

Employee Security Clearance Suspensions Increased As Reinvestigations Increased, Baca Says

Although the number of suspended security clearances for New Mexico-based Sandians and contractors went up substantially during the past two years, the numbers generally track the accelerated pace of clearance reinvestigations by the Department of Energy, according to Sandia's Personnel Security Dept. Manager Bob Baca (7437).

A March 13 front-page *Albuquerque Journal* article reported that DOE suspended the clearances of 32 Sandia/New Mexico employees in FY91 and '92. Bob says these numbers also include Sandia contractors and that a total of 17 employee and contractor clearances were suspended in FY92 and 15 in FY91.

The article claimed that "several" Sandia employees said their clearances were pulled after DOE obtained "confidential information from employee assistance programs." Although the article did not report how many employees made this claim or how many of the 32 total suspensions during the past two years were related, it did say the *Journal* had talked to five employees whose clearances were suspended or revoked.

Politicians Express Concern

The *Journal* also reported that US Rep. Steve Schiff said he has received at least six letters in the past two months from constituents at Sandia who say they lost their clearances because they sought

help from emotional or substance-abuse programs. US Sen. Pete Domenici and US Rep. Bill Richardson were also quoted, expressing their concern about several aspects of the security-clearance process, including allegations that the DOE is misusing information that employees provided when they were seeking help for emotional or substance-abuse problems.

Sandia's Employee Assistance Program (EAP) in Preventive Medicine/Employee Assistance Dept. 7035 is designed to help employees experiencing certain types of emotional and substance-abuse problems. According to recent information

DOE's Albuquerque office has stepped up the pace of its clearance reinvestigations considerably.

provided to the LAB NEWS, EAP offers professional counseling and referrals related to emotional difficulties, financial or legal problems, alcohol or drug abuse, and family or marital issues.

(Editor's Note: The March 13 *Albuquerque Journal* article was published the day after our deadline for this issue of the LAB NEWS, but we will follow up this article with one about the
(Continued on Page Four)



BOB BACA, Manager of Personnel Security Dept. 7437, with electronic equipment that was stolen from Sandia, then recovered during a recent Albuquerque sting operation. A contract employee's clearance was suspended as a result.

Sandia Helps Create Engineering School at the Univ. of Turabo in Puerto Rico — See Page Five



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PROMISING NEW TECHNIQUE — Floyd Spencer (323) demonstrates a magneto-optic imager that locates tiny flaws in riveted lap joints (seams) in airplane fuselages. The demonstration was part of a ceremony last month dedicating a new Sandia facility — a 25,000-sq.-ft. hangar that will be headquarters for the Aging Aircraft Non-destructive Inspection Validation Center (AANC). AANC researchers are cultivating a variety of non-destructive inspection techniques for assessing the flight worthiness of US commercial aircraft. See story and photos on page eight.

Improvement Work Continues, but...

Sandia Skipping '93 Quality Award Competition

Sandia will not seek the AT&T Chairman's Quality Award (CQA) this year, choosing instead to continue working on seven points considered most important in applying for the prestigious award in 1994.

Charles Tapp, Director of Quality Improvement and Primary Standards Center 4300, recommended against applying for this year's award during a recent Sandia Quality Council (SQC) meeting. The council endorsed his recommendation and Sandia President Al Narath accepted that endorsement.

In recommending this, Charles says he believes the CQA examiners would say Sandia already is working on the seven areas most important to its application, but that the Labs is not yet competitive with top AT&T organizations and would be better served by spending another year improving those seven areas.

The subsequent application would be scored using the CQA process if AT&T is willing, he says, or by a similar process of Sandia's new management and operating contractor, if the contractor has one, or by independent examiners, if necessary.

1993 Work Valuable Practice

"Al agrees with that assessment," says Charles, "and wants everyone to use this year constructively in making progress on the Malcolm Baldrige National Quality Award [MBNQA] criteria. He's specifically encouraging preparation of assessments at the sector, division, and/or center level this year."

The seven areas the Labs should continue
(Continued on Page Seven)

This & That

Oh No, Full Days Ahead! - After several weeks recuperating at home since having back surgery in early February, I've been trying to follow the doctor's orders for the past two weeks by working half days only. Unfortunately, I've become accustomed to the schedule, so I'll have to spend some of this weekend psyching myself up to resume the old 40-plus grind next week. My thanks go to all Employee Communications Department staffers who put in extra effort during my absence and "part-time" duty.

Larry Has a Vision - A new word "came to me" the other evening as I was fuming over the growing trend of people (including some Sandians) to use oodles of unexplained acronyms when they write and talk, assuming of course that everyone knows every dingdong acronym ever dreamed up. I'm gonna start calling these people "acronymcompoops." And I'm thinking about starting chapters of Acronymcompoops Anonymous to help them kick this despicable habit.

Another New Word - Fellow scribe Nigel Hey (4524), who writes the *Sandia Management Bulletin*, has coined another new word. He says Sandia is now undergoing the "recontractorization" process. Nigel's office is in Bldg. 802, near the Sandia executive offices. Maybe too near!

Change Performance Appraisal Process - "For some time, employees and managers have expressed concern about the Laboratory's performance appraisal process. It's been called time-consuming, unwieldy, and even meaningless. Many participants in last year's employee survey suggested overhauling the process or eliminating performance appraisals. . . ." Guess where I read that! Nope, not in any Sandia document, but in a February issue of the Los Alamos National Laboratory newspaper. It seems we have one more thing in common with our LANL colleagues.

I'm starting to get the impression that it isn't possible to come up with a process that will totally satisfy everyone. Continuous improvement, though, is a noble goal, and I applaud the folks who are working to improve Sandia's performance review process.

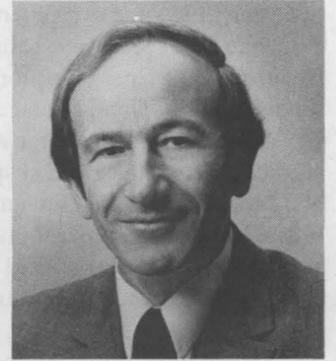
Words to Live By - Speaking of processes, these statements are from the latest update of Sandia Laboratories Instruction 2815, *Preferred Processes*: "A changed preferred process must be subjected to the 'Preferred Process' process before it can supersede the current preferred process. Preferred processes are approved by the Preferred Process Approval Board as one of the final steps in the Preferred Process Development and Approval Process (SAND92-2502)." I don't know about you, but I get a warm, fuzzy feeling while reading these words.

Please, Please Take Me Off! - Our Mail Services folks have been encouraging all Sandians to help reduce the volume of junk mail coming to the Labs by asking mailers to delete our names from their lists. I've sent several dozen requests to various mailers, but after two or more requests to some groups over several months, I'm still on their mailing lists. I may resort to a trick that a buddy of mine used when his electric company installed a utility pole so close to his driveway that he could barely get his car past it. After a company official explained that it would cost the company too much money to remove and reset the pole, my friend replied, "I can't force you to move that pole, but if you don't, I'm gonna call you and complain every day as long as we're both alive." The pole was moved the next day. ●LP

Was Bell Labs Senior VP

Sandia Board Member Sol Buchsbaum Dies

Sol Buchsbaum, a member of Sandia's Board of Directors and senior vice president of Technology Systems for AT&T Bell Laboratories, died March 8. He was 63. He was also a former Sandia research VP.



SOL BUCHSBAUM

He came to Sandia as vice president for research in 1968 and served in that capacity until 1971, when he returned to Bell Labs.

"Sol was a convincing champion of the excellence of

Sandia's work and its importance to the country when he served as a vice president here as well as during his service on the board," says Sandia President Al Narath. "He will be missed both here and at Bell Labs."

"Sol Buchsbaum was a tower of strength at AT&T Bell Laboratories," says Bell Labs President John Mayo, also a Sandia board member. "Sol was a close friend within the AT&T family. We admired him greatly and will miss him a lot."

Buchsbaum received his bachelor's and master's degrees in physics in 1952 and '53, respectively, from McGill University in Montreal. He earned his doctorate in physics from the Massachusetts Institute of Technology in 1957.

He joined Bell Labs in 1958 to work in theoretical and experimental research in gaseous and solid-state plasmas. During his career, he published 50 papers on plasmas and solid-state physics, and received eight patents.

Buchsbaum served as a member of President Bush's Council of Advisors on Science and Technology, and as a senior consultant to the Defense Science Board. He served on numerous other boards, committees, and councils, including the Board of Governors of Argonne National Laboratory and as a trustee of the Rand Corporation.

He also was a member of the National Academy of Sciences and the National Academy of Engineering, and was a fellow of the National Academy of Arts and Sciences.

Buchsbaum is survived by his wife, three children, three grandchildren, and a sister. Funeral services were held March 9 in Westfield, N.J. ●

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feed back

Q: I applaud Kirtland's decision to modify the Eubank gate. I am disappointed, though, that they have done little more than create a fancier bottleneck.

Eubank is capable of handling two lanes moving at 45 mph. Unfortunately, Kirtland has chosen to again limit access to two lanes at 15 mph. As a result, Eubank backs up to Southern, or farther north, and moves at about 15 mph.

Kirtland would have done well if they had created six incoming lanes at the gate, with a couple of additional guards at rush hour. If it is inadequate now, what's going to happen when the new stoplight is added just inside the gate, once the new Air Force facility opens?

A: I applaud your interest in moving things along at the Eubank gate.

Your suggestion to open the Eubank gate to traffic moving at 45 mph, however, would not work. A military installation has controlled access and limits entry to those having business on the base. The existing system of guards necessitates the slowdown. Also, in this time of cutbacks, adding extra guards is not an acceptable option.

Perhaps creativity will yield results as electronic traffic controls become more widespread. I can envision an automated system allowing registered base vehicles to continue at the posted speed limit past a scanner. Visitors would be diverted to a lane with a gate guard, or to a visitors center.

Our traffic committee and I will continue working with base officials and will share your feedback with them. We appreciate all good ideas on this subject.

Charles Thomas (7015)

Welcome

Albuquerque — Veronica Argo (21-1), Gloria Atencio (21-1), Denise Blaisdell (21-1), Charmaine Dewerff (7033), Therese Eisold (21-1), David Furgal (7733), Norma Hibbs (21-1), Mark Kalin (157), Leroy Marquez (7533), Colista Murphy (21-1), Linda Lyons (21-1), Angelo Salamone (4212), Sandra Smallwood (21-1), Greg Valdez (9341), Anita West (21-1). *Other New Mexico* — Carrie Blake (21-1), Mercedes Herrera (21-1).

Elsewhere: Nevada — Danny Donald (7732).

Brainy 'Bowlers' for Science

San Jose High School Students Win Science Competition

"If a cube has all its faces painted such that no adjacent faces are the same color, how many —" BZZZZZT. "The answer is three."

