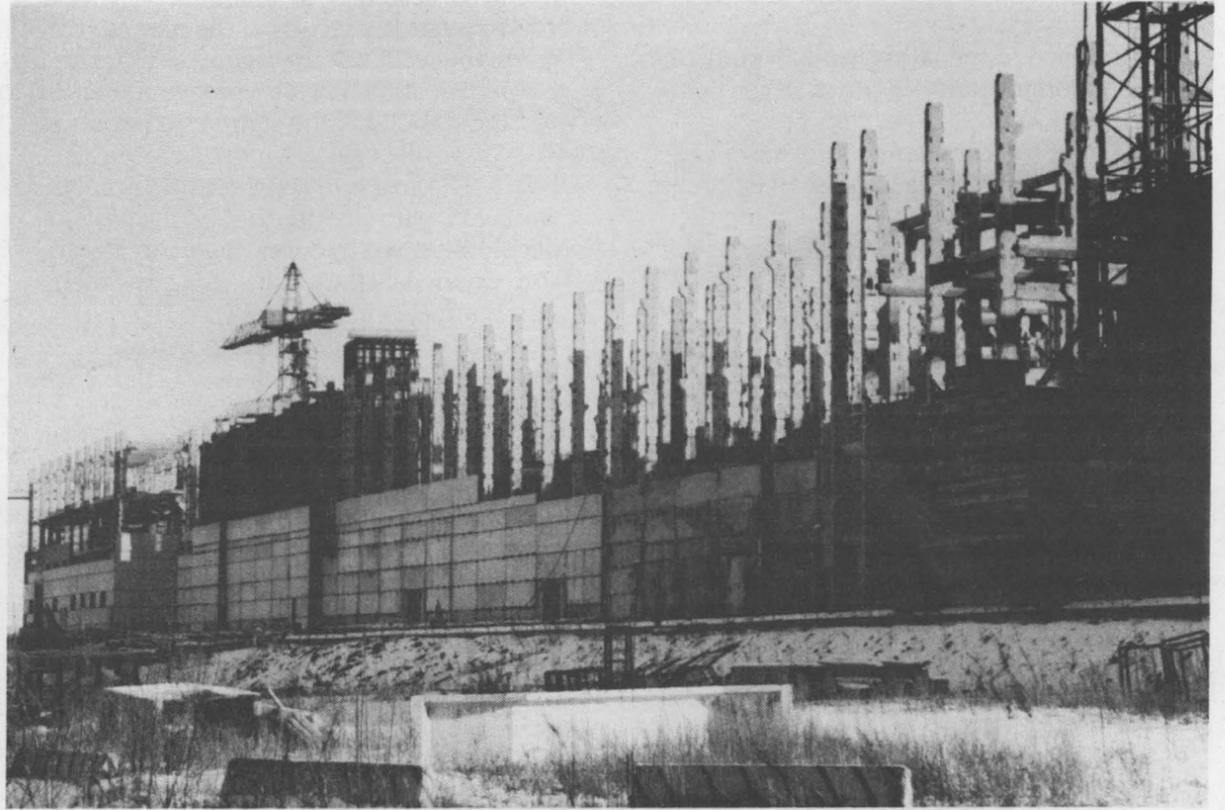
What about the bear meat? Well, one of their days there, the Russians put on a party for them out in a forest. It wasn't a short jaunt. They went in a Russian military transport vehicle for two hours to a remote cottage that had no electricity and no water. After a hike through the forest along the river, they had a fine feast. The cook fire was outdoors. "They cooked salted fish, pork on skewers, and bear meat," says Dave. "Then we were treated to a sauna and a roll in the snow."

After this variously invigorating and exhaustive trip, Dave and the others returned home briefly, then went to Washington to prepare a joint trip report.

Sandia's participation in this collaborative US-Russian effort is coordinated by its Coopera-

tive Measures Program Office, managed by Dave Nokes (5091). The collaborations on radiochemical safety will continue. The next time US members see their Russian colleagues,

it'll be right here in New Mexico. The next meeting has been scheduled for August at Los Alamos. By then, several collaborative projects should have begun.



EXTERIOR of the uncompleted RT-2 commercial fuel reprocessing plant at Krasnoyarsk-26.

Tomsk-7 accident triggered US-Russian safety effort

The first-ever visit to the secret Krasnoyarsk-26 nuclear facility by a US scientific team is part of an ongoing exchange of radiochemical safety information and joint program development between the US and Russians.

The collaborative effort began after an April 1993 accident at the Russian nuclear fuel reprocessing plant at Tomsk-7 (also now known as Seversk), in Siberia. An explosion at Tomsk-7 caused substantial plant damage and contaminated approximately 123 square kilometers. Human radiation exposure was minimized by the prevailing winds, which blew into a forested and unpopulated area of Siberia.

DOE Secretary Hazel O'Leary directed a collaborative mission to determine if there are

possible applications to DOE operations. DOE's F. Charles Gilbert was named to head the team, which visited Moscow and the Tomsk-7 site in June 1993. It also conducted reviews of DOE facilities throughout the complex to identify potential organic nitrate problems involving technologies similar to those used at the Tomsk plant.

The US delegation met again with their Russian counterparts in Richland, Wash., in September 1993. There they developed a framework for exchange of information on radiochemical safety issues. The exchange was officially included as part of the environmental/waste management agreement under the US-Russian Federation umbrella agreement for Peaceful Uses of Atomic Energy.

The Russians then issued an invitation to

the American team to visit Krasnoyarsk-26 in Siberia and the Khlopin Radium Institute and the Gatchina Laboratory in St. Petersburg. At Khlopin, team sessions focused on radiochemical modeling and experiments related to the Tomsk incident and on safety analysis and methods of risk assessment.

The Krasnoyarsk-26 visit, according to DOE, had three purposes: (1) Exchange information for improving radiochemical safety in US and Russian operations, (2) identify possible collaborative projects in radiochemical safety, and (3) develop mutual ties, friendships, and trust between US and Russian nuclear safety experts.

Before leaving Krasnoyarsk-26 on Nov. 19, the groups signed an official proceedings of the US visit.

Ninety-seven of Sandia's best manufacturing practices getting Navy's spotlight

Sandia's undergoing a Navy inspection all next week, but it has nothing to do with sea or ships. And it's seen here as something very positive for the Labs.

Twenty-three members of the Navy Best Manufacturing Practices (BMP) Survey team are coming Jan. 23-27 to learn more about Sandia Best Manufacturing Practices candidates. They'll see presentations about Sandia practices worth sharing with industry and then write them up in a report to be published by the Navy Best Manufacturing Practices Center for Excellence, in College Park, Md.

The survey team is coming to Sandia at Sandia's invitation, says Larry O'Connell of the Advanced Manufacturing Technology Center's Project Development Dept. 2901. He says BMP's intention is to look for positive practices that are worth telling others about elsewhere.

These reports go to some 4,500 recipients. They'll also be entered into an on-line database of best practices.

BMP's purpose is to extend the use of state-

of-the-art equipment and practices throughout industry and government. Spreading better ways of doing things helps everyone. US industry gets more competitive. The Navy and other customers get better products more quickly. And taxpayers get more value for their tax dollars.

The reviews begin Monday. A four-member subset of the survey team will review seven activities at Sandia/California on Monday, while the rest of the group begins reviewing 90 additional activities at Sandia/New Mexico. At the closing session next Friday, the survey team will provide a draft of its final report for Sandia review and approval.

All this is a great opportunity to get Sandia's capabilities in product realization better known throughout industry, Larry says. And that may lead to more interest by industry in working with Sandia.

"Sandia is well on its way toward an impressive set of presentations describing practices worth emulating throughout industry," says Larry.

The 97 Sandia practices chosen for review fall into six categories: design, testing, production, facilities, management, and logistics.

Examples of the Sandia practices to be shown off are the Microelectronics Reliability Benchmarking Facility, the Integrated Assembly Planning Facility, the A-Primed robotic workcell, the Just-In-Time procurement system, an innovative process for supplier selection, an expert system to support green design and manufacturing, the Sandia preferred process for software development, concurrent engineering communications, and the Advanced Manufacturing Technology Network.

Sandia is among the first research and development facilities to be surveyed by the BMP. As a result, the Navy survey team leader, Larry Robertson, is expecting to see more practices that are not yet implemented on the "factory floor" than usual. The team will still be looking for evidence that the reported practices are actually in use or will soon be implemented.

— Ken Frazier

Workweek pilot

(Continued from page 1)

team surveyed in preparing Sandia's guidelines, as one reason for Sandia's switch to the compressed workweek.

"Most of the companies our team spoke with indicated a definite increase in employee productivity and morale accompanying the implementation of a compressed workweek," she says. "We expect similar results."

Cleaner air, too

Stringent air quality guidelines in both California and New Mexico are another reason for the change. The California Clean Air Act requir-

ing corporations to minimize travel between home and the workplace and similar legislation pending in New Mexico have brought the issue to a head, according to Susan.

To judge the success of the proposed program, the team will use feedback from employees participating in a pilot program intended to test the viability of the compressed workweek. The pilot will begin at Sandia/New Mexico on Feb. 3. The goal is to continue the compressed workweek without interruption if a positive decision is made by Sandia's Quality Leadership Council (SQLC). Labs-wide implementation is targeted to begin in May.

Pilot program participants will include some New Mexico employees in Laboratory Development Div. 4000, Defense Programs Div. 5000, and Energy and Environment Div.

6000. Employees in those divisions must decide before Feb. 3 if they are going to participate in the pilot. They must then receive concurrence from their managers and agree on a schedule. Pilot program participants will have the opportunity to decide if they want

to continue on the compressed workweek once the pilot ends, and nonparticipants may opt to work the compressed workweek once Labs-wide implementation occurs.

California employees will not be participating in the pilot program, but should be eligible to participate if Labs-wide implementation occurs in May. Labor laws prevent Sandia from offering the compressed workweek to its California employees until two-thirds of non-exempt employees there vote in favor of it.