So it went in the Regional Science Bowl held Feb. 27 at Ohlone College in Fremont, Calif., where only fractions of a second separated the winning team, Lynbrook High School, from the rest. Often, it meant risking an answer before the question was fully stated ("...how many colors are needed?").

To be competitive, team members needed broad knowledge and fast recall in physics,

"Besides being quick and sharp, they are all a bunch of neat kids."

chemistry, biology, computer science, earth and space science, and math.

The Lynbrook team from San Jose went through all five rounds without a single loss. For their outstanding efforts they received a trophy, a banner, and \$250 in science supplies for their school. The team also receives an all-expenses-paid trip to Washington, D.C., to compete against 43 other regional winners at nationals April 18 and 19.

Taking second place was last year's winner, Henry M. Gunn Senior High School from Palo Alto, which took fifth place in the 1992 nationals. The third-place team was from Washington High School in Fremont. Both teams also received trophies and science supplies for their schools.

This year's Regional Science Bowl, co-sponsored by Sandia/California and DOE, featured 15 teams from the South Bay area. The event was patterned after traditional College Bowl competitions, matching two four-person teams at a time in head-to-head competition.

30 Sandians Volunteered

"Toss-up questions, worth four points, could be answered by either team — the first one to push its electronic buzzer getting first shot," explains scorekeeper Cathy Houf (1951). "If the answer was correct, the team got a bonus question, worth 10 points. The risk of answering before the question was done was that if you were wrong, the other team got four points *plus* a chance to answer the question correctly."

Ray Ng (8526), education outreach coordinator, is pleased with the continued success of the Science Bowl. "A common theme for all teams was their diversity, knowledge, and ability to communicate," he says. "The future of science in



CONGRATULATING the winning science bowl team from Lynbrook High School in San Jose is Ray Ng (8526 left), education outreach coordinator for Sandia/CA. Next to Ray from left are team members Hai Wei Guo (captain), Michael Baer, Jim Wang, Bruce Lo, and faculty advisor Drew Coble.

the US looks bright."

Some 30 volunteers from Sandia/California spent much of the day serving as judges, moderators, scorekeepers, timekeepers, and coordinators. All were impressed by the students' enthusiasm and support for each other. "Besides being quick and sharp, they are all a bunch of neat kids," says Jim Lathrop (8743), one of the moderators. Other Sandia volunteers noted a parallel with sports teams—the hours spent in preparation, the importance of team spirit, and the intense competition.

VP John Crawford (8000), who kicked off the event, says, "I hope this activity helps stimulate student interest in science and engineering careers. These bright young people are very important to this country's future."

Dan Peterson, advisor for the Gunn team, gives the students all the credit. "I just drive them around and do the paperwork. They study, test each other, and try to enter lots of similar competitions. They are all self-motivated and enjoy every minute of it." •RTucker(8535)



Supervisory Appointments

BILL PEILA to Manager of Electronic Sensor Dept. 8453.

Bill joined Sandia in 1961 at Albuquerque under the Technical Development Program, going to school half-time for his MS degree. He worked in the Project Engineering Department in Albuquerque, then at Livermore in Field Test, Telemetry Systems, Solar Central Receiver, and Instrumentation Systems Design.

Bill has a BS in electrical engineering from the Illinois Institute of Technology and an MS in the same field from the University of New Mexico. He was named a Sandia Distinguished Member of Technical Staff in 1990.

DONN WRIGHT to Manager of Health Protection Dept. 8641.

Donn came to Sandia in 1978 from General Electric Vallecitos at Sunol, where he was a health physicist. Before that he was a nuclear medical technologist with St. Mary's Hospital in Galveston, Tex. His first assignment at San-

dia was as a staff health physicist in the Hazards Control Division. For the past two years, he has been acting manager of the Health Protection Department.

He has a BS in nuclear medical technology from the University of Iowa and an MS in radiation biophysics from Texas A&M University.

Donn is active in the Health Physics Society.

Earnings Factors January 1993

Long-Term Savings Plan for Management Employees (LTSPME)	Earnings Factors
AT&T Shares	1.0367
Government Obligations	1.0118
Equity Portfolio	1.0140
Guaranteed Interest Fund	1.0063
South Africa Restricted Fund	1.0102

Long-Term Savings and Security Plan (LTSSP)	Earnings Factors
AT&T Shares	1.0366
Guaranteed Interest Fund	1.0064
South Africa Restricted Fund	1.0102
Equity Portfolio	1.0140
Employer Stock Fund	1.0365



Jan Inzerilla
8525 35

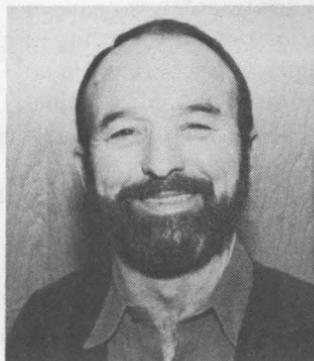
Recent Retirees



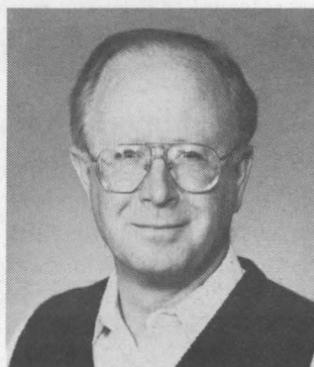
Del Houser
8284 30



Al Skinrood
5366 37



BILL PEILA



DONN WRIGHT



DOE Clearance Criteria (10 CFR, Part 710.11)

- A. Committed or aided an act of sabotage, espionage, treason, or sedition.
- B. Knowing, sympathetic association with saboteur, spy, etc., or other agent or person advocating unlawful overthrow of US Government.
- C. Knowingly held membership in or became associated with a group advocating acts of violence to deny the rights of others.
- D. Advocates or participates in group striving to alter or overthrow the government through unconstitutional means.
- E. Immediate relatives residing in a country which may be inimical to the US.
- F. Falsification of questionnaire for sensitive positions, personal qualifications statement or personnel security interview.
- G. Failure to protect classified information or special nuclear material or violation of security regulations to a degree that would endanger the common security/defense.
- H. Mental illness or condition, or refusal to be examined.
- I. Refusal to testify on charges relevant to eligibility for access authorization.
- J. Habitual use of alcohol to excess without rehabilitation or reformation.
- K. Drug use without evidence of rehabilitation or reformation.
- L. Information relating to honesty, reliability, trustworthiness, or susceptibility to coercion, influences, or pressure to act contrary to the national security.

(Continued from Page One)

Suspensions

Employee Assistance Program in the next issue. Although we cannot discuss individual cases, we will provide as much general information as possible about how the program works.)

LANL Employees Express Concerns

The March 13 *Albuquerque Journal* article followed another front-page article that it published on March 7 about security clearance investigation problems at Los Alamos National Laboratory (LANL), reporting that some LANL employees and administrators believe DOE clearance investigators are being overzealous. DOE reportedly suspended or revoked 65 Q-clearances last year at LANL. A group of LANL Fellows expressed its concern last summer, according to the article, calling the DOE Albuquerque office's security investigation methods "awkward and nasty" and "newly aggressive."

Employees at other DOE contractor-operated facilities — including Rocky Flats near Golden, Colo. — also have expressed similar concerns, according to the *Journal*.

Bob Baca says a minimum of two and a maximum of seven Sandia/NM clearances were suspended per year from FY86 through FY90, for a total of 26.

Although clearance suspensions totaled 32 during the past two fiscal years, Bob points out that DOE's Albuquerque (DOE/AL) office has stepped up the pace of its clearance reinvestigations considerably. And more reinvestigations generally mean

Clearances can be suspended or revoked at any time for serious violations, not just during reinvestigations.

that more clearance suspensions will follow. Although his office does not have figures showing the number of Sandia/NM employees and contractors reinvestigated per year before FY90, Bob says the numbers were definitely smaller then. Here are the numbers for the past few years:

- FY90 — 4,001
- FY91 — 4,676
- FY92 — 2,417
- FY93 — 2,361 (target set by DOE)

(It should be noted that there is some natural "lag time" in the reinvestigation process, meaning that the number of suspensions do not track exactly with the number of reinvestigations in a particular fiscal year.)

Even though clearance suspensions went up noticeably during the past two years, Bob emphasizes that the percentage of Sandia employees and contractors who lost clearances during this time

was relatively small in comparison with the number of clearance reinvestigations — less than one-half of one percent.

DOE was taking heavy criticism in the mid 1980s from the Government Accounting Office, the DOE Inspector General, and others because it was so far behind on security reinvestigations. A 1985 policy change was made to clear the backlog and to mandate that DOE reinvestigate all cleared employees and contractors every five years.

Bob says DOE/AL added more investigators after the policy change, with a goal of eliminating the backlog by the end of this fiscal year. The *Journal* article stated that Dave Frederickson of DOE/AL's Personnel Security Operations Division said his office had already achieved the goal.

What Can Get You Suspended?

The reasons for Q-clearance suspensions and revocations fall into 12 categories — lettered A through L — that are incorporated into the Code of Federal Regulations, 10 CFR, Part 710.11 (see "DOE Clearance Criteria" above).

Bob emphasizes that employee clearances can be suspended at any time for serious violations, not just during regular security clearance reinvestigations.

"Take a look at the electronic equipment on the table there," he said during the interview for this article. "A Sandia contractor was caught recently in a sting operation downtown trying to exchange this Sandia property for cocaine. He no longer has a clearance and faces possible criminal prosecution."

A simple reading of the sketchy clearance criteria could be misleading, notes Bob. For example, he says that just because someone is experiencing a temporary "mental condition" (criterion H), that doesn't mean his or her clearance will be jerked. "We're typically talking about major mental illnesses, rather than such things as seeing counselors for routine personal, marital, or family problems. Reliability and judgment of the individual is considered."

Other "common" reasons for clearance suspensions, says Bob, include lying on official clearance investigation documents and during follow-up interviews with DOE investigators (criterion F), continuing alcohol-related problems after entering rehabilitation programs (J), drug use (K), and problems relating to honesty, reliability, trustworthiness, etc. (L). Criterion L may include arrests for theft and other criminal acts.

Vast Majority Not a Concern

DOE's Frederickson provided the LAB NEWS with a copy of a letter he sent to the *Albuquerque Journal* after the paper published the March 7 article about security clearance problems at LANL and a follow-up editorial critical of DOE's methods. Here is some of what he said in that letter:

"Let me . . . assure you that the vast majority of cleared employees who seek counseling for a

variety of problems are NOT a security concern to the DOE. However, individuals (for example) who are current users of illegal substances or who have deliberately falsified significant information on security forms or during a security interview may have a problem with their clearance.