Represented employees also will not be piloting the compressed workweek unless the unions approve the new policy before or during the pilot. Labor Relations negotiators expect that bargaining will be complete and contracts will be renegotiated and modified before May, if all parties approve.

FLSA limits options

The Fair Labor Standards Act (FLSA) requires employers to pay overtime to non-exempt employees working more than 40 hours in a workweek. Because nonexempt employees are entitled to overtime compensation, they must work a balanced workweek. That means nonexempt employees can only participate in the compressed work week by working four 9-hour days and one 4-hour day each week, which would give them four hours off each Friday, or by alternating working five 8-hour

(Continued on next page)

Option for exempt employees

	Fri.	Mon.	Tues.	Wed.	Thurs.	Total Hours
Week 1	8	9	9	9	9	44
Week 2	0	9	9	9	9	36

COMPRESSED WORKWEEK — The standard compressed workweek option for exempt employees is illustrated above, using Sandia's Friday-Thursday pay period. Exempt employees may also choose from the two options illustrated below. Nonexempt employees are limited to choosing from the two options below because of the Fair Labor Standards Act (FLSA), which requires that employers pay overtime to their nonexempt employees working more than 40 hours a week (see story). Participation in the compressed workweek is optional, and any employee may choose to work a regular schedule.

Option for exempt and nonexempt employees

	Fri.	Mon.	Tues.	Wed.	Thurs.	Total Hours
Week 1	4	9	9	9	9	40
Week 2	4	9	9	9	9	40

Option for exempt and nonexempt employees

	Fri.	Mon.	Tues.	Wed.	Thurs.	Total Hours
Week 1	8	8	8	8	8	40
Week 2	0	10	10	10	10	40



TEAM LEADERS — Susan Harty (3531) and Ray Shaum (10502) discuss the upcoming implementation of the compressed workweek pilot at Sandia. The compressed workweek will give eligible employees every other Friday off or part of every Friday off.

General policy for implementing compressed workweek Labs-wide

Participation: Director or vice president may prohibit participation by organization. Department manager authorizes employee participation in compressed workweek at employee's request. Records will not be documented in the human resources database, but will be kept at the department level.

Scheduling: The scheduled day off will be Friday, but will be flexible by organization for urgent business needs. An employee will have the option to change his or her schedule every two weeks. Individuals also have the freedom to deviate their own schedules as long as they coincide with Sandia's core business hours, 10 a.m. to 2:30 p.m.

Meetless Fridays: No meetings will be scheduled on Fridays so meetings will not conflict with anyone's day off.

Must work first Friday: Because a two-week period of implementation is required, an employee must work the first Friday of the transition to get the next Friday off. Transition start dates will be staggered to maintain coverage on Fridays.

Benefits unchanged: Vacation, holidays, sickness absence, and A-Order charging will remain the same.

Problem-solving fun, realistic technology bring 96 area students to Carlsbad science fest

Sandia's 'RATS' symposium is for the kids

Sandia's WIPP Operations (SNL/WIPP) Center 6700 recently co-sponsored the second annual Realistic Applied Technology Symposium (affectionately known as RATS), at New Mexico State University-Carlsbad. Ninety-six students from the seventh and eighth grades in Carlsbad, Loving, Eunice, Dexter, and Hagerman participated in the day-long symposium. RATS offered them a chance to work together to solve real-life problems in math and science.

The students worked together in school groups on an environment problem dealing with the study of local-area water and water life. The environmental problem was devised by SNL/WIPP six weeks before RATS, and each group monitored local water sources to gather information necessary to solve the problem. At the symposium, each group presented oral, written, and poster presentations of their findings.

Following those presentations, the students joined the interschool teams to solve six real-life math and science problems. The premise of this part of RATS was to promote science and math as fun. The interschool team concept helps promote cooperation between students from the different schools. Too often there is only competition between them.

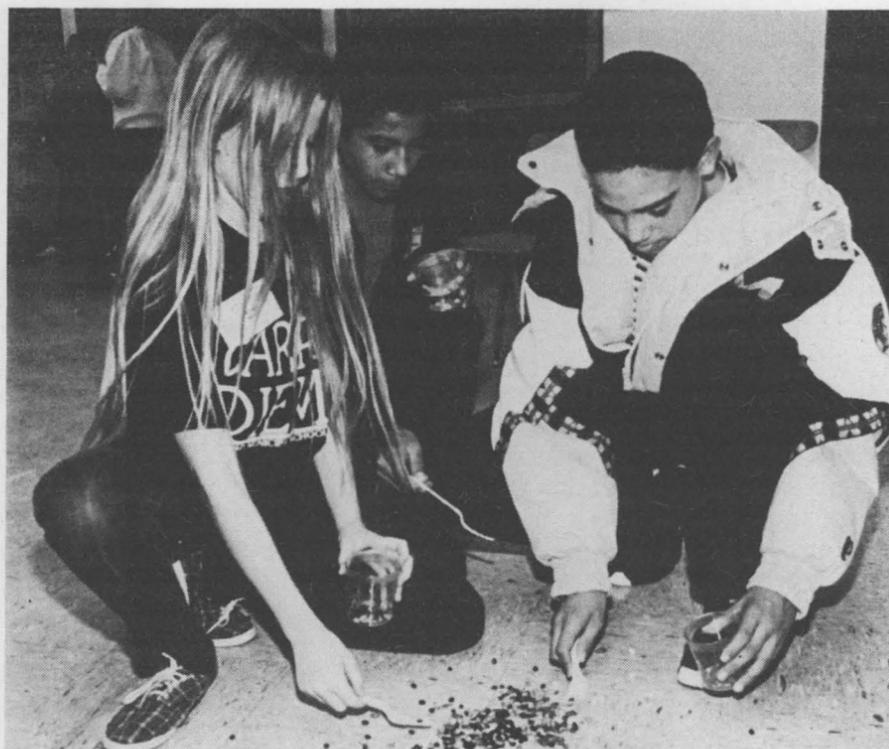
Five spontaneous problems

"The fun portion of RATS was the five spontaneous problems," says Terry MacDonald (6742), an educational outreach program coordinator for SNL/WIPP and a member of the RATS board. "These problems required the interschool teams to work and think as a unit to solve them. It's amazing what structures some students can build with marshmallows and spaghetti!"

This year, the parents of students participating in RATS were able to get involved. A panel of experts answered parents' questions on peer pressure, communicating with children, and preparing their children for college. The parents were also able to join in on the fun with the spontaneous problems. They were formed into teams and had to solve the same problems as the students. The parents' solutions were then compared with those of the students.

One highlight was the presence of Dr. Andrew Gaffney as guest of honor.

Dr. Gaffney, a one-time Carlsbad resident, is Chief of Cardiology at Vanderbilt University School of Medicine, and has been a NASA space shuttle astronaut. He gave a brief film presentation of his experiences aboard the space shuttle. He remained at the symposium all day to answer the students' questions and to encourage them. He even got a chance to be a spontaneous problem judge.



FUN LEARNING — Three students from a school team participate in the "Owl game," designed to teach about the spread of DDT-affected owls throughout a population based on different starting percentages. Ninety-six mid-school youngsters took part in the Realistic Applied Technology Symposium (RATS), put on by Sandia/WIPP in Carlsbad.

"RATS was an enormous success thanks to the hard work and support of the participating schools, SNL/WIPP, DOE, Westinghouse Waste Isolation Division, the Carlsbad Department of Development, and businesses and volunteers from the participating communities," Terry says. "Everyone is already looking forward to next year's RATS."

(Continued from preceding page)

days one week and four 10-hour days the next, getting every other Friday off. These same options are available to exempt employees, but they can also opt to have all days be nine-hour days except Friday, which would mean every Friday worked would be an 8-hour day with every other Friday off. (See graphics on opposite page.)

Division 10000 is studying ways in which the financial workweek (currently Friday through Thursday) could be changed so that nonexempt employees could have the same schedule options as exempt employees. Biweekly pay and biweekly time reporting are among the options being considered.

The discrepancy between the different options available to exempt and nonexempt employees was one issue raised by many of the Sandians in the three pilot program organizations polled in a *Lab News* telephone survey. Even so, 76 percent said they favor the compressed workweek option.

SQLC has final word

But whether the compressed workweek is implemented as Sandia policy is ultimately up to members of SQLC, who will be monitoring the pilot program. They, too, will be considering employee feedback in gauging the success of the program and deciding if the policy meets Sandia's business needs. Other issues influencing their decision are the success of union negotiations, the vote of nonexempt employees in California, energy usage monitoring, and cost effectiveness. Their decision is expected in April.

A special phone line, (505) 844-3263, has been set up for Sandians to ask questions and

give input regarding the compressed workweek. The phone will be answered in person, Tuesday through Thursday 1-3 p.m. Voicemail messages may be left anytime.

Defining the terms

Fair Labor Standards Act (FLSA): The FLSA is a federal law, administered by the US Department of Labor, which specifies minimum wage, overtime, and record-keeping requirements for employees considered to be nonexempt from its provisions.

Exempt: An employee who is not subject to the FLSA because he or she is not covered by its provisions. Exemption determination depends on job duties, responsibilities, and salary received. Exempt employees are not entitled to overtime. Timecards of exempt employees have an "E" preprinted on them.

Nonexempt: An employee who is covered by the FLSA, as determined by the type of work performed and salary, is subject to its provisions. Nonexempt employees are entitled to overtime. Timecards of nonexempt employees have an "N" preprinted on them.

Represented: Represented employees are those employees who are represented by a union. All represented employees are nonexempt, but not all nonexempt employees are represented.

Galvin report

(Continued from page 1)

Motorola chairman Robert Galvin to head it. She asked it to report back to her by February 1995.

"Now is the time to plan how the department's laboratories can best help meet the energy, environmental, economic, scientific, and defense needs of the future," she said.

She asked the task force to examine all options for change within the DOE multiprogram national labs and to propose specific alternatives, including possible "redirection, conversion, and/or closure" and "costs and benefits" of the same. She also asked it to examine the current configuration of nuclear weapons research, development, and testing among the Los Alamos, Lawrence Livermore, and Sandia national labs and to examine alternatives to that configuration.

The task force's National Security Subgroup visited Sandia June 16-17, 1994 (*Lab News*, July 8), and Galvin and five other members of the task force visited Sandia Aug. 16 (*Lab News*, Sept. 2). Sandia President Al Narath and the other lab directors have made presentations to the task force in Washington, and there have been visits by individual members to Sandia.

Sandia officials have been cautiously optimistic about how Sandia fared in the Galvin reviews.

Sympathy

To Dave Renninger (2274) on the death of his father, John Renninger, in Boyertown, Pa., Dec. 28.

Sandia officials answer reengineering questions

Replies to employee questions/comments from town meetings

Several Sandia administrators who are involved in various aspects of the Laboratory Process Reengineering (LPR) effort at the Labs made presentations and answered questions at reengineering town meetings Dec. 12-13 at Sandia/New Mexico. A similar meeting was held in mid-November at Sandia/California and was reported in the Dec. 2 *Lab News*. The basics of Sandia's reengineering activities were covered in that issue, along with some questions from Sandia/California employees and the answers.

Here are selected questions and answers resulting mostly from the Sandia/New Mexico town meetings and a few more from the California meeting. Some original questions and answers have been combined, shortened, or excerpted to save space. Some answers are exact, and a few are indirect attributions. As indicated, the following answers are provided by Executive VP Jim Tegnalia, VP Paul Stanford (10000), and Mike Ebben (10600). The *Lab News* thanks these folks for providing answers and thanks Cynthia Musselman (10605) and Linda Jaramillo (10606) for their special help. Reengineering questions answered by other Sandia administrators will be published in a future issue.

What are the goals of reengineering? The goals presented [during the meetings] were inconsistent.

Jim Tegnalia (Executive VP) — The Laboratory Process Reengineering cost-savings goal is to save \$60 million in FY98, which equates to 20 percent of today's indirect budget [see graph below].

Has the Labs decided what our mission is in order to redeploy resources — both labor and space and support systems in some priority way?

Jim: The Strategic Plan and Operational Plan will define our mission to the extent required to redeploy resources. The operational planning activity projects revenue streams for three years to provide for resource planning and is updated. . . as required.

If reengineering is another step in our "quality journey," why wasn't the Quality organization [12900] used instead of establishing the LPR business office to help the line with these efforts. Sounds like another duplication of effort and a waste of money.

Jim: Good question. We are considering the consolidation of several initiatives under one office. These initiatives include such functions as Conduct of Operations, Reengineering, Management Information & Integration Program, and Business Architecture and Process Improvement. Consolidation of these initiatives will save money, improve efficiencies, and provide focus for the line. The Quality organization has been involved. Quality Director Charles Tapp is the vice chairman of the Laboratory Process Reengineering/Chief Information Officer Council, which provides advice and feedback to the reengineering effort. We will continue to implement a quality-based program through reengineering.

Reengineering has required commercial entities to invest their profit into the reengineering process over several years before realizing the desired gains. Since Sandia has no "discretionary profit" to redirect, how will this initiative be paid for?

Jim: While some small number of AMCO [Administrative Management Council] funds have been set aside for reengineering, process owners have been challenged to reprioritize and redirect funds from their budgets to cover

the expenses of reengineering and achieve the targets associated with the reengineering efforts. Savings must outweigh the costs in the LPR project.

You promise lower overhead rates in FY96 but no reduction in the overall cost of doing business, which has risen steadily as Sandia moves formerly "indirect" functions to "direct" charging. Is reducing overall cost a major goal?

Jim: Reducing the overall cost of doing business is a major goal of LPR. The projects that we have already initiated will focus primarily on reducing administrative costs.

How can the line reduce overhead when compliance seems to grow exponentially?

Jim: We cannot continue to take on additional compliance activities on a fixed budget, without impacting our mission performance. Reasoned pushback is. . . clearly necessary and will be supported by DOE. Also, the consolidation of initiatives under a single office should reduce the impact to the line over that of the old shotgun approach to imposition of compliance requirements. This office should buffer the line from contradictory and/or redundant compliance requirements. And our approach to implementation of Conduct of Operations should provide additional relief to many lower-hazard areas of Sandia.

Center taxes are too high to support funding into Sandia from the private sector. What will we do to address these things?

Jim: When we provide a service to the industrial base, the overall cost of the service should be consistent with the value received. Those elements of our total cost (such as management, purchasing, and materials management) should be comparable to the analogues within industry; we must reduce our costs in these areas. Other elements of our total cost, such as personnel costs (we have a highly educated staff) and capital and lab equipment, are typically greater than those found in industry.

How are capabilities, for example, test and design, going to be supported if overhead is slashed? These are necessary for mission, but can't be supported just by individual projects; capabilities are a corporate resource.

Jim: I do not expect that reductions in overhead rates will be evenly spread across all corporate overhead functions. I believe that test facilities such as Tonopah and Kauai should be afforded on a pay-as-you-go or self-supporting basis. We can't assure that we should put facilities like these into overhead, hoping for new business to come along and support their costs. If new business did eventually come around, the new customers' requirements would no doubt require significant investment and/or modification to these facili-

ties. We have an obligation to determine what to do with facilities that can't make it on a self-supporting basis.

Who will make corporate-level disinvestment decisions and see that they are carried out?

Jim: Al Narath and I, with the considered advice and counsel of the Sandia Quality Leadership Council, will continue to make corporate-level disinvestment decisions at the Labs. The strategic and operational planning that we began a year ago has helped and will continue to help earmark areas of make/buy consideration. A well-oiled redeployment and retraining process will assist implementation of any disinvestment decisions.

Has all of our current technical effort been reviewed and reengineered? This includes potential duplication evaluation to ensure that all of our technical effort is directed correctly.

Jim: No, all of our current technical effort has not been reviewed or reengineered. The initial focus of reengineering is in the corporate service area. I invite the line to apply reengineering principles to technical areas. Mike Ebben's organization [10600] is available for consultation, education, and support. We believe that significant improvements could be made in the line. We also believe that the best ideas for reengineering that part of the business will come from the line.

Many, if not most, support functions do not consider the line as their customer. How do you plan to change this long-standing, major attitude problem?

Jim: The quality initiatives that began several years ago went a long way toward awakening the support functions as to who their true customers are. Reengineering is providing the first opportunity, in many cases, for these support functions to demonstrate that change in attitude. Understand that the entire attitude problem will only be completely addressed when the line recognizes and acknowledges this change on the part of the support functions. A reengineering pilot project in Organization 1000 [Research and Exploratory Technology Div.] is attempting to clarify roles, responsibilities, and accountabilities of support function suppliers, the line, and line management. We will provide this data to the line as it becomes available for comment and review.

Do you expect reengineering to cause layoffs at Sandia?

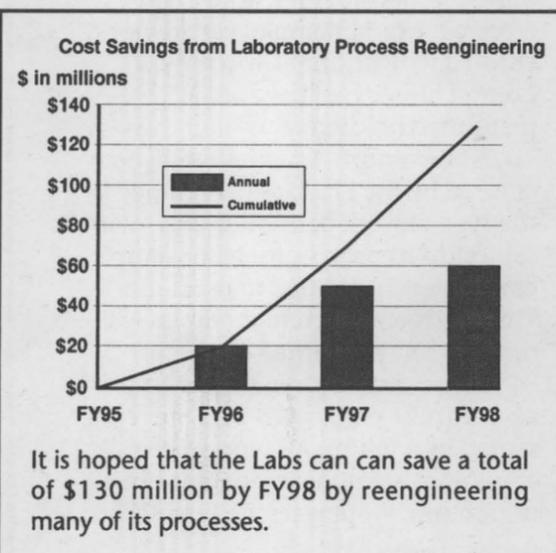
Jim: I do not expect reengineering to cause layoffs at Sandia. I expect any layoffs at Sandia will only be caused by either significant budget reductions. . . or by changes in business needs that surplus employees are not willing or able to react to via retraining.

Why are payrolls processed weekly? Wouldn't it be more cost effective to process biweekly?

VP Paul Stanford (10000): Not only would it be more cost effective to process payroll biweekly, but biweekly payroll processing will also facilitate the offering of the compressed workweek schedule to employees [see separate story on page one]. It is being evaluated in the overall reengineering of payroll and timekeeping.

How will you ensure that AMCO budget reductions will be based on difficult but sound management decisions and not on arbitrary cuts?

Paul: We are working to establish the basis for AMCO budget reductions due to reengineering results. The line tells us where we ought to cut money from the AMCO budget.



Electronic timekeeping [a term mentioned during the presentations]? Punching a clock?

Paul: Electronic timekeeping does not imply punching a clock. It implies replacement of today's [paper] timecards with an electronic timecard that can be routed to your manager for on-line approval and then routed to payroll for processing.

I've heard statistics like "80 percent of reengineering efforts are unsuccessful." How are you ensuring that we are not part of this 80 percent? Are you comparing the successful vs. unsuccessful to understand why/how?

Mike Ebben (10600) — Yes, we are comparing the successful vs. unsuccessful reengineering efforts to improve our odds of success. Michael Hammer, known as the dean of reengineering, was misquoted as saying that 80 percent of reengineering efforts have been unsuccessful. He clarified at a seminar that several Sandians attended that 80 percent of the companies that embarked on reengineering efforts failed to meet their initial goals. If a company set a goal for 30 percent improvement in an area and achieved only a 25 percent improvement. . . these results could hardly be considered wholly unsuccessful. We are working with Ernst & Young's Center for Business Innovation and continuing dialogue with Hammer and Champy to apply lessons learned from both successful and unsuccessful efforts.