" . . . there are many checks and balances in the personnel security program to prevent misuse or abuse. In each case where a clearance is suspended, DOE regulations require an immediate review by DOE Headquarters to ensure appropriate action was taken. In each and every clearance suspension initiated by AL over the past several years, DOE Headquarters judged this action both appropriate and justified."

Jim Martin, Director of Sandia's Safeguards and Security Center 7400, emphasizes that DOE is solely responsible for investigating and granting security clearances and for deciding whether to suspend or revoke them if security clearance criteria violations become known. Sandia and other DOE contractors have no role in these processes other than completing and submitting required paperwork.

Suspended Clearances Usually Revoked

A suspended clearance is one that possibly could be reinstated; a revoked clearance is one that has been permanently taken away from an employee or contractor, after a formal DOE hearing. Recent Sandia statistics indicate that very few suspended clearances are ever reinstated. Only four were reinstated at the Labs for all of fiscal years '90 through '92.

If an employee's clearance is suspended, he or she may be allowed to keep working on unclassified, non-sensitive projects "outside the fence" until DOE decides whether to revoke his or her clearance. If it is revoked, the employee is fired because Sandia currently requires employees to have a Q-clearance to work at the Labs.

As announced in a recent issue of the DOE/AL newspaper, many DOE employees and contractors who do not have a specific need for a Q-clearance

People who do not have a specific need for a Q-clearance may in the future get an L-clearance instead.

may in the future get a lower-level type of DOE clearance called an L-clearance instead.

Sandia will be participating in a DOE/AL pilot program dealing with these types of clearances, and another LAB NEWS article will discuss this program soon. L-clearances reportedly cost DOE much less to process and can be processed much faster.

Sandia/New Mexico employees who have questions or concerns about clearances in general, DOE's clearance reinvestigation process, or Sandia's official policies are encouraged to contact Bob Baca in Personnel Security Dept. 7437. Sandia/California employees may contact Don Charlesworth in Physical Security Dept. 8531.

•LP

Employee Death

Robert Dosch of Process Research Dept. 6212 died March 2 after a long illness.

He was 54 years old.

Robert was a distinguished member of the technical staff and had been at Sandia since 1962.

He is survived by his wife and three sons.

Sympathy

To Hugh Bundy (7733) on the death of his father-in-law in Toronto, Ohio, Feb. 12.

To Jeff Morgan (2664) on the death of his father-in-law in Chicago, March 9.



Product of Sandians' Hard Work, Commitment**New Engineering School in Puerto Rico Opens Doors**

Genneysburgh Izquierdo never would have pursued a career in science had it not been for a new engineering program at the University of Turabo in Puerto Rico. It's possible she would have followed in the footsteps of many of her Puerto Rican neighbors, graduating from high school at age 15 and going to work at a job that requires little training.

But thanks to the work of several dedicated people, many of them Sandians, Genney plans to enter the US work force in spring 1995 with a mechanical engineering degree, a Q clearance, two summers of work experience at a national engineering laboratory, and an air of confidence. She hopes to go to work for NASA or DOE, possibly in the field of astronautics.

"The program gives us new skills without waiting until we finish school," says 19-year-old Genney, who says she now feels prepared to enter the US work force. "It's a big opportunity. It motivates us to finish."

During a March 4 ceremony in Puerto Rico, former Energy Secretary James Watkins formally announced the opening of the University of Turabo's new engineering building. Its name, the Sandia National Laboratories Engineering Building, recognizes the contributions of Labs' employ-

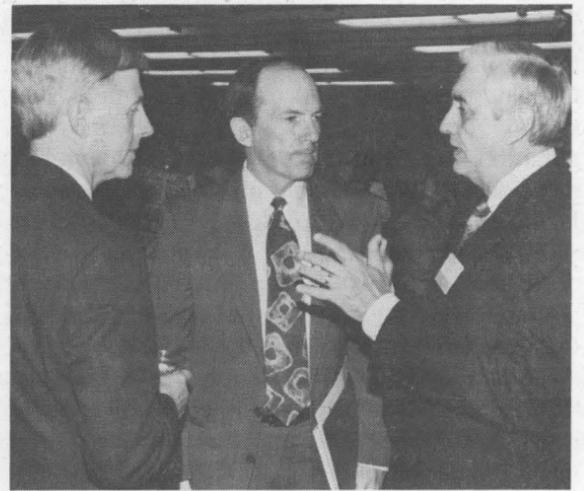
ees in developing two new degree programs at the university in the fields of mechanical and manufacturing engineering.

Two Deans, Two Degrees

The glue that brought Sandia and the university together was the Science & Technology Alliance, a DOE-funded organization dedicated to increasing the number of minority students who are studying science and engineering. The Alliance, founded in 1987, pairs American universities with DOE laboratories. One goal of the Alliance is to create or enhance engineering programs in areas with high minority populations.

As lead laboratory in the Science & Technology Alliance, Sandia joined the Ana G. Mendez University System — a private, non-profit group comprising three Puerto Rican college-level institutions. The goal was to open doors for Puerto Rican students to jobs in the engineering fields by creating a new engineering school on the island. (See "Wanted: 600,000 Qualified Engineers.")

"The Alliance provided the university with necessary resources, particularly trained staff, to establish an engineering school," says Ken Holley of Education and New Initiatives Dept. 35, lead laboratory coordinator of the Alliance. "Now kids



MARRIAGE of Sandia and the Ana G. Mendez University System (AGMUS) represents a unique arrangement between DOE labs and American universities. Labs VPs Lee Bray (30) and Dan Hartley (6000) discuss the arrangement with Jose Mendez, AGMUS President and son of Ana G. Mendez, the woman who founded AGMUS.

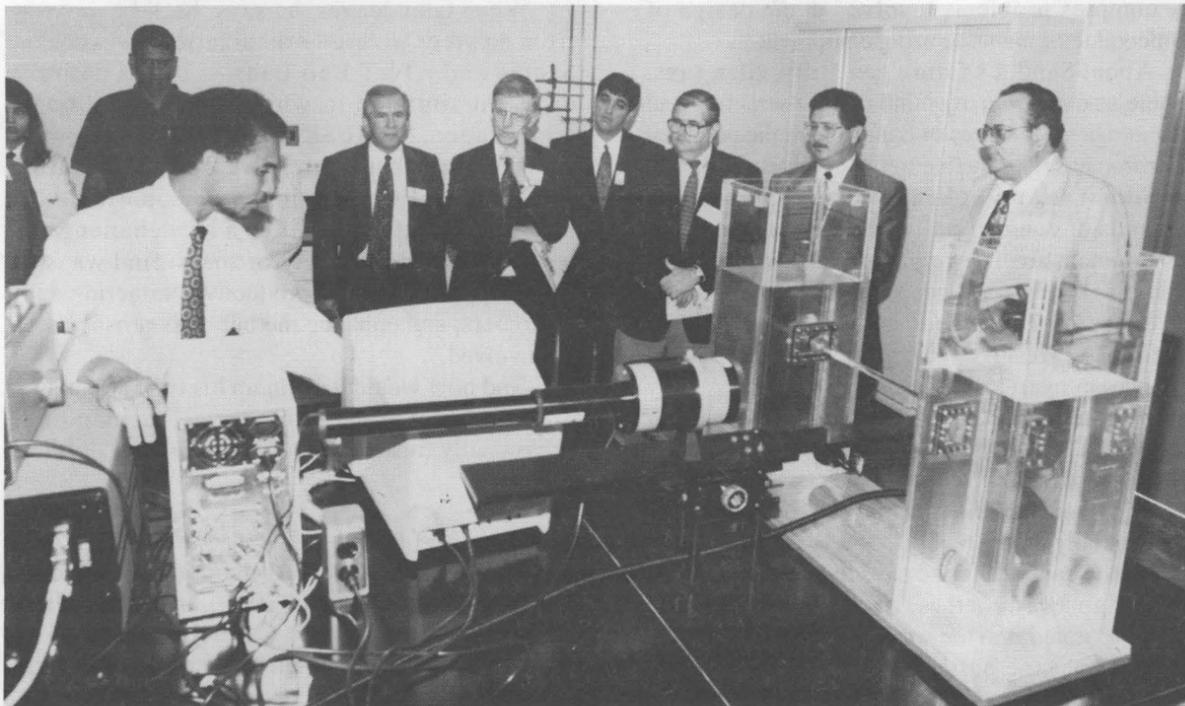
with good grades can get a higher education and take advantage of ample job opportunities in the US in the science and engineering fields."

Turabo's new School of Engineering was established by the Alliance in 1987. John Otts (4200) served as the school's first dean from 1989 to 1990. Bill Dawes (35), the school's second dean from 1990 to 1992, was largely responsible for planning and overseeing construction of the new building and hiring the first faculty members. Recently another Sandian, Steve Casalnuovo (35), became dean of the school.

In addition, Sandians have helped develop two distinct four-year degree curriculums in mechanical and manufacturing engineering. Sixty-seven students enrolled in fall 1991, becoming Turabo's first engineering class. Approximately 20 of those original students, including Genney, are now in their third year. Almost 200 students are enrolled now, and finishing touches are being put on a new electrical engineering degree program to begin next year.

"The creation of the School of Engineering at the University of Turabo is certainly one of the most impressive achievements of the Science & Technology Alliance," said Labs Executive VP Lee Bray to the nearly 300 Turabo faculty members and students who gathered for the March 4 ceremony.

"The Alliance has helped us become interdependent," he said. "The strengths of each institution
(Continued on Page Six)



UNIVERSITY OF TURABO faculty member Marcus Modesto shows visitors, including Labs Executive VP Lee Bray (fifth from right), a laser setup in a lab at the university's School of Engineering. The Science and Technology Alliance helps universities like Turabo purchase and upgrade laboratory equipment.

Wanted: 600,000 Qualified Engineers

Projection: By the turn of the century, the United States will be short 600,000 engineers, according to *Workforce 2000*, a report published by the US Department of Labor.

This statistic is daunting in light of the growing complexity of the work environment, especially in science and engineering. It means US employers will not be able to find qualified engineers to tackle the technical challenges of the 21st century.

Among these challenges, according to former DOE Secretary James Watkins, are global climate change, radioactive and hazardous waste management, preservation of the environment, development and use of new materials, creation of safe and abundant supplies of food, improved communications and travel, and unlocking the mysteries of the human genome.

And, says Ken Holley (35), the number of minorities entering the work force today is

increasing compared to the number of white males. During the next 10 years, many more highly trained minorities than ever before will be needed to fill vacancies in science and engineering.

The Science and Technology Alliance — created in 1987 to increase the number of minorities enrolled in science and engineering degree programs — pairs DOE laboratories with minority universities in an unprecedented arrangement that utilizes the unique capabilities of the national laboratories.