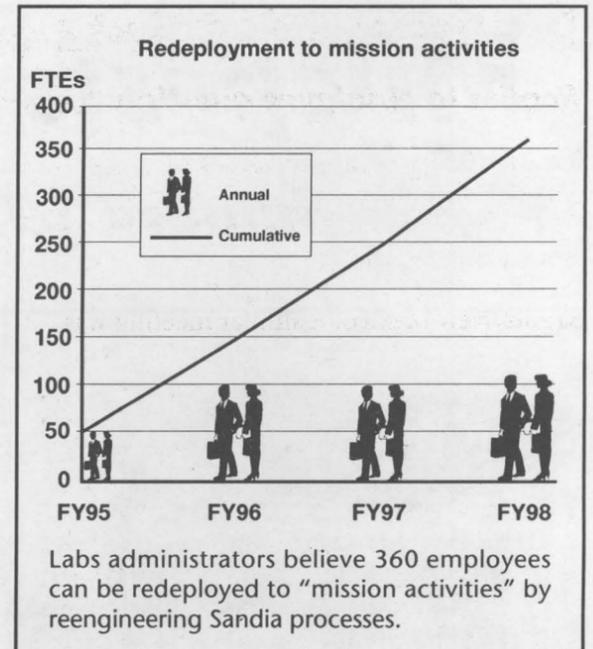
Where else within Martin Marietta has reengineering been implemented? Successes? Failures? Lessons learned?

Mike answered that other reengineering efforts have not been as coordinated or as broad-based as Sandia's. He said Martin Marietta's Orlando office started a reengineering effort on a smaller scale about three years ago, and has now established approximately 95 teams and is saving about \$28 million a year. Orlando's efforts to date, however, have been focused on manufacturing processes rather than on administrative processes. He added that Oak Ridge National Lab is also undergoing reengineering and is realizing savings of about \$160 million a year after three years. Sandia is utilizing the lessons learned and is evaluating the techniques.

Where are you getting your requirements and specifications? Will you ever ask for input from staff and line or program managers? If you want to know about supplier quality, try listening to the line instead of stonewalling us! Will there be an easy way to express concerns about unsatisfactory products, service, or costs?

Mike: More than 400 line employees have been consulted for input as to requirements/desires from reengineering. Each reengineering team has line representation on it. Also, the Laboratory Process Reengineering/Chief Information Officer Council is in place to ensure that we are addressing the needs of the line with our solutions. We are open to comment, advice, and counsel. You can fax your reengineering comments, concerns, questions, or advice to me on 844-9074 or send them to me on e-mail.

Please give us a specific, tangible exam-



ple of reengineering at Sandia and how it has already helped.

Mike: One of the initial improvements. . . is the simplification of travel authorization and reimbursement — elimination of travel authorization forms, direct deposit of reimbursements, and a new approach to voucher processing. Another. . . is the rewiring of our buildings. This has helped by providing access to those connected to additional corporate services.

How have you determined that 360 people will be redeployed [by FY98, see graph above] and 20 percent costs will be saved? Where exactly will those savings be?

Mike: The redeployment and cost-saving goals are targets established through Sandia Quality Leadership Council (SQLC) discussions as to what we need to achieve to position Sandia for future requirements. This took into consideration the Strategic Plan, DOE funding forecasts, comparisons to other institutions and companies, and results from documented reengineering efforts. The savings will be realized in all aspects of. . . Sandia business, including the central administrative organizations, line administrative organizations, and line technical processes.

Sandia News Briefs

President's State of the Labs address at Sandia/California changed to Feb. 21-22

Because of schedule changes, President Al Narath will give his State of the Labs address to the Livermore community on Tuesday, Feb. 21, 7 p.m., in the Livermore High School auditorium. The California employee dialogue sessions featuring the State of the Labs address have also been changed from Feb. 1 to Wednesday, Feb. 22, at 10:30 a.m. and 1 p.m. in the Bldg. 904 auditorium. Al was originally scheduled to deliver his State of the Labs address to California employees and to the Livermore community on Feb. 1, but had to change that in order to attend the Galvin Task Force presentation in Washington on that day (see story on page 1). Al's State of the Labs address to the Albuquerque community remains on Tuesday, Feb. 7, 5:30 p.m., at the Technology Transfer Center (Bldg. 825). New Mexico employees will hear the address at the employee dialogue sessions scheduled for Friday, Feb. 3, at 8:30 and 10 a.m. in the Technology Transfer Center.

Eunice Young wins Black Engineer of the Year award

Eunice Young of Energy/Environment Education/Outreach Dept. 6905 was selected to receive the 1995 Black Engineer of the Year Award in the category of Affirmative Action. Black Engineer of the Year Awards are presented to outstanding African-American engineers, scientists, and technology leaders. Eunice was selected because of her efforts to promote affirmative action by contributing to Sandia's approach to Blacks' advancement in education, job promotion, business development, and community activities. Eunice's award will be presented Saturday, Feb. 18, in Baltimore, Md.

AMMPEC signs articles of incorporation

The Advanced Materials and Manufacturing Processes for Economic Competitiveness (AMMPEC) Alliance was formally incorporated with the signing of the articles of incorporation at the Advanced Materials Laboratory on Jan. 11. AMMPEC is a not-for-profit organization actively engaged in the maturation of new materials-related and advanced manufacturing process technologies. The Alliance was started by Bob Egan, Director of Physics, Chemistry, and Metrology Center 1100, Al Romig, Director of Materials and Process Sciences Center 1800, and Cesar Lombana, Manager of Industrial Partnership Development Dept. 4211. The Executive Director of AMMPEC is Jeff Bullington, former CEO of Radiant Technologies, Inc., an Albuquerque small business involved in development and manufacture of nonvolatile ferroelectric memories for computer applications. AMMPEC is currently seeking alternate funding sources for cooperative research and development agreements between the DOE national laboratories and the industrial sector. For further details, call Walter Schimmel (4212), Materials Product Area Manager, on 271-7846.

Sandians respond to Clean Air Challenge 1994

The results of the 1994 Clean Air Challenge are in, showing Sandia participation increased by almost 50 percent over last year. Community sponsors of the Clean Air Challenge encourage Albuquerque drivers to find alternate means of transportation, such as the city bus or car-pooling, for at least one day during Challenge week. The 1994 Clean Air Challenge, held Dec. 3-9, prompted 906 Sandians to return pledge cards, compared with 620 cards returned last year. Sandia had 11.2 percent participation, finishing second city-wide in our size category behind UNM, which had 17 percent participation.

Send potential Sandia News Briefs to Lab News, Dept. 12622, MS 0413, fax 844-0645.

Congratulations

To Theresa and Richard (1845) Brow, a daughter, Katherine Anastasia, Oct. 24.

To Brawna and Kevin (9133) Henderson, a daughter, Brynn Erin, Oct. 25.

To Sheryl Hingorani (4514) and Randy Watkins (6625), a daughter, Aja Claire, Dec. 1.

To Brenda Langkopf (6622) and John McBryer (1302), a daughter, Josefine Desiree McBryer, Dec. 5.

To Pam King and Tom Corbet (6115), a daughter, Andrea Katherine Corbet, Dec. 13.

To Teena (1517) and Jeff Volker, a son, Nicholas Scott, Dec. 23.

To Donna Martin (10200) and Michael Stimak, married in Albuquerque, Dec. 30.

To Alice and David (3344) Skousen, a son, David Logan, Dec. 31.

Fun & Games

Soccer — An entry-level soccer referee clinic will be held on Saturday, Jan. 28, 8 a.m.-5 p.m. and on Saturday, Feb. 4, 8 a.m.-12:15 p.m. at the Heights Cumberland Presbyterian Church on Academy at Moon (west of Wyoming). The field session will be held on Saturday, Feb. 4, 1:30-4 p.m. at La Cueva High School. Satisfactory completion of the training, provided at no charge, will fulfill the requirements for certification as a USSF referee. For more information, contact Paul Mix on 299-7547.

Mileposts

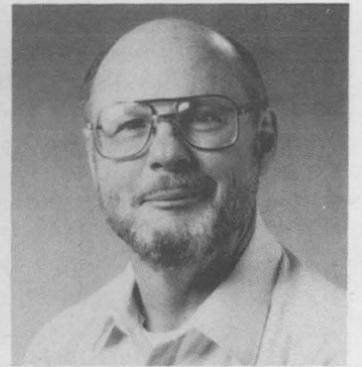
January 1995



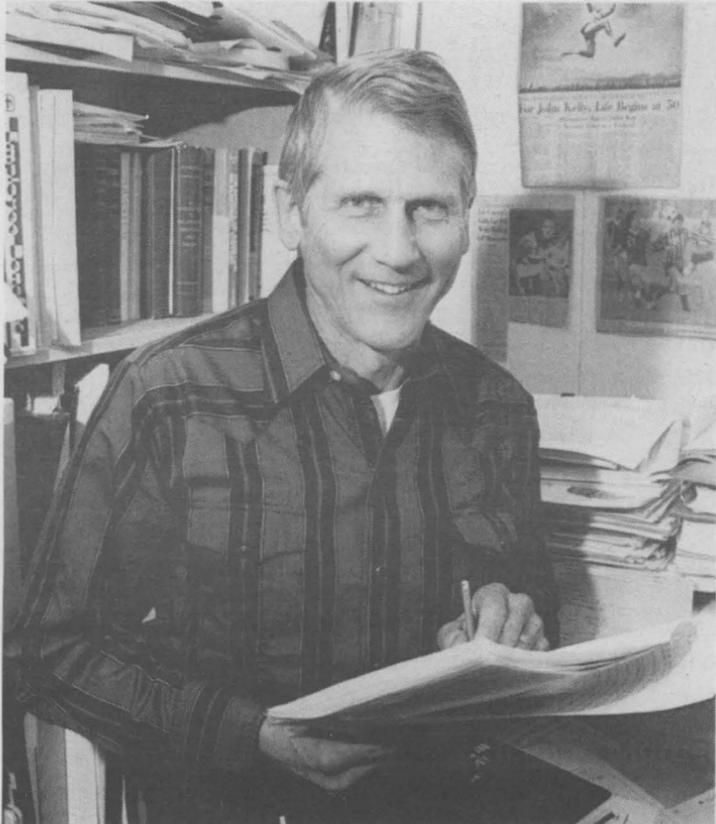
George Edgerly 35
2566



Al Romig 15
1800



Thomas Prevender 25
5912



Jake Kelly 30
6514



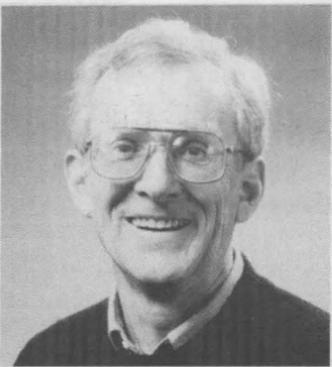
Maria Lake 15
2334



Silviano Candelaria 30
5512



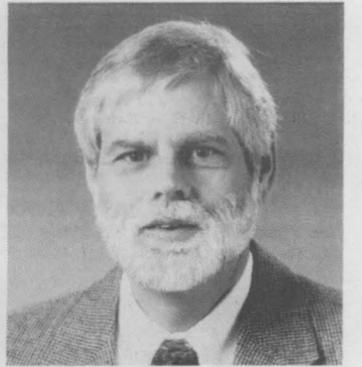
Chris Robertson 15
7442



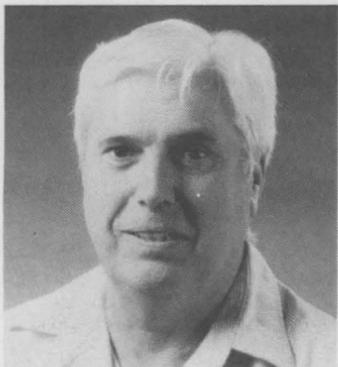
Donald Hoke 35
2653



Spencer Nelson 15
13917



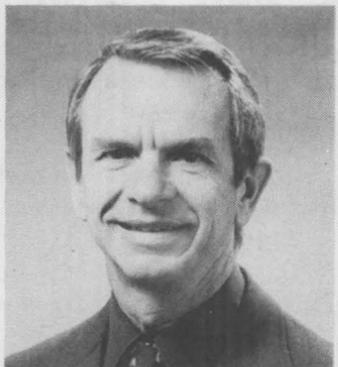
Robert Williams 20
9136



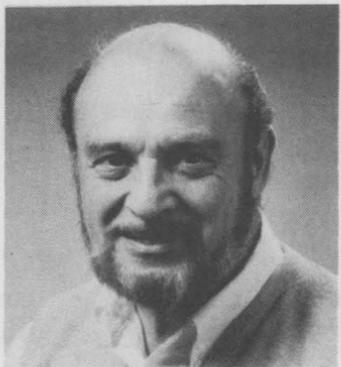
Richard Wright 15
2483



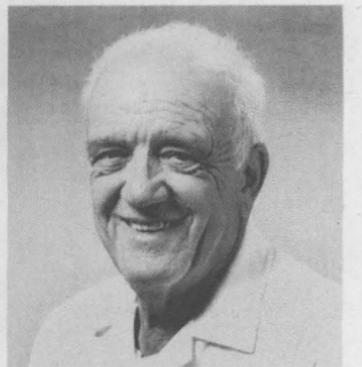
A. V. Farnsworth 25
1432



Jim Furaus 15
7903



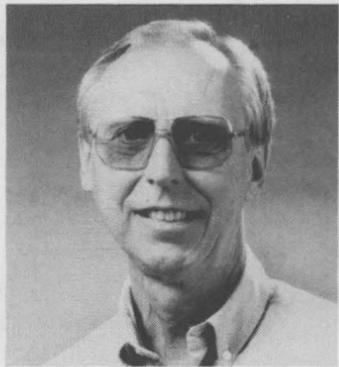
Paul Cooper 30
9333



Thomas Tracy 15
7811



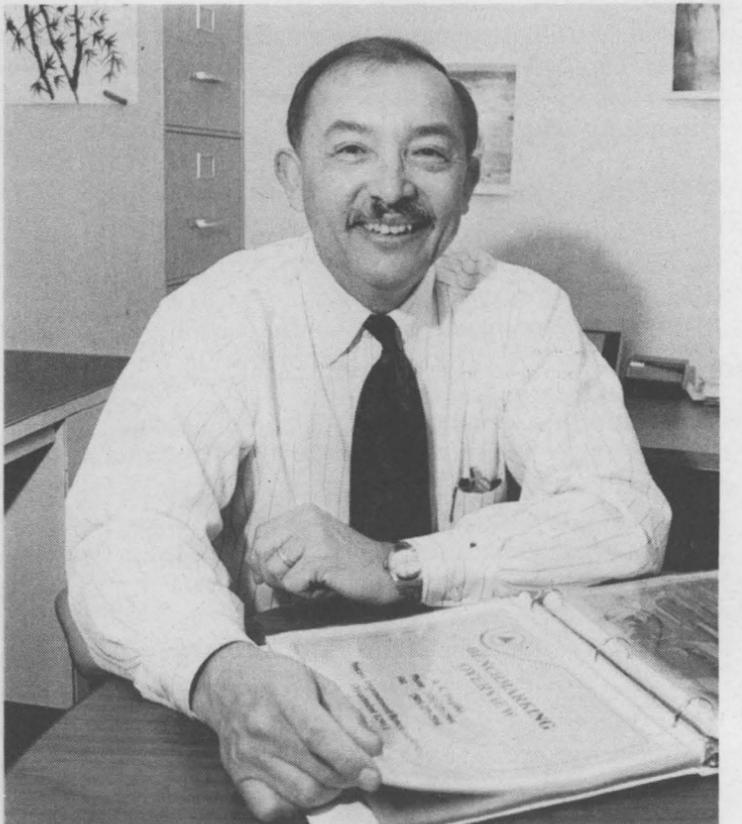
Dean Wilson 15
2781



William Schaedla 20
2343



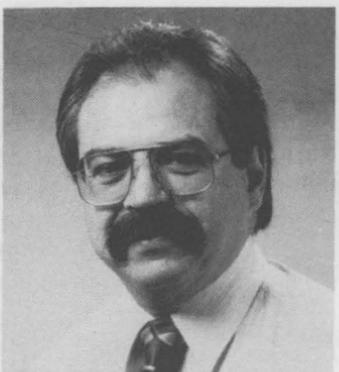
Ray Ostensen 15
6113



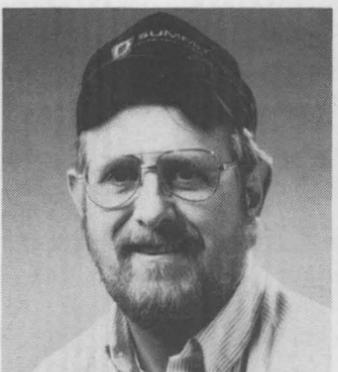
Art Trujillo 30
12913



Patrick Drozda 20
6114



David Sepulveda 15
7712



Randy Swier 25
9816

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

MISCELLANEOUS

REFRIGERATOR, Hotpoint, white, 14 cu. ft., large freezer, excellent condition, \$120. Bliss, 296-3752.

TIRE CHAINS, 12-3/4" x 54", 12" x 71", 14" x 62", heavy-weight, \$10/pair. Kepler, 296-0402.

CD PLAYER, JVC model XL-V112BK, black cabinet, dual D/A converter, oversampling digital filter, CompuLink remote capability, programmable, \$50. Schkade, 292-5126.

CONSOLE TV, Heathkit mahogany; Tappan Profile 300 double oven, electric range, 30 in. wide. Peabody, 296-6239.

'94 NORDICTRACK EXCEL, includes books, tape, meter, excellent condition, only used a few times, \$350. Hart, 822-1768.

REFRIGERATOR, Kenmore, 19.3 cu. ft., almond, excellent, \$400; Sears microwave, 1.4 cu. ft., excellent, \$150; Kerosun kerosene heater, \$150. Savage, 890-4796.

QUEEN-SIZE BED, mattress, box spring, metal frame, 4 yrs. old, \$150. Kovacic, 256-9867.

INFANT CAR SEAT/CARRIER, \$25; powered recliner/swing, \$40; Tot Wheels walker, \$15; Pack-n-Play pen, \$40. Bishop, 299-8782.

STANLEY ROUTER w/9 bits, instructions; dovetail, plane, & butt hinge, attachments, all in cabinet, \$60. Henry, 266-6467.

MIDI KEYBOARD, Suzuki, \$30. DeMarquis, 237-9858.

286 COMPUTER UPGRADE, 386SX-25 motherboard w/CPU, 4MB RAM, 2400 modem, Orchid PROLIS w/1MB, SCSI card, \$50 takes all. Ennis, 836-0504.

KING-SIZE WATERBED, w/6-drawer pedestal, \$225 or \$300 w/matching chest; cross stepper, \$30. Gutierrez, 275-8228.

WASHER/DRYER, General Electric, almond, heavy-duty, extra-large capacity, many features, great condition, \$325 pair. Miner, 298-4779.

STUDENT JEANS, 28-29/32, \$10; boy's clothing, various sizes; small leather jacket, \$25; leather coat, \$45; sheepskin jacket, \$250. Gonzales, 823-9511.

SOFA & LOVESEAT, popular pattern, w/light Southwestern colors, looks new, stain guard, recently cleaned, very comfortable, \$575 for both. Jackson, 275-2524.

EPSON PRINTER FX-286NLQ, \$75; cable, \$8; Epson FX-100, 9-pin, \$45, see it work. Kietzel, 294-4702.