"Life in the 21st century will be increasingly based on advanced technologies and dependent on well-trained engineers to support that technology," says Labs Executive VP Lee Bray. "The DOE and its national labs are a powerful resource that can be used by US colleges to bring engineering and technical expertise to bear on educational needs."



DIGNITARIES speaking to a crowd of about 300 at the March 4 ceremony included (from left) Jose Mendez, President of the Ana G. Mendez University System (AGMUS); Admiral James Watkins, former Energy Secretary; Armando Figueroa, AGMUS Chairman of the Board; and Labs Executive VP Lee Bray. Dan Hartley, VP-6000, also addressed the crowd, in Spanish.

Will Be President of Consortium**VP Glen Cheney to Leave Sandia for SEMI/SEMATECH**

As the Labs undergoes its transition to a new management and operating contractor, Glen Cheney — with a mixture of excitement and sadness, he says — has decided to make his own personal transition. On April 1, he'll leave his position as Vice President of Internal Programs Div. 7000 to become President of SEMI/SEMATECH in Austin, Texas.

Glen has been at Sandia since July 1988. He previously served Sandia as the Vice President of Org. 2000.

Describing his new position, Glen explains, "SEMI/SEMATECH is a consortium of 145 US producers of semiconductor manufacturing equipment. It is closely aligned with SEMATECH." He and the new job found each other when word started going around among his friends in the semiconductor industry that he'd be leaving Sandia. "I began receiving phone calls about possible jobs," he says.

One of the calls came from Bill Spencer, a former Sandian and Xerox vice president who's now President and Chief Executive Officer of SEMATECH, a US semiconductor consortium. Spencer — who interviewed Glen when he applied for a job at Bell Labs in 1963 — told him about the SEMI/SEMATECH opening.

"It seems like a splendid opportunity," says Glen. "And I have felt for some time that it would be good to provide Sandia's new managing contractor with an opportunity to influence the direction of programs here that I had been recently involved with and that might be thought to have a unique AT&T stamp on them." (Glen is on leave of absence from AT&T while serving as a Sandia VP and will be retiring from AT&T.)

Became the ES&H VP

Reflecting on recent years at the Labs, Glen notes, "When I came here, there was still a very intense focus on the design and production of nuclear weapons. My directors and I [in Org. 2000] were very concerned about design for manufacture and visited the factories in the nuclear weapons complex with some frequency and regularity. The weapons mission is still a vital mission for Sandia, but its character has changed immensely.

"At the same time, DOE was becoming much more concerned about matters involving environment, safety, and health. When the Tiger Team was

on the horizon for New Mexico, I volunteered to become involved in that. I was thinking at the time — and I believe correctly — that both Sandia's and AT&T's standing with DOE were important considerations for that Tiger Team visit in the spring of 1991."

Glen points out that, although the Tiger Team found many opportunities for ES&H improvement, the executive summary of the team's report also said about Sandia/New Mexico that "the seeds of [ES&H] excellence have been sown and their cultivation has begun."

"That was an immensely satisfying result," says Glen.

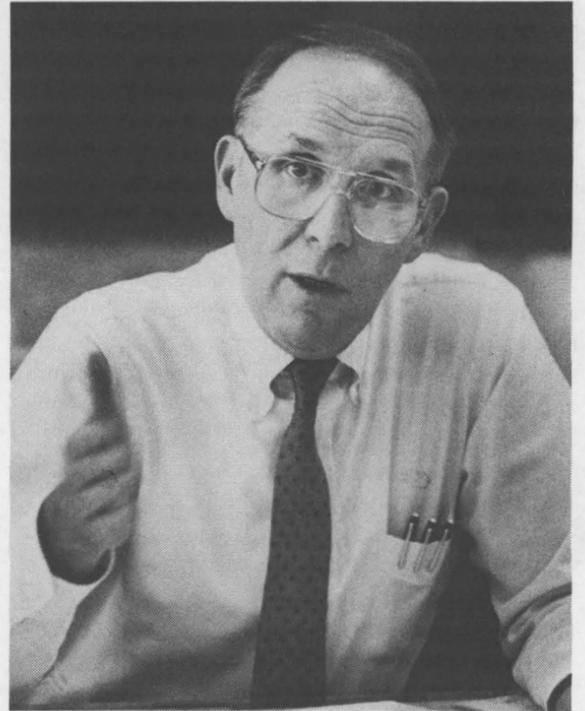
Future Sandia Interactions Likely

Looking toward the future, Glen observes that he and Sandians could be hearing from each other. "SEMI/SEMATECH will undoubtedly want to explore ways the national labs, and Sandia in particular, can contribute to enhancing US competitiveness in the semiconductor industry."

It's too early to talk about specific ideas, he says, but points out that some of Sandia's capabilities — such as massively parallel computing, coupled with "immense analytical, scientific, and engineering skill," could assist in solving some of the complex problems involved in the design of semiconductor manufacturing equipment.

About Sandia's future generally, Glen says, "There's no doubt in my mind that the scientific and technological resources of Sandia have the potential to be immensely valuable to US commercial firms. I wouldn't tell my colleagues at Sandia that the demands of commercially oriented research and development are uniquely more difficult than, for example, the nuclear weapons program, but they are different. Issues such as time to market, the timeliness of results, the technological fit of new advances into an existing manufacturing technology — all these represent a new set of challenges for Sandians. They will require the very capable technical people at Sandia to learn some new skills and to learn how to adapt their technical expertise to that commercially driven reality."

At the same time, he says, "The old mission will not go away. So these new emphases have to be incorporated into the work while preserving the features that the nation deems essential in the nuclear weapons program."



GLEN CHENEY, VP of Internal Programs Div. 7000, leaves Sandia and retires from AT&T April 1. He will become President of SEMI/SEMATECH.

When Glen leaves, he says, he'll be moving from a career in large organizations — such as Sandia and AT&T Bell Labs — to "an entirely different situation in which a relatively small organization, SEMI/SEMATECH, working with another larger (but still relatively small) organization, SEMATECH, has immense opportunity to make contributions. It'll be a new challenge to work with a wide variety of firms, find ways to create opportunities for productive partnering with customers, and enhance the business prospects of all involved."

And how would he sum up his time at Sandia? "It's been exciting," he says, "demanding, occasionally frustrating, but never dull!" ●CS

Open House

Division 7000 is holding an open house in honor of **Glen Cheney** (7000) on Wednesday, March 31, in the Area 1 Cafeteria (Bldg. 861) from 2 to 4 p.m. Refreshments will be served. Friends and acquaintances are invited.

(Continued from Page Five)

Puerto Rico

support the others. Together, we are stronger than the sum of our parts." Energy and Environment VP Dan Hartley (6000) also addressed the crowd, in Spanish.

Other Alliance members include Los Alamos and Oak Ridge national laboratories, New Mexico

Highlands University, North Carolina Agricultural and Technical State University, and a consortium of four Montana tribal and private colleges. AT&T and Georgia Tech are affiliate members of the Alliance.

Summers at Sandia

Summer internships are an important feature of educational programs through the Alliance. Participating laboratories hire students from

Alliance universities during summers, when they earn college money and, more important, gain valuable work experience. In 1992, 60 students and faculty members from Alliance schools participated in summer research programs at national labs, 35 at Sandia.

Genney has worked at Sandia for the past two summers on projects in the semiconductor research field. She says she is able to take her experience back to students in her classes at home.

"Approximately 20 students from the University of Turabo come to Sandia each summer," says Ken. "When they graduate, they not only have an engineering degree, they also have Q clearances and hands-on work experience, everything they need to be competitive in the US job market."

At Turabo, the Alliance also offers pre-engineering programs to help bring students up to the freshman level of competence in math, science, computers, and English. Other assistance offered to Alliance universities includes money for building and improving laboratories and on-campus technical libraries.

An important aim of the Alliance is to help new degree programs become self-sustaining. The engineering program at the University of Turabo is expected to be self-sustaining after six years, says Ken. The Alliance will then move on to assist other minority universities. ●JG

NAMED AFTER US — The Sandia National Laboratories Engineering Building at the University of Turabo in Puerto Rico. The building's familiar name recognizes the work of several Sandians who helped establish the university's new School of Engineering. The building was dedicated March 4.



Sandia News Briefs

Norman Warpinski Wins Best Paper Award for 1992

A paper by Norman Warpinski of Geotechnology Research Dept. 6112 recently earned a best paper award for 1992 from the Society of Petroleum Engineers (SPE). One best paper is selected from each of the Society's five journals each year.

Norman's paper, "Determination of the Effective Stress Law for Permeability and Deformation in Low-Permeability Rocks," was selected from the June issue of *SPE Formation Evaluation*. SPE is an international society with more than 50,000 members.

Kirtland AFB Offers MWRS Cards to New Mexico Sandians

MWRS (Morale, Welfare, and Recreation Services) cards are provided to military and DoD employees and their families. Sandia and contract employees who work on Kirtland AFB may also purchase MWRS cards for \$150 per family per year. The money is used to purchase supplies and equipment and to provide staff for MWRS facilities as a result of the additional use. This year, 1,000 cards have been allocated for Sandians and other KAFB workers.

The cards are passports to a variety of base services and facilities: fitness centers, community activities center, arts and crafts center, auto hobby shop, wood hobby shop, outdoor recreation equipment checkout, base library, youth center, child care center (space limited), bowling alley, golf course, and indoor and outdoor swimming pools. They also provide an opportunity for membership in the Enlisted Club or Officers Club. Many activities are free; others (such as bowling and golf) are provided at a lower fee than at public facilities. You may purchase MWRS cards at the Que Pasa Center located one block west of Wyoming on B Street. For more information, call 846-2059.

Sandia Women Engineers Help Girl Scouts Build Cardboard Train Engine

Members of the Society of Women Engineers recently helped two Albuquerque Chaparral Girl Scout troops build a train engine out of Girl Scout Cookie boxes. The purpose was to expose the girls to successful women engineers and the ideas and practices of the profession.

The engineers helped the Girl Scouts choose from a number of conceptual designs and then showed them how to calculate the number of various-sized cookie boxes needed to construct the 10-foot-long, 5-foot-high cardboard train engine. In all, 1,550 boxes were used. Participating Sandians included Margie Whipple (6219), Kathie Hiebert-Dodd (5913), Sandra Begay-Campbell (7906), Patricia Cordeiro (6215), Georgianne Huff (7907), Jill Fahrenholtz (1671), Chris Morgan (7903), and Suzanne Stanton (2338).

Send potential Sandia News Briefs to LAB NEWS, Dept. 7162.

Sandia in the News

This is a periodic column listing a selection of print and broadcast news reports about Sandia. It is provided by Public Relations Dept. 7161 and is published to give Sandians a sense of what is being said about Labs work in national and international media.