DINING TABLE, Thomasville, 41" x 64", w/4-arm chairs, two 16-in. leaves, pecan finish, \$550; coffee table, 40" x 40", w/glass top, \$375. Salazar, 281-0560.

DIAMOND RING SET, engagement/wedding, nice stones, size 7, very beautiful, appraised at 1K, will sell for \$700. Lucero, 877-7517.

WOMAN'S DIAMOND RING, 18K white gold, 1/2-ct. solitaire, certificate of appraisal \$2,195, asking \$1,495. Lehrer, 898-2581.

COMPUTER, 80486DX-33, 8MB RAM, 256K cache, 240MB HD, Diamond Stealth VRAM (1MB) video, SVGA monitor, 14.4K fax modem, \$975. Smith, 856-1567.

TIRES, used, good tread, three 165/SR13; three P235/75R15. Medina, 299-8475.

DRESSER & DESK, American Furniture, like new, \$850, (Lexington); electric stove, w/oven & microwave, \$150. Banks, 291-1784.

GIUITAR, Ibanez Performance, ovankol wood, limited edition, w/SKB case, both new. Robertson, 294-2652.

SKIS, cross-country, Fischer, waxless, 200cm, 3-pin, \$70; poles, 135cm, \$7. Lorence, 275-3586.

'91 BALDWIN SPINET ORGAN, MCX2100, midi, all easy-play features, 20 pre-recorded songs, new, \$7,450, sell \$2,995. Landis, 865-9111.

MACINTOSH PLUS COMPUTER, two 3-1/2-in. 800K drives, ImageWriter II printer, mouse, software, works perfectly, \$250 OBO. Case, 293-5466.

SKIS, 190cm, very good condition, \$75. Wernicke, 237-9332.

STEEL SHELVES, 36"W x 10"D x 90"H, Sandia surplus "Ames" shelves, \$15. Stirbis, 299-8442.

GOLF BAG, Sun Mountain, (w/pop-out legs), \$25; Burke Tommy Armour irons, (2-SW), \$30. Philbin, 838-2414.

OAK DINING TABLE, 42" x 48", plus 4 chairs, \$200; Easy Stepper, \$75; upright sweeper, \$25; Fischer 180 skis; Raichle boots, size 9-1/2. Whelan, 255-3529.

TWA AIR TRAVEL CERTIFICATE, \$100 off on one-way, or round trip transatlantic fare, expiring Jan. 31, 1995, \$50. Wagner, 823-9323.

PET FENCING, portable, 16' x 3', folds to 3' x 2', for use at shows, \$25. Dykhuizen, 281-9463.

MACINTOSH LC III COMPUTER, 8MB memory, 8MB HD, purchased Sept. 93, like new, \$500 OBO. Lujan, 299-2218.

PIONEER SX780 RECEIVER, \$35; Teac R/R tape, auto/reverse tape deck, \$40; Radio Shack Optimus speakers, \$20 pair. Guilford, 255-6294.

WEDDING GOWN, size 6/8, chantilly lace collar & train, empire waist, full-length mantilla veil, simple but elegant, \$100. Seyfer, 292-0179.

SANDIANS, last call for anyone interested in spring Europe trip, two couples going, looking for companions. Benton, 275-2602.

BEDLINER for '84-'95 Ford truck, full-size, long-wide bed, good condition, \$100. Brown, 865-1151.

GIUITAR EFFECTS PEDALS, Boss phase shifter, AD3 distortion, \$30 ea., \$55 for both. Holmes, 897-0916.

UTILITY TRAILER, made from 7-ft. Datsun pickup bed, including some hitch parts, \$150 OBO. Grossman, 856-2096.

WASHER/DRYER, Sears Kenmore, heavy-duty washer, large-capacity dryer, 3 yrs. old, excellent condition. Marra, 899-2087.

COMPUTER PRINTER, Panasonic KX-P1191, dot matrix, manual, cable, box of paper, free of troubles, \$85. Shunmy, 265-1620.

STEREO SPEAKERS, OHM Walsh, 4 omnidirectional, 40"H, rosewood finish, \$425; Mamiya C330F TLR camera, 2/180mm lens, \$700 OBO. Brooks, 275-0056.

KING-SIZE WATERBED, waveless mattress, headboard, storage drawers, \$150; rowing machine plus several other configurations, \$50. Goodwin, 294-6702.

COMPUTER, SVI-328, runs BASIC, w/2 joysticks & games, IBM PC-compatible, runs DOS, EGA color monitor, dual 5-1/4-in. drives, w/software. Shrouf, 821-0765.

LA-Z-BOY RECLINER ROCKER, gold tweed, wingback, like new, \$150; bentwood rocker, rattan seat/back, excellent condition, \$50. Grothaus, 821-1530.

LA-Z-BOY ROCKER RECLINERS, matching, dark brown, excellent condition, \$165 ea.; turntable, 8-track, FM receiver, speakers, \$100. Dubois, 256-9165.

TABLE SAW, 9-in. Rockwell w/extension, direct drive, 5/8-in. arbor, w/blade guard, mitre guide, sanding disc, \$95. Letz, 293-4525.

STAIR STEPPER, nearly new, excellent condition, paid \$150, asking \$75. Kallio, 856-1350.

GRAND PIANO, upright, circa 1849, great shape, beautiful wood, \$600 OBO. Eikelberg, 296-0899.

EXERCYCLE, Lifestyle dual-action ergometer, excellent condition, \$110. Meloche, 296-1452.

BUTCHER BLOCK TABLE, custom-made, excellent condition, \$100; metal footlocker, \$10. Foflygen, 294-9768.

DOGHOUSE, igloo style, large, w/door flaps, less than one year old, \$50 OBO. Hamilton, 271-8643.

KITCHEN TABLE, w/4 chairs, \$125; double bookcase bed, complete, \$100; 1929 portable sewing machine. Puhara, 255-7447.

TRUNDLE BEDS, Techline style, white laminate, one Sealy Posturepedic and one foam mattress, new condition, \$175. Crego, 292-0266.

BIKE TRAILER, good condition, seats 2 children, includes child's helmet, \$100. Bouchard, 293-2618.

ORIGINAL R. C. GORMAN, 1978, \$18,000. Baca, 296-6985.

PRECIOUS MOMENTS collections, \$35 to \$100. Wenzelburger, 256-9370.

STATIONARY BIKE w/back rest, low mileage, \$50; joggers trampoline, \$45. Navratil, 293-5527.

AUTOMOTIVE TOOLS, engine stand, car ramps, undercar creeper, all heavy-duty, all good shape, \$100/all. Gorman, 292-7119.

DP POWER TRAC 2000 TREADMILL, excellent condition, \$125. Prevender, 296-8586.

CAR STEREO, Blaupunkt CD player w/amplifier, used less than 1 yr., paid \$1,000, will sell for \$400. McNamer, 866-1413.

BORDER COLLIE, female, 1 yr. old, spayed, smart, good w/children, likes to herd & run, \$250 w/accessories. Morrison, 299-4757.

GATEWAY COMPUTER, 386/33 system, SVGA monitor, 404MB HD, CD-ROM, sound system, \$675. Thomas, 822-1923 after 5 p.m.

REFRIGERATOR/FREEZER, Hotpoint, no-frost, 23.5 cu. ft., ice maker, external ice & water dispenser, almond. Machin, 822-8125.

STEREO, AM/FM tuner, dual-cassette deck, turntable, all-in-one unit, 2 speakers, stand, \$50 OBO. Henson, 291-0180.

OLD OAK DESK, single pedestal, \$100; sewing machine, console, attachments, \$75; tires, set, Michelin, P215, 75R/15, \$100. Wemple, 298-2048.

REFRIGERATOR, good condition, 10 yrs. old, 18 cu. ft., frost-free, w/ice maker, almond, \$200 OBO. Gido, 823-6697.

AIRDYNE EXERCISE BICYCLE, Schwinn, w/sheepskin padded seat, good condition, 838 miles, \$375. Wright, 298-4567.

1MB SIMMS, 70NS, \$30 ea.; adult skis, w/Solomon bindings, used twice. Forster, 293-7231.

PERSONAL COMPUTER, 8088, 10Mhz, 20MB HD, 14-in. amber monitor, 2400-baud internal modem, WordPerfect, Quattro-Pro, best offer. Caskey, 298-6428.

Deadline: Friday noon before week of publication unless changed by holiday. Mail to Dept. 12622, 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.

MEAT GRINDER, Hobart Model #4612, 1/4-hp, stainless-steel attachments included, excellent condition, sells for \$1,425 new, asking \$900. Papas, 268-7020.

CANOE, Old Town, 16-ft. Penobscot, \$600. Allhouse, 296-2276.

PORTABLE GENERATOR, Kawasaki, Model #KG550, never used, \$400. Parsons, 298-3053.

CAMERA, Pentax P3N, SLR, 1:2 50mm lens, Vivitar 28-70mm zoom, AF160Sa flash, \$150. Lewin, 898-2303.

LASERJET III, w/PS cartridge, \$900; Dell 386/33, 4MB RAM, fax, 130 MB HD, both floppies, SVGA, \$700; garage refrigerator, \$50. Black, 822-1216.

BABY BASSINET, w/canopy (Spanish rattan), never used, \$100 OBO; antique oak fireplace mantle, w/beveled mirror, \$150 OBO. Steel, 298-3815.

CAMERA, 35mm Contax, extras, \$400; 8,000 baseball cards, make offer; framed paintings, fancy gold frames; golf clubs/bag, \$150. Eikelberg, 296-0899.

SOFA SLEEPER, earthtone floral design, good condition, \$325; 13-in. B&W TV, \$15. Cocain, 281-2282.

WATER PUMP, 1/3-hp, 3/4-in, 1/2-in. out, 11.5v., never used, \$100. Moss, 298-2643.

SKI EXERCISER, Fit-One, cross-country, paid \$299 new, used only a few times, \$125 OBO. Harris, 299-4559.

286 TURBO IBM-COMPATIBLE PC, 40MB HD, 1MB RAM, 3-1/2 & 5-1/4 floppy, internal fax/modem, keyboard, VGA monitor, mouse, \$350 OBO. Cheng, 275-7008.

FLEX EXERCISE MACHINE, includes stepper & all apparatuses for arms, shoulders, pecs, thighs, like new, \$110. Etheridge, 888-2633.

SNOW TIRES & WHEELS, recaps, L78-15 for Ford pickup; air & oil filters for Ford Escort, Fram CA-3597 & PH-3600. Dresser, 281-8247.

SKI & TRAM SEASON PASSES for Sandia Peak, bargain price, make offer. Schultz, 821-5158, call 291-1600 days, ask for Lytle.

WHITE SEWING MACHINE, straight & zigzag stitching only, \$50. Romero, 281-9423.

DINING ROOM SET, dark solid-wood table, w/2 leaves, 4 matching chairs, hutch, \$350. Campos, 836-3605, leave message.

MACINTOSH SE COMPUTER, w/Imagewriter II printer, software, manuals, \$500 OBO; sofa, \$350. Waggoner, 293-4755.

MARCY WORKOUT CENTER, bench press, leg lifts, lat pull-downs, curls, 80 lbs. extra weights, originally \$650, sell for \$300. Langwell, 293-2728.

BANTAM ROOSTERS, 3 silkies, 1 frizzle, free, in Corrales. Stude, 897-4352.

HO TRAIN & BOARD, partially completed, \$50; N-scale train & board, partially completed, \$50; Savannah monitor lizard w/large cage, \$20. Van Den Avyle, 898-6474.

CRIB & MATTRESS, excellent condition, \$100; baby swing, battery operated, \$25. Pott, 821-2253.

WOMAN'S VORDIKA BOOTS, 6-1/2, \$70; two ski outfits, size 5, \$40 ea.; Head skis, 175, Mk2S bindings, \$50. Martinez, 242-9067.

BEDROOM SET, king-size waterbed, mattress, new heater, liner, dresser w/mirror, \$300. Atencio, 897-2189.

STENOGRAPH MACHINE, manual, w/stand & 15 pads of paper, \$150. Serna, 275-2061.

ALLOY WHEELS, 6.5 in. x 14 in. for '84/'85 BMW, \$75 ea. Gough, 822-0090.

WETSUIT, USD, 3mm bibs & step in jacket, fits male approx. 5'8", 150 lbs., blue/red trim, excellent condition! Warren, 294-5250.

SAILBOARD, Mistral Maui, 1986, excellent condition, \$400; large wetsuit, \$50; Amiga 2000 computer & software, \$300. Sjaardema, 299-8042.

COLT 357 REVOLVER, Pachmayr grips, \$300; AMT 380 pistol, stainless steel, \$200, both new condition w/padded cases. Daniel, 883-0763.

PORTABLE WASHER/DRYER, Kenmore, \$325; brass lamp, \$25; playpen, FP swing, backpack, carrier, highchair, more. Levay, 243-0079.

TRANSPORTATION

'86 GMC CUSTOM VAN, 3/4-ton, V8-305, great family vehicle, loaded, immaculate, 70K miles, hightop, AT, dual-air, \$6,500. Aragon, 897-3878.

'87 TOYOTA TERCEL SR5, wagon, 5-sp., 4WD, AC, stereo, 83K miles, \$3,400. Copus, 281-4483.

'84 PONTIAC FIREBIRD, great condition, 106K miles, \$2,700 OBO. Kapuranis, 275-8299.

'90 GMC SUBURBAN SLE, C1500/ZWD, white loaded, 78K miles, 350 V8, tow pkg., very good condition, must see, \$14,500. Lane, 856-1341.

'79 MERCEDES 300 SD, creme w/palomino interior, excellent condition, \$5,250. Salazar, 281-0560.

'74 CLASSIC BMW 2002Ti, excellent condition, one owner, 50K miles on new engine, sound system, recently painted, \$6,000. Hays, 836-2099.

MAN'S 10-SPD. BICYCLE, \$50. Banks, 291-1794.

'84 CADILLAC SEDAN DEVILLE, good, comfortable, \$1,995. Wenderott, 281-4609 evenings.

'92 HONDA PRELUDE, 37K miles, PW, PL, power sunroof, PS, PB, AC, 6-speaker AM/FM cassette, airbags, airfoil, teal, 5-sp., \$17,900. James, 344-5251.

'89 OPEN ROAD MOTORHOME, 31-ft. basement, w/rear queen bed, Cummins turbo-diesel, APV, dual AC, microwave, color TV, \$32,000. Harmon, 856-1805.

'88 FORD MUSTANG, 5.0 LX hatchback, one owner, 63K miles, AT, PL, new paint, excellent condition, \$5,299. Amundson, 866-1300.

'92 DAIHATSU ROCKY 4x4, sport utility, AC, AM/FM cassette, 31K miles, very nice condition, \$9,600 OBO. Jones, 292-0175.

'89 CAMARO RS, V6, T-top, fully loaded w/extras, 28K miles, well maintained, asking \$7,200 OBO. Marquez, 831-1732 after 5 p.m.

'93 HONDA CBR900RR, adult owned, 3K miles, red, white, & blue, extra windshield, Lockhart rear stand, \$7,500 OBO. Light, 299-0336.

'90 VW JETTA, PL, PW, sunroof, low miles, warranty, custom wheels, cruise control, AM/FM cassette, AC, \$6,700. Rhodes, 884-8394.

'94 HONDA MOTORCYCLE, 250XL, purchased Nov. 94, excellent condition, 400 miles, remaining factory warranty, \$3,495. Girard, 292-3708.

'63 FORD GALAXIE 500, 390 V8, AT, PB, PS, upgrades, white on sky blue, 118K miles, transmission ok, \$3,000 OBO. Stang, 256-7793.

'81 MERCURY CAPRI, 4.2L, V8, 165K miles, good transportation, not a wreck, \$2,000. Crumley, 299-5293.

'90 CHRYSLER LEBARON, G/AT, 2-dr., red, PS, PB, AC, bucket seats, alloy wheels, low mileage, very clean, \$9,000. Brown, 271-1141.

'82 OLDS 98 REGENCY, 4-dr., 91K miles, fully equipped, excellent condition, original owner, \$2,500. Whitfield, 884-5104.

WOMAN'S BIKE, 10-sp., 26-in., \$45. Navratil, 293-5527.

'90 CORVETTE, convertible, AT, Delco Bose Gold CD system, excellent condition, \$21,900 OBO. Daniels, 292-2775.

'92 MAZDA MIATA MX-5, convertible, 5-sp., stereo tape, new Pirelli tires, excellent condition, \$11,800. Lifke, 237-1490.

'88 CELEBRITY EURO SPORT, stationwagon, loaded, 84K miles, great condition, original owner, \$3,300. Machin, 822-8125.

'87 FORD F250, 4-sp., shell, \$5,300; '67 El Camino, Chevelle big-block hood, straight body, needs engine work, \$1,500. Wemple, 298-2048.

'91 NISSAN MAXIMA, 4-dr., loaded, excellent condition. West, 865-4203.

'84 DODGE, full-size conversion van, 318-V8, 83K miles, 4 captains' chairs, back bench/bed, stereo, dual air, PW, PB, cruise, \$5,500 OBO. Salas, 294-5863.

'86 GMC JIMMY, two-tone, 2.0, AT, PL, PW, 75K miles, excellent condition, \$5,800. Hubbs, 891-2846.

10-SPD. BICYCLE, Schwinn Super LeTour, w/tour packs, good condition, \$75. Cocain, 281-2282.

'91 CHEV. VAN, full-size, Mark III conversion, 350 V8, dual air, towing pkg., excellent condition. Grant, 271-1449.

'87 FORD TAURUS, white/gray, V6, AM/FM cassette, 97K miles, runs well, looks good. Valerio, 869-4622.

'86 DODGE RAM 50, w/shell, AC, AM/FM cassette, cruise, 100K miles, runs great, \$2,100. Schafer, 828-9544.

'88 KAWASAKI KX, 125cc, excellent condition, well-maintained, \$1,100. Dresser, 281-8247, after 5 p.m., ask for Chris.

'75 CHEV. PICKUP, LWB, 6-cyl., 3-sp., AC. Richards, 281-9471.

'89 FORD BRONCO XLT, 351, AT, AC, cruise, PD, PW, AM/FM cassette, 116K miles, \$7,000 firm. Caton, 281-9420.

'88 MAZDA 929, 4-dr., luxury model, has all options, including heated seats, 90K miles, \$7,300 OBO. Martinez, 242-9064.

'90 MAZDA MX6 DX, excellent condition, 5-sp., AC, stereo cassette, cruise, alloy wheels, 73K miles, dark gray, \$7,650. Salmen, 881-8612.

REAL ESTATE

5-BDR. HOME, East Mountain adobe, w/clearstory, 2 baths, 2,300 sq. ft., 1.3 acres, 300 sq. ft. CB storage bldg., \$165,000. Wernicke, 237-9332.

3-BDR. HOME, Sandia Terrace, formal living, dining & den, w/breakfast area, 1-3/4 baths, 1,780 sq. ft., double garage w/opener, \$129,000. Lin, 821-6183.

4-BDR. HOME, Holiday Park, near Tramway & Comanche, 2 baths, 1,985 sq. ft., \$145,000. Bouchard, 293-2618.

4-BDR. CUSTOM HOME, Corrales, 2,400+ sq. ft., 2.5 baths, living room, family room, dining room, 3-car garage, \$249,500. Teague, 897-2496.

3-BDR. MOBILE HOME, '89 Oakcreek, 16' x 80', skirting included, 2 baths, big kitchen, excellent condition, \$23,700. Salazar, 865-3632.