Sandians have been popping up on national TV shows a lot recently. Featured during ABC-TV's recent several-day "Swords to Plowshares" series on its *World News This Morning*: Pat Eicker (1600) on intelligent machines; Carl Diegert (1424) on how supercomputers can aid surgeons by providing better views of the brain, and physicians by aiding breast cancer diagnosis; mention of the Labs' "thinking" Archimedes software; and shots of Frank Zanner's (1833) Fastcast operations in Area 3.

Phil Kegelmeyer (8351) and his mammographic screening software, which can aid radiologists in breast cancer diagnosis, were the centerpiece of a report by nationally syndicated medical reporter Dr. Dean Edell, whose reports originate at KGO-TV in San Francisco.

The closely watched *Washington Technology* devotes an entire article to Sandia ideas: TIE-IN, or

Technology Information Environment for Industry, and Fastcast. The article quotes Ed Barsis (1400) extensively about TIE-IN and predicts that if the approach works, "it won't be long before a manufacturing company could interface with Sandia online to design a custom part and contract the lab to make a mold of it."

One of our Labs ombuds, Mike Birnbaum (11L) of Sandia/California, gets a mention in *The Wall Street Journal's* detailed piece about ombudsmanship in companies.

The New York Times' recent swords-to-plowshares/tech transfer front-page piece quotes Dan Arvizu (4200): "I have in front of me 70 proposals for about \$250 million in work over the next three years, but I have an available pool of \$30 million."

Ward's Auto World, one of the automotive industry's hallmark publications, has an illustrated article about Pete Witze's (8362) innovative head gasket that provides data on the combustion process.

Former Sandia/California engineer turned NASA astronaut Ellen Ochoa was on the cover of the weekly news magazine *Vista*, which is aimed at a national Hispanic readership.

cies, and critical support services.

- Use industry "best practices" to establish a Corporate Education and Training program.

- Align the performance and recognition system with the corporate values and sector goals.

"I know many Sandians are well into preparing documentation for the CQA application," says Charles. "I encourage them to continue, then submit their completed work to our organization for scoring. The feedback we'll provide, including suggestions for improvement, should help.

"That 1993 work, along with constructive feedback, should be valuable in our efforts to prepare an application for all of Sandia for 1994," he adds. "It's important to remember that the value of this process is to help us understand how to become world-class in our ability to please our customers. The score and any award are secondary."

•HK

Transition Update

AT&T ESOP — What Happens For Sandians?

The following information is an official statement by the AT&T and Sandia organizations dealing with transition matters.

After the AT&T/DOE contract expires Sept. 30, AT&T will continue to maintain accountability and custody of the AT&T Employee Stock Ownership Plan (ESOP) accounts belonging to active and former Sandians who are participants.

All accounts will remain invested in AT&T shares. Under current plan provisions, dividends are distributed to participants annually. An individual's account will be distributed in a lump sum if that person is an active employee attaining the age of 70, or upon retirement, other termination of employment, or death. Accounts are paid to terminated employees and retirees who are less than 65 upon request, or at age 65, automatically distributed in shares of AT&T stock.

Effective in 1987, AT&T suspended contributions to the ESOP because of changes in the federal income tax law. The IRS discontinued the tax credit to companies for contributions to an ESOP after Dec. 31, 1986.

Important features of the ESOP are described in the summary plan description mailed in late December 1992 to the home addresses of participants eligible for the AT&T Long Term Savings Plan for Management Employees. A summary plan description is scheduled to be mailed by the end of June 1993 to participants eligible for the AT&T Long Term Savings and Security Plan.

Active and former Sandians who have questions about the ESOP may call Joe Rivera (7544) on (505) 844-6575. •



DEL OWYOUNG, Manager of Photonics Programs Dept. 1304 and Photonics Research Dept. 1312, was recently named a fellow of the Institute of Electrical and Electronics Engineers (IEEE). Only one-tenth of one percent of the society's 320,000-person membership is eligible for appointment to the grade of fellow each year. Del's appointment recognizes his contributions to the study of lasers, non-linear optics, and spectroscopy, particularly his pioneering work in the understanding and development of non-linear stimulated Raman spectroscopy.

(Continued from Page One)

Chairman's Award

working on, he says, are:

- Develop — and review at every SQC meeting — metrics that are corporate-wide, results-focused, and customer-oriented.

- Extend to the individual Sandian the Labs' commitment to cascade vision (long-term vision beginning with top management and extending through sectors, divisions, centers, etc.), goals, and metrics.

- Develop a structured but flexible approach to managing customer interfaces.

- Develop a flexible system that facilitates management decision-making based on data.

- Benchmark one key process each from corporate-wide processes, each sector, core competencies,



HOLLOW SHELL — Ken Harmon of Aerodynamics Dept. 1554 examines the interior of a 737 transport plane to be used as part of Aging Aircraft Non-destructive Inspection Validation Center research at Sandia. (Photos by Randy Montoya)



WORSE FOR WEAR — An over-the-hill 737 transport plane lands at Albuquerque. It's now used for research on inspecting aging aircraft.

Sandia, FAA Put Aging Aircraft Inspection Techniques to the Test

In a ceremony last month, representatives of the Federal Aviation Administration (FAA) and New Mexico's Congressional delegation dedicated a new Sandia facility, a 25,000-sq.-ft. hangar located at the Albuquerque International Airport.

The new hangar will serve as headquarters for the Aging Aircraft Non-destructive Inspection Validation Center (AANC), a research center managed by Sandia's Aging Aircraft Project Dept. 2757, sponsored by the FAA, and dedicated to improving the safety of the nation's aging commer-

cial airline fleet. The AANC was established in August 1991.

The center's main purpose is to evaluate, validate, and transfer to industry non-destructive inspection (NDI) techniques for assessing the flight worthiness of US commercial aircraft. The average age of the approximately 3,700 US commercial planes is 13 years, and one third of those planes are 20 years old or older.

Non-destructive inspection techniques, originally developed through weapons work, do not require an aircraft to be disassembled before structural inspections are conducted. The techniques locate cracks and other defects in a material by passing sound, magnetic, radiation, thermal, or optical signals through or across their surfaces.

Cracks Near Rivets

At present, electrical eddy currents are used by most major airline companies to examine riveted lap joints in airplane fuselages. These seams, held together by rivets and adhesives, are vulnerable to

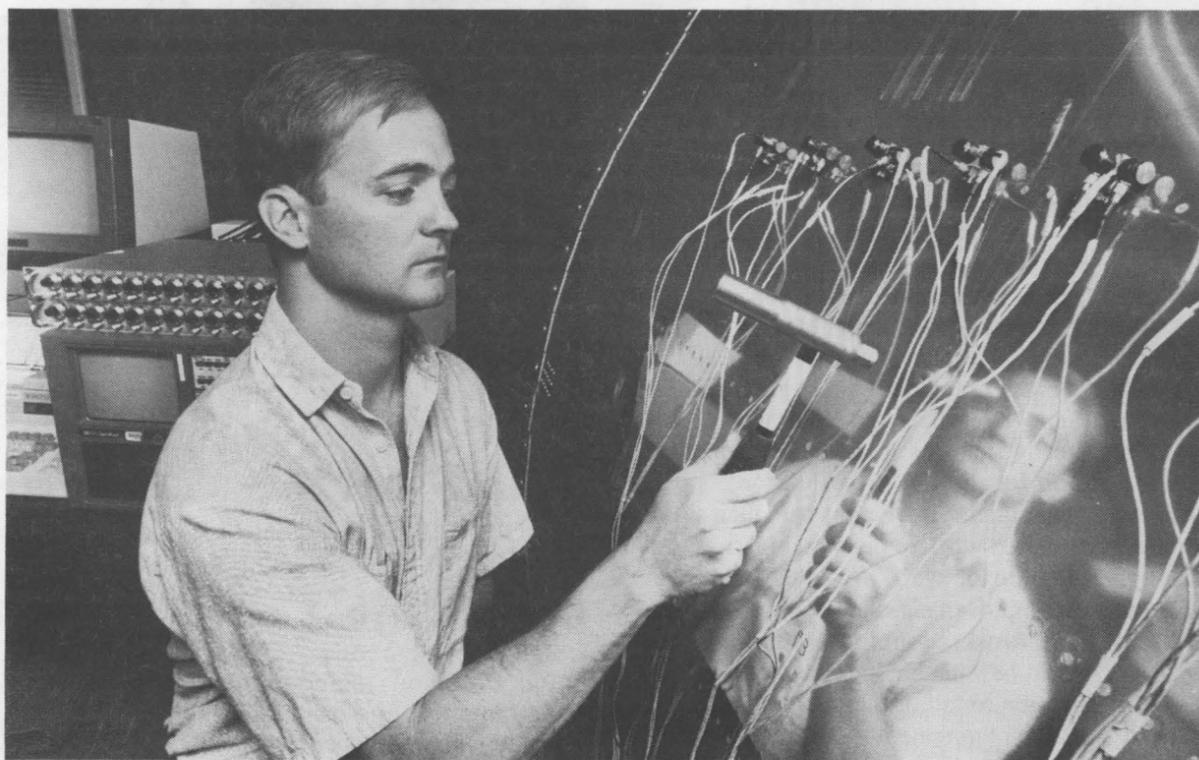
US commercial planes are 13 years old on average; one-third are 20-plus.

corrosion and fatigue. Cracks near rivets may indicate the beginnings of structural failure.

The eddy current technique uses induced electrical currents to detect such cracks. As inspectors pass eddy current devices over rivets on the fuselage, cracks alter the density or distribution of the current, the effects of which are detected on a meter or oscilloscope.

During the past year, the AANC has developed an experiment aimed at determining how reliable the eddy current method is for assessing the flight worthiness of aircraft, which will provide the first

(Continued on Next Page)



VIBRATION SIGNATURES — Dennis Roach (2741) hits a replicated aircraft fuselage with a modal impact hammer as sensors measure vibration. Vibration signatures from undamaged aircraft structures can be compared to those of damaged structures to determine the type and degree of damage.

Supervisory Appointments

DAVID STRIP to Manager of Intelligent System Principles Dept. 1621.



DAVID STRIP

David joined Sandia's Nuclear Reactor Safeguards Division in 1978. Other organizations he's worked in include the Future Options Group and the Nuclear Reactor Safety Division. David's field of work is in computer science. He has a BA in mathematics from the University of Pennsylvania and an MS and PhD in operations research from Cornell. David worked for the Planning Research Corporation from 1973 to 1974 before attending graduate school.

LORI PARROTT to Manager of Corporate Publications Support Office 4526.

Lori joined Sandia in 1984 as a member of the Engineering Specifications Division. Her work has been in scientific and technical communications. Other organizations she has worked for include the Technical Communications Division and the Management Staff organization. She has a BS in geology from Iowa State University and an MS in technical communication from Rensselaer Polytechnic Institute. Before coming to the Labs, Lori was managing editor of *Northeastern Geology* and *Northeastern Environmental Science* journals.



LORI PARROTT

CAROL SUMPTER to Manager of Intellectual Property Development Dept. 251.

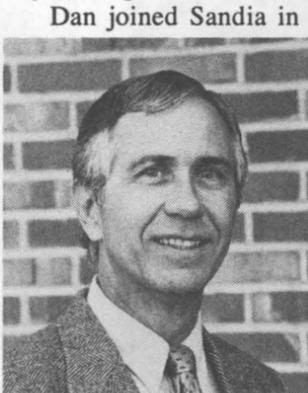


CAROL SUMPTER

Carol joined Sandia's Technology Transfer Applications Department in 1989. She has a BS in electrical engineering and an MBA in marketing from UNM. Before joining Sandia, she worked for Motorola's semiconductor products sector, Fairchild Semiconductor, and Booz-

Allen & Hamilton. She is a member of the Institute of Electrical and Electronics Engineers.

DANIEL THOMPSON to Manager of Health Physics Dept. 7713.



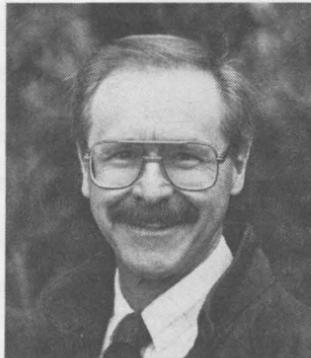
DAN THOMPSON

Dan joined Sandia in 1967 as a member of the Radiation Instrumentation and Dosimetry Division. He also worked in the Health Instrumentation Department. His specialty is health physics. He was named Distinguished Member of Technical Staff in 1992.

Dan has a BS in physics and a BS in mathematics from Wisconsin State College and an MS in radiological health from the University of Michigan.

KENNETH GROTHAUS to Manager of Battery Development Dept. 2522.

Ken joined Sandia's Power Supplies Division in 1963. He has also worked in the Storage Battery Division and the Verification Systems and Technology Division. His specialty is battery engineering/chemistry.



KEN GROTHAUS

Ken has an AS in chemistry from the University of Cincinnati and a BS in mathematics from the University of Albuquerque.

ANTHONY CHAVEZ to Supervisor of Support Services Team 7813-4.

Tony joined Sandia's Maintenance Operations Department in 1983. His work at the Labs has been in heating, ventilation, and air conditioning.



TONY CHAVEZ

He is a graduate of Vo-Tech, Universal Technical Institute, and T-VI programs in heating, ventilation, and air conditioning. Before coming to Sandia, he worked for Chavira's Heating and Plumbing.

CHARLES MEYERS to Manager of Laboratory Directed Research and Development Dept. 1011.

Chuck joined the Labs in 1990 as a member of the Manpower Procurement Division. His work has been in fluid mechanics, planning and operations, and security and intelligence. Before his promotion, he was assistant to the director of the Center for Nuclear Safeguards and Security. He has a BS in engineering science, an MS in civil engineering, and an MBA in management and marketing from the University of Texas. Before coming to Sandia, Chuck was vice president of National Economic Development Associates, Inc. in Albuquerque. He was an academic advisor and instructor at Albuquerque Technical-Vocational Institute from 1986 to 1987. He also worked for Booz-Allen & Hamilton in Dallas, the US Tennessee Valley Authority, the University of Texas College of Engineering, and the US Army Security Agency.



CHUCK MEYERS

PHILLIP GREEN to Manager of Space Applications Dept. 9231.

Phil joined Sandia in 1987 as a member of the Instrumentation Development Department in the Applied Physics, Engineering, and Testing Center. In 1991, he received a Sandia Award for Excellence for his outstanding performance in leading a project to record data for the Defense Nuclear Agency and Jaycor on the Distant Zenith project.



PHIL GREEN

He has a PhD in physics from Louisiana State University. Before coming to Sandia, Phil was a physics professor at Texas A&M University, where he specialized in high-energy cosmic ray physics.

He is a member of IEEE and was a member of an IEEE committee to write a standard for digitizing waveform recorders.

JUAN GRIEGO to Manager of Medical Administration Dept. 7032.

Juan joined Sandia in 1969 as a messenger in the Mail Services Department. Other organizations he's worked for include the Microfilm, Micrographics, Education and Training, and Purchasing departments.



JUAN GRIEGO

He has a BS in psychology and a BA in business from the University of Albuquerque and an MA in business from New Mexico Highlands University.

(Continued from Preceding Page)

industry-wide statistics in civil aviation history about the technique's reliability.

The experiment will be conducted at nine airlines and third-party maintenance facilities during the spring and summer. With a 70-ft. replicated aircraft fuselage specially fabricated to emulate flaws found on aircraft after tens of thousands of takeoffs and landings, researchers will assess the chances that an aircraft inspector will locate cracks of varying sizes and distributions.

In addition, the effects of human factors such as accessibility, lighting, background noise, and inspector experience and alertness will be assessed to determine whether these factors significantly influence inspection results. The experiment will also compare eddy current results with results from a promising new NDI technology, magneto-optic/eddy current imaging.

"The experiment will allow us to talk about how effective inspections have been, as well as

provide information on possible improvements," says Floyd Spencer (323), Sandia's principal investigator.

Library of Parts

The newly acquired hangar will house a library of aircraft parts and structures to be used in AANC research, including a recently acquired 737 transport airplane. These structures will help researchers validate techniques for examining corrosion, disbonding, cracks, and other defects.

The hangar will also serve as a representation of an actual airline maintenance facility, in which the effects of background noise, room temperature, and lighting on inspector performance can be studied.

Through the AANC, Sandia works in collaboration with New Mexico State University, Science Applications International Corp., and AEA Technology (U.K.). To date, Sandia has received \$7 million from the FAA, part of a five-year, \$15-million project. ●JG/Jclausen(7161)

Congratulations

To Liz (7615) and David (2482) Schroeder, a daughter, Valerie, Feb. 15.

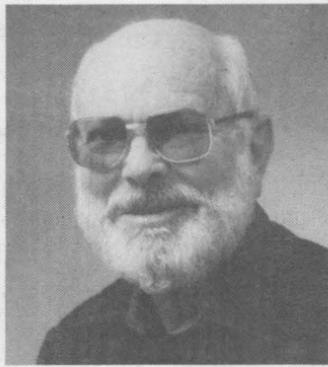
To Toni and Joe (2664) Ehasz, a daughter, Alyssa Lee, March 5.



MILEPOSTS

LAB NEWS

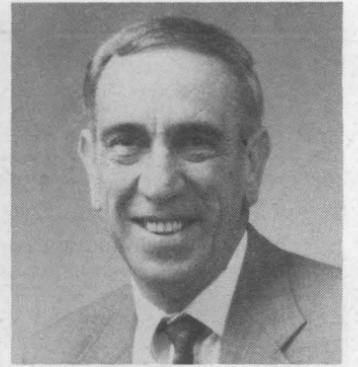
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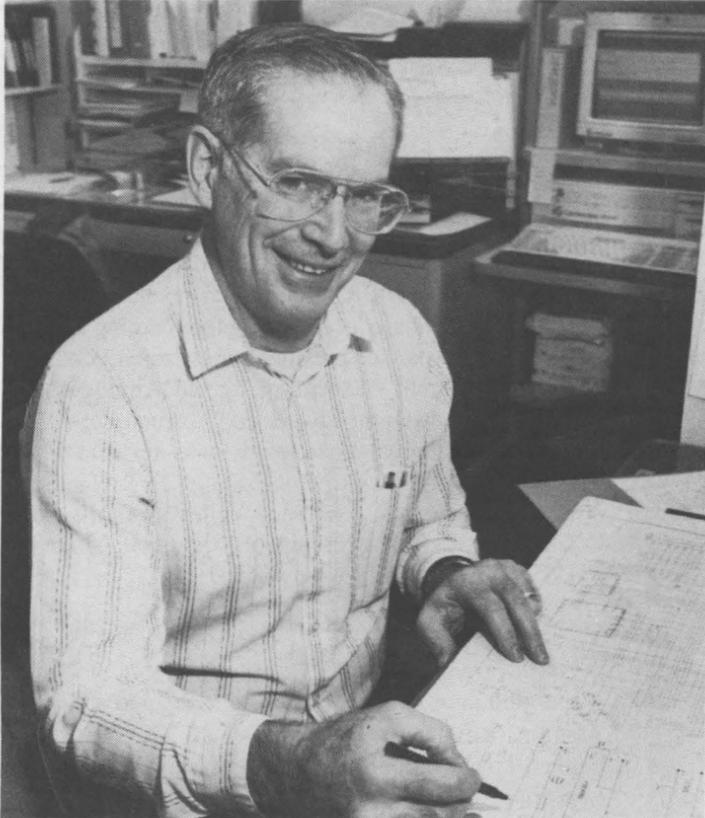
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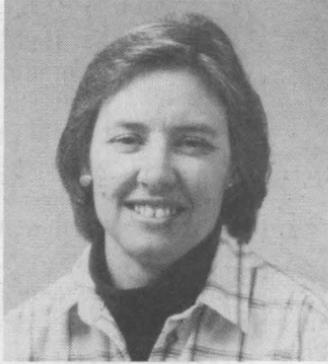
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Donald Stone
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James Lohkamp
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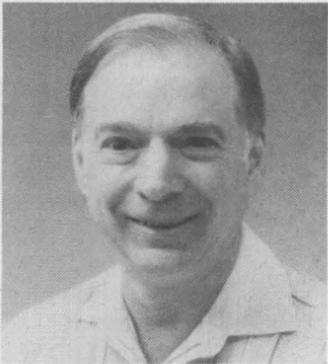
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George Schnetzer
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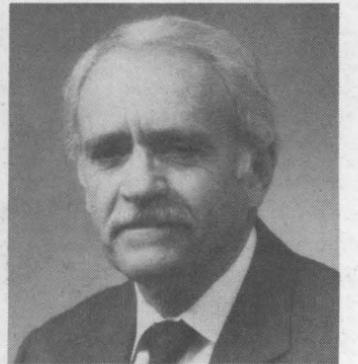
Suzanne Follett
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George Kaye
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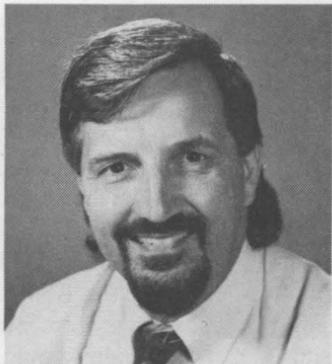
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Jim Martin
7400 30