3-BDR. HOME, 2 baths, 1 mile (paved) east of Tijeras, two acres, 15 min. to Albuquerque, decks, security system, pellet stove, \$157,500. Dresser, 281-8247.

WANTED

TV ANTENNA, large, for outdoor use, must be like new. Holmes, 292-0898.

CROSS-COUNTRY SKIER WANNABEES, free all-day group lesson, experienced teacher. Shunmy, 265-1620.

LEGOS, gray and/or black castle parts preferred, anything considered. Hunter, 294-2807.

LOVING INDOOR HOME for affectionate, spayed, female cat, black & white, long hair, declawed, 7 yrs. old, litterbox provided. Griego, 864-2624.

ADVENTURERS, Grand Canyon, Colorado River raft trip, 8 days of scenic beauty/relaxation, Sept. 1995, \$1,400. Barr, 856-1767.

TENNIS TABLE. Romero, 897-2690.

SHARE 2-bdr. N. Valley adobe house, hardwood floors, fireplace, skylights, dishwasher, deck, storage on 1/3 acre, cats ok, \$395/mo. plus 1/2 utilities, \$250. Colarullo, 343-8034.

RENSELAER GRADS: UNM student interested in graduate study at R.P.I. I want to talk w/you about the school. Hatheway, 296-0989.

STUDENT NEEDS notebook computer, IBM-compatible, 486 CPU, minimum 4MB RAM, minimum 120MB HD, reasonably priced. Zamora, 881-2835.

DOUBLE BABY JOGGER, good condition, reasonable priced. Ottesen, 292-7147.

GAS RANGE; hand-held microcassette recorder; two 205 70R/15 tires, must be good to excellent. Underhill, 294-5724.

DRUMMER for classic rock band, 1-2 gigs/mo., semi-serious group. Holmes, 897-0916.

FOUR DINING ROOM CHAIRS to match smoke-gray glass table; standard-size mini-blinds; children's white chest of drawers. Romero, 296-1081.

GRINDER AND VISE for workshop. York, 828-9505.

NIKKOR LENSES, AF or manual focus, 33mm, any aperture; 85mm f/1.8 or 2; 105mm f/1.8 or 2.5; 105mm Micro, other considered. Rodacy, 293-2668.

LOST & FOUND

LOST RING, plain band of ivory, very old, vicinity east water tower parking lot, Bldg. 887. Locher, 266-2021.

LOST GLOVES, black kid (dress), w/long black fur fringe, Christmas present 2 yrs. ago, sentimental & expensive, both missing, just discovered missing. Coe, 844-8524.

FTC says it will not challenge Lockheed/Martin merger

Several actions required to preserve competition in defense industry

The Federal Trade Commission (FTC) announced Jan. 11 that it will not challenge the merger of the Martin Marietta and Lockheed corporations.

In a joint statement, the two companies said the FTC's action is consistent with the positions of Lockheed and Martin Marietta that the transaction is pro-competitive and meets requirements expressed by the government for industry consolidation.

An FTC consent order requires the companies to comply with several provisions concerning space-based early-warning systems, the LANTIRN night navigation and targeting system, and the launch vehicle business.

Specifically, the agreement requires that a "firewall," or communication barrier, be established to prevent the sharing of information about competitors between divisions that build satellites and the divisions that launch them. The same "firewall" approach will be required to prevent the transfer of competitive informa-

tion between those divisions involved in LANTIRN production and Lockheed Martin's military aircraft divisions.

In addition, the agreement prohibits Lockheed Martin from modifying the LANTIRN system in a way that discriminates against any military aircraft manufacturer.

The FTC decision follows a favorable recommendation from the Department of Defense, which for the first time played a formal role in federal antitrust consideration of a combination in the defense industry.

The joint proxy statement/prospectus pertaining to the proposed transaction is still being reviewed by the Securities and Exchange Commission (SEC). After the companies have satisfactorily responded to the SEC's comments, the proxy statement/prospectus will be mailed to stockholders. Stockholder meetings and voting can take place 30 days after this mailing.

The *Washington Post* says the merger would create the world's largest defense contractor and that analysts expect the two companies' shareholders to approve it overwhelmingly.

The transaction is now projected to close in mid-March.

Martin Marietta has managed Sandia National Labs through its wholly owned subsidiary, the Sandia Corporation, since Oct. 1, 1993.

Recent Retirees



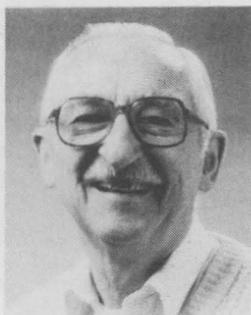
Paul Spellman 36
1141



Amos Alire 38
7814



Al Hachigian 34
5500



Ben Petterson 42
2171



George Urish 31
2709



Employee death

Carmen de Souza of Nuclear Waste Management Center 6300 died Jan. 2 after a long illness.

She was 61. (Photo not available.)

Carmen was a staff secretary and had been at Sandia since 1978.

She is survived by her sister, Yvonne Ozorio, and brothers, Raul de Souza and Marcus de Souza.

this month in the past...



45 years ago...Some things never change. From the Jan. 6, 1950, *Sandia Weekly Bulletin* (then Sandia's main publication): Pete Meigs is recovering nicely from a severe case of invasion by relatives over the holidays. Some things do change, however. The Jan. 13 *Bulletin* included a statement of worth from the Sandia "Welfare Association." The statement showed that assets included 1,640 full bottles of Nehi and 2,834 full bottles of Coca-Cola, valued at seven cents a bottle — a nickel for the contents and two cents for the bottle.

30 years ago...Sandia had just put into operation what was then the "world's largest flash X-ray machine." It was minuscule by today's standards, but it was Sandia's entry into the pulsed-power sciences. According to one Sandian, the machine was later tagged with the name "Spastic" (undoubtedly a politically and socially incorrect name today) because it worked only intermittently. Sandia today has a variety of huge pulsed power machines in Area 4, including the Particle Beam Fusion Accelerator II, Saturn, and Hermes III.

20 years ago...The Atomic Energy Commission (AEC) went out of business, and Sandia began reporting to the Energy Research and Development Administration (ERDA), which took over many functions from the AEC plus some functions previously handled by the National Science Foundation, the Environmental Protection Agency, and the Department of the Interior.

Coronado Club

Jan. 20 (tonight) — Friday night dinner/dance. Dinner 6-9 p.m. T-bone steak or fried shrimp, \$11.95. All-you-can-eat-buffet (baked ham, baron of beef, roast turkey breast, poached fish, chef's surprise), \$6.95. Music by Three Legged Willie, 7-11 p.m.

Jan. 22 — Sunday brunch buffet, 10 a.m.-2 p.m. Tea dance, 1-4 p.m. Adults \$6.95, nonmember guest \$7.95, child 4-12 \$2.95, child 3 and under free.

Jan. 26, Feb. 2, 9, 16 — Thursday bingo nights. Card sales and buffet beginning at 5:30 p.m., early birds' bingo begins at 6:45 p.m.

Jan. 27 — Friday kids' bingo. Buffet at 5 p.m., with cartoons and movie. Bingo starts at 7 p.m. Free hot dog and soft drink for all kids playing bingo.

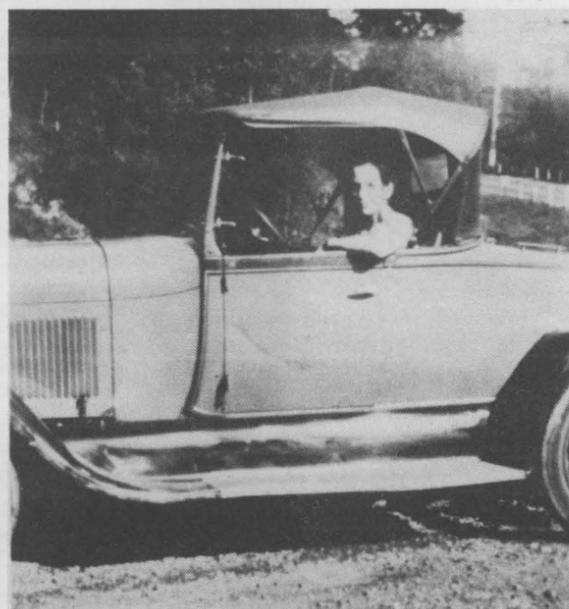
Jan. 29 — Super Bowl XXIV and Super Bingo IV Sunday. Doors open at 1 p.m., with ala carte buffet. Hamburgers, sandwiches, chicken, pizza, green chile stew available. Bingo starts at 2 p.m. Big screen TV for the game, 4 p.m.

Feb. 3 — Friday night dinner/dance. Dinner 6-9 p.m. Filet mignon or fried shrimp, \$11.95. All-you-can-eat buffet, \$6.95. Music by Isleta Poorboys, 7-11 p.m.

A special meeting of the Coronado Club active members is scheduled for 5 p.m., Jan. 24, in the club main ballroom. The purpose is to revise the bylaws to update wording and make them reflect current philosophies of the club. Draft changes and recommendations are available at the club office.

Keep your schedules open for this future special event: Tuesday, Feb. 28 — Fireside chat with UNM football coach Dennis Franchione. Jim Crouch, moderator, plus the UNM Chaparrals, 5-6:30 p.m. Open to all Sandia and DOE employees.

Favorite Old Photo



This photograph shows my grandmother taking a driving lesson in my grandfather's 1929 Ford in Grove City, Pa., shortly before they were married. Just after this picture was taken — in fact, she was on her way to take her driving test — she lost control of the car and rolled it completely over. Fortunately no one was hurt, but the car sat idle on blocks for quite some time because it was during the Depression and my grandfather didn't have the money to fix it. My grandmother didn't want to ask her parents for help because she was learning to drive on the sly without their permission.

— Richard Neiser (1841)