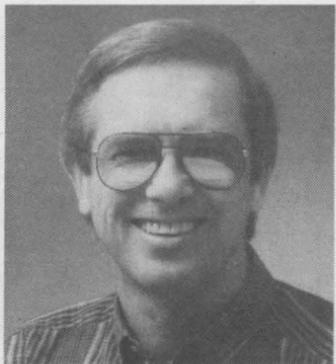
Hsi-Tien Chang
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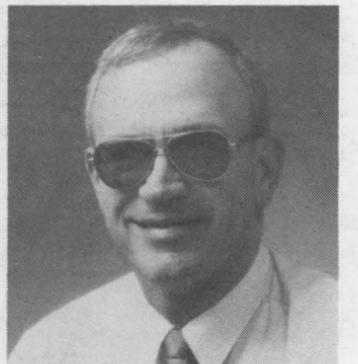
John Smugeresky
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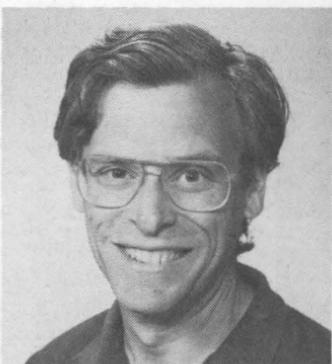
Bruce Gunckel
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Steven Burchett
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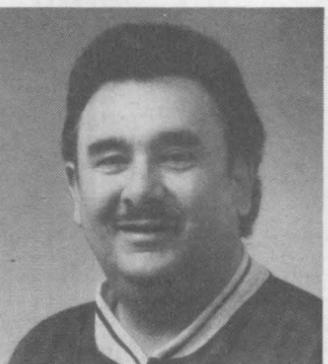
Bill Wolf
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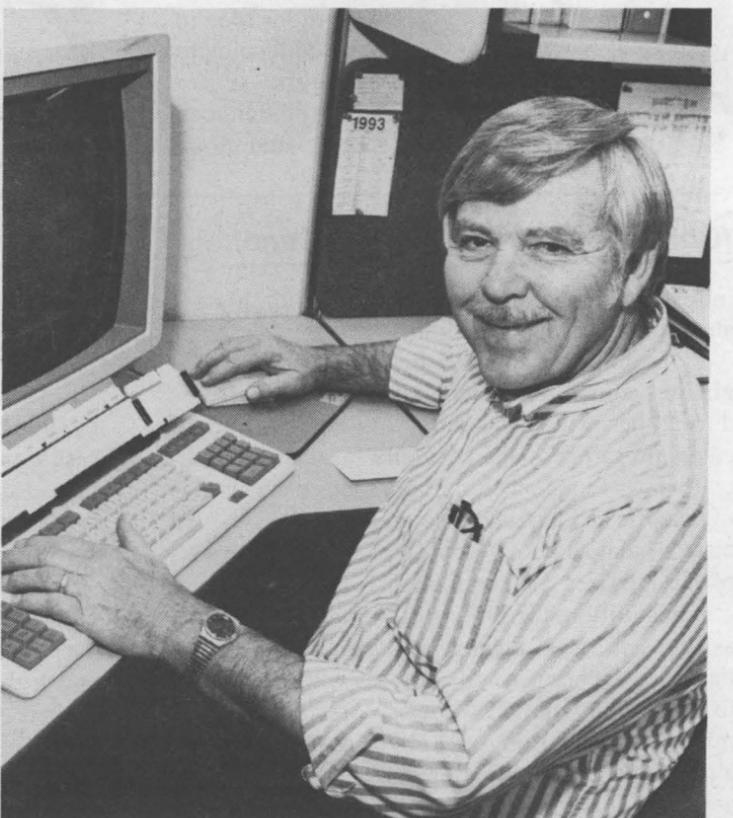
Jay Spingarn
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Danny Bernacil
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Joe Sanchez
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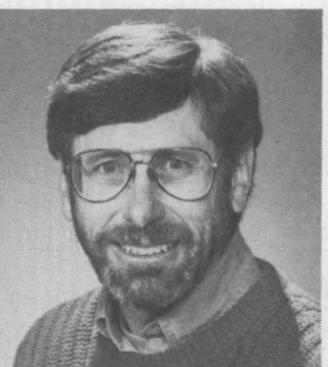
Carl Longerot
2277 35



Dick Silva
8613 30



Nina Coe
7222 15



Steve Folkendt
8536 30

Fun & Games

Fun Run/Walk — The sixth annual Roadrunner Ramble 5K Walk/Run, sponsored by Chaparral Girl Scout Council, will be held Saturday, March 27, at Kirtland AFB (use Louisiana/Gibson Gate). More than 600 participants walked and ran in last year's event. Entry fee is \$10 if received by 5 p.m. March 24 or \$12 on race day. Awards include a T-shirt to the first 600 entries, ribbons to first-, second-, and third-place winners for 5K in each age group, and a plaque for best over-all. Registration forms can be picked up from Gardenswartz Sportz, Ski Systems, Oshman's, REI, or Chaparral Girl Scout Council (500 Tijeras Ave. NW).

The American Lung Association of New Mexico is sponsoring an adult asthma support group meeting on Tuesday, March 23, at 7 p.m. The topic is "Asthma Update." For more information, call the American Lung Association on 265-0732.

The National Atomic Museum Foundation is sponsoring a bus tour to Trinity Site at White Sands Missile Range on Saturday, April 3. Buses will leave the Museum on KAFB at 6:30 a.m. Cost is \$17 per bus ticket. Bob Henderson, head of the Engineering Group in the Explosives Division for the Manhattan Project at Trinity and Los Alamos, will give an eyewitness account of the first atomic

Take Note

explosion at Trinity on Thursday, April 1, at 7:30 p.m. at the Atomic Museum. For tickets and information, call the Atomic Museum on 845-4636.

Retiree Deaths

- Robert Hartenberger (67).....Feb. 1
- Clifford Magnuson (70).....Feb. 2
- William Farrar (79).....Feb. 9
- Thelma Carpenter (88).....Feb. 12
- George Dickins (96).....Feb. 19
- George Miller (82).....Feb. 22
- Lois Calkins (81).....Feb. 27
- Carlton Kentfield (70).....Feb. 28

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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.

MISCELLANEOUS

- ANTIQUE PRINTER TRAYS; bed frame, full or queen size, \$15; twin size bed frame w/headboard, \$15. Peterson, 256-7514.
- SKI BOOTS, Salomon SX-92 Equipe, white/black/blue, men's size 8-1/2 to 9-1/2, cost \$350 new, asking \$130. Schkade, 292-5126.
- COUCH & LOVESEAT, matching, like new, used for 9 months, asking \$525 OBO. Obrien, 892-2498.
- ROLL BARS, for small truck, chrome, like new, 3-in. diameter bars, with 3 halogen lamps, \$240 OBO. Abeyta, 242-8836, leave message.
- WASHER & ELECTRIC DRYER, pair Montgomery Ward brand, almond color, approx. 7 yrs. old, \$100 OBO. Martinez, 888-3067.
- COMPUTER, IBM-compatible 286, 40MB, 1MB RAM, monochrome monitor, Hercules graphics, DOS 5.0, keyboard, mouse, 24-pin printer, \$850. Alder, 246-1868.
- RECUMBENT EXERCISE BIKE, hardly used, like new, \$100; fireplace enclosure w/screen & glass doors, black, 30 to 38 in. W, 21-1/2 to 28-1/2 H, \$45. Lewis, 291-8181.
- SKIS, Pre 1200 Cl., 195cm, w/Tyrolia 570 bindings, excellent condition, \$175 OBO. Griego, 877-6593.
- GOLF CLUBS, left-handed, 1, 3, & 5 metal woods, 2-SW perimeter weighted irons, putter, bag, \$100. Prairie, 821-4556.
- BEDROOM FURNITURE, solid cherry wood, includes headboard, dresser, chest of drawers, & night stands, good condition, \$350. Romero, 298-7934.
- FLOOR LOOM, Pendleton, 4-harness, 45-in. width, folding, jack action, excellent condition; assorted weaving tools and yarn. Sharpton, 897-2883.
- TROMBONE, Olds Ambassador, \$600 or trade for good quality electric guitar; Harley Davidson Screaming Eagle carburetor, \$150. Gonzales, 344-4933.

- MONITOR, IBM, CGA, \$95; Epson printer, FX-100, \$85. Dietzel, 294-4702.
- COMPUTER, Packard Bell, XT equivalent, color monitor, 2 floppies, 20MB hard drive, two keyboards, DOS 3.3, Word Perfect, \$300. Mauldin, 293-3763.
- ENGRAVING MACHINE, for laminated plastic, 3 letter types, beveler, cutter, & assorted materials. Williams, 293-1765.
- COMPUTER, Commodore 64, Epson Homewriter printer, disk drive, software, \$200; pine chest, painted, 4 drawers, \$40. Biffle, 293-7043.
- TYPEWRITER, Brother Correctronic (C-40), includes case & correction tape, \$40; halogen bicycle light, Cat-Eye, \$5. Davis, 255-2084.
- SMITH & WESSON 38 SPECIAL, on 5 screw .44 frame, \$300; Llama 32 semi-automatic pistol, \$250. Roeschke, 266-8988.
- COMPUTER EQUIPMENT: Bernoulli drive, lomega 44MB internal, interface card, cables, manuals, \$300; 6 ea. 44MB cartridges, \$200; all for \$450. Laguna, 298-1732.
- COFFEE & END TABLES (2), Oak Parson, \$50/ea.; vase lamps (2), Southwest style, \$30 both. Oczon, 275-7147.
- COLOR TV, 19-in., good picture & sound, \$100. Horton, 883-7504.
- COMPUTER, 286 PC, 20MB HD, 512K, 5-1/4-in. drive, monochrome, DOS 3.3, \$600; Precor rower, like new, paid \$240, sell for \$150. O'Neill, 266-8810.
- TICKETS TO "THE BEACH," '93 season, one-day pass admit one person, Little League fundraiser, regularly \$9.50, sell for \$6.50/ea. Noriega, 867-5735.
- DOG, Chow, male, 6 yrs. old, AKC-registered, good natured, cinnamon colored, one-eyed, free to good home. Murray, 299-7226.
- ALUMINUM GLIDER, \$35; aluminum chaise longue chair, \$15; chrome director chairs (4), \$10/ea. Walston, 298-1500.
- RED BRICK, approximately 100, sell for 10c/ea. Mozley, 884-3453.
- DISC CAMERA, LeClic, perfect condition; stuffed elephant, 21"L x 13"W, gray, made by Alresford Crafts of England. Wagner, 823-9323.
- BABY JOGGER, blue, w/canopy, \$250 OBO. Longenbaugh, 293-0704.
- BELL MOTORCYCLE HELMET, size 6-7/8; leather jacket, size 36; take-down bow & 3 sets limbs. Anderson, 298-1635.
- COMPUTER EQUIPMENT & SOFTWARE: Paradox 4.0, unopened, \$300; Tax/Investment software; HP Scanjet, \$300; Okidata 293 printer, \$200; modem; EGA card; etc.; all BO. Meyer-Hagen, 293-7339.
- MAGNAVOX TV/MONITOR, 25-in., stereo; oak entertainment center, w/4 shelves behind glass door, video storage; \$325 for both. Harley, 281-9777.
- KITCHEN SINK, heavy duty stainless steel, w/mounting ring & hardware, \$15; repair manual for '88 Toyota Corolla, \$15. Murphy, 881-1520.
- GAS RANGE, Whirlpool, electric ignition, 4 burners, self-cleaning oven, almond, 3 yrs. old, \$350. Ambabo, 266-2383, after 6:30 p.m.
- SLEEPER COUCH, queen size, & matching loveseat, blue floral print, good condition, \$375 OBO. Restrepo, 822-9419.

- FREE LANDSCAPING ROCK, medium-sized, you load and haul. Shirley, 883-3210.
- ELECTRIC MOWER, \$40; evaporative pre-coolers (2), for refrigerated AC, new, \$65/ea.; car stereo, AM/FM cassette, \$35. Glaser, 293-8110.
- COFFEE TABLE & END TABLES (2), oak w/glass tops, \$75; 13-in. color TV w/remote, \$50. Williams, 266-6552.
- UTILITY TRAILER, 5' x 9', \$350 firm; infant car seat, \$20; maintenance manuals for '85 Accord, '68 Pontiac, & '83 Firenza, \$5-\$10. Garcia, 293-3937.
- DRESSERS: five-drawer, \$125; 4-drawer, \$35 OBO. Poulter, 291-0607.
- GARDEN TRACTOR, Allis-Chalmers hydrostatic drive, w/mower & snow blower; rear-tine tiller, Rotto-Hoe, 8 hp, w/attachments. Whitley, 293-6094.
- PISTOL, TZ-75, 9mm + 4 AE, long slide, ported, 4 mags, ammunition, holster, perfect in box, \$550. Roth, 344-7060.
- BEDROOM SET, girl's, white provincial, double bed, box springs, mattress, dresser, mirror, chest, hutch, balloon curtains, bedspread, \$450. Munson, 822-1497.
- AUXILIARY GAS TANK, for pickup, \$25. Ottinger, 296-3526.
- LIVING ROOM FURNITURE: couch, large coffee table, side tables, chairs. Walker, 821-5938.
- GARAGE SALE: April 1, 2, & 3, vanities for 2 bathrooms, fixtures, 25-in. color TV, more. Rael, 884-4778.
- SONY MONITOR, 27-in., not receiver, video to RGB input, stereo, \$525. Ginn, 883-0004.
- BETTY CROCKER COUPONS, big collection, free. Daniel, 271-0721.
- TICKETS TO PAUL MCCARTNEY CONCERT, April 20, Las Cruces, 2 pair, \$34/ea. ticket. Shirley, 296-3972 or 296-0896.
- OAK ENTERTAINMENT CENTER, oiled, used 9 months, 43" H x 54" W, paid \$240, asking \$140; veneer bookcases (2), 42" H x 30" W, \$15/ea. Denaple, 298-2778.
- WATERBED, queen-size, \$195; table-top stereo, Fisher, phono, dual cassette, AM/FM, \$100. Hill, 836-1006.
- DOG, Australian Sheep/Spaniel mix, female, spayed, shots, 2 lbs., good health, sweet temperament, affectionate, loves other animals, free. Pompeo, 265-9248.
- DINING TABLE & CHAIRS, 36-in. round table, w/2 leaves, expands to 36" x 72" oval, four chairs, excellent condition, \$300. Logan-Condon, 296-6346.
- ATARI ST PERIPHERALS, Spectre GCR Mac emulator w/roms, \$400; SM124 monochrome monitor, ZRAM 2.5 Meg memory upgrade, ICD host adapter, monitor master. Evans, 831-4736.
- FORD RIMS, 16.5-in., 1 set, 8-hole, mounted on tires w/minimal tread, \$30/ea. or \$100 for all. Zirzow, 281-9896.
- CANON LENSES: 80-200mm, F4.5 S.C., \$200; 50mm F1.4 S.S.C., \$65; Vivitar 2x macro teleconverter, \$75; extension tube set, \$35. Brooks, 275-0056.
- '89 CASITA TRAVEL TRAILER, 16-ft., king bed, AC, kitchen, refrigerator, microwave, toilet/shower, water heater, stereo, canopy, \$6,500. Cunningham, 892-0436.

- CORNER GROUP, storage unit/table, w/2 twin beds, \$150 OBO. Spinello, 292-5681.
- EXERCISE BICYCLE, AD-Argometer, like new, \$90; camper steps, folding aluminum, for pickup camper, cost \$130 new, sell for \$70. Oatley, 821-6801.
- FLOAT TUBE, Caddis Deluxe, excellent condition, a terrific way to fish, \$60. Miller, 294-4409.
- TRAVEL TRAILER, Nu-Wa Fifth Wheel, 25-ft., good condition, original owner, \$7,950. Manning, 243-7124.

TRANSPORTATION

- '92 SATURN sports coupe, ABS, AC, AT, cruise, AM/FM cassette, 11K miles, white w/blue interior, in Las Cruces, \$13,700. Roherty, 1-522-5549.
- '79 FIAT CONVERTIBLE, 90K miles, new top & interior, \$2,000 OBO; '81 Goldwing motorcycle, 28K miles, chromed engine, many extras, \$2,000. Duffy, 275-2857.
- '91 TOYOTA COROLLA DX, 26K miles, 4-dr., AT, AC, PS, stereo w/cassette, 4 speakers, burgundy w/gray interior, \$8,500 OBO. Gallegos, 899-1013.
- '74 DATSUN PICKUP, 150K miles, new tires, AC, \$500. Prior, 281-5532.
- '84 FORD RANGER, 4WD, V-6, 5-spd., fiberglass camper, 2 gas tanks, new tires, heavy duty suspension, 91K miles, \$3,000. Lee, 857-9765.
- '91 TOYOTA MINI MOTORHOME, PS, PB, AT, tilt, cruise, cassette, dash/roof AC, awning, microwave, 15K miles. Sharpton, 897-2883.
- '55 CHEVY BELAIR, rebuilt 350 engine, 3K miles, good condition, \$6,500 OBO. Padilla, 296-5048, after 3 p.m.
- '86 FORD F250 LARIAT XLT SUPER-CAB, 4x4, 460 engine, 4-spd., 2-tone paint, chrome drop hitch bumper. Nelson, 881-0148.
- '83 HONDA SHADOW 500 MOTORCYCLE, 12K miles, \$1,200 OBO; dirt motor bike, needs mechanical work, \$25. Estill, 883-1531.
- '84 CHEVY CONVERSION VAN, front/rear AC & heater, AT, captain chairs, couch converts into bed, \$5,000. Ferguson, 292-3824.
- '88 NISSAN PATHFINDER XE, V-6, 4 x 4, sport package, AC, 61K miles, ski racks, 1 owner, excellent condition, \$11,000. Volk, 299-1702.
- BICYCLE, Fugi Club, 59cm frame, excellent condition, \$100. Anderson, 298-1635.
- '90 HONDA CRX, metallic blue, AC, AM/FM cassette, low mileage, excellent condition, \$7,200. Schnetzer, 292-0733.
- '90 FORD RANGER, 4-cyl., 5-spd., PS, PB, AC, extended cab, 20K miles, red w/gray interior, trailer towing hookup, \$8,900 OBO. Treadwell, 884-4221.
- '93 FORD ESCORT WAGON, red on gray, 5-spd., loaded, less than 2K miles, \$11,800 MSRP, sell for \$10,000. Chalmers, 899-2330.
- '89 FORD AEROSTAR XL WAGON VAN, excellent condition, 27K miles, \$8,800. Spencer, 275-8468.
- '70 CADILLAC ELDORADO, 8.2 liter, extensive mechanical restoration, recent paint & vinyl top, no rust, 115K miles, \$2,795. Cunningham, 892-0436.

REAL ESTATE

- HALF-ACRE LOT, Rio Rancho, first street east of Goff, 19th & 30th, pavement paid. Rael, 884-4778.
- 3-BDR. HOME, 1-3/4 bath, 2-car garage, fireplace, covered patio, sprinklers, new roof & windows, 1,190 sq. ft., Lomas & Chelwood, \$82,000. Denning, 299-5843.
- 2-BDR. MOBILE HOME, '80 Town & Country, 1-1/2 bath, nice, big, front kitchen, carport & awning, now located near Wyoming gate, \$14,000. Raines, 275-5854.
- 3-BDR. HOME, 2 baths, Towne Park, 1,919 sq. ft., 2-story model, oversized lot, middle of development for extra security, \$119,500. Clark, 293-3750.

WANTED

- HOMES: for two Vizsla-cross hounds, spayed and neutered, 8 mos. old; one American Eskimo-cross, spayed, 8 mos.; all have shots & are housebroken. Rex, 764-9655.
- NORDICTRACK exercise equipment. Maish, 898-8027.
- GRAY WATER HOLDING TANK, w/wheels, for travel trailer; RV TV antenna. Kercheval, 864-6549.
- BI-WEEKLY HOUSEKEEPER, must have transportation & references. Vandewart, 298-4741.
- HOUSESITTING POSITION, available May 1, references on request, leave phone number. McConnell, 299-0061.
- HOUSE TO RENT, for couple & small housebroken pet, 6 months, NE/east mountain area, while building home. Logan-Condon, 296-6346.
- TIFFANY LAMP, for above pool table, in good condition. Schwartz, 856-0836.
- GOOD HOME, for Commodore 128 & Vic 20 computers, includes monitors, X10 printer, software, documentation, table, will donate to good cause. Glaser, 293-8110.
- DAVID WINTER COTTAGE COUNTRY MAGAZINE, Issue 3, Autumn 1987, to buy or borrow. Ottinger, 296-3526.
- SKI EQUIPMENT for a 4-yr. old; National Geographic magazine, Nov. 1980 issue. Palmquist, 281-5951.
- ELECTRIC TROLLING MOTOR. Westman, 881-0471.

WORK WANTED

- GENERAL YARD WORK, yard mowing, and odd jobs by high school student, NE Heights, reasonable rates, reliable. Perrine, 293-1429.

Coronado Club Activities

Membership Drive Starts Monday

HEY, MOMS AND SONS — This Sunday's brunch (March 21) is a mother-son special. All moms will receive a lovely flower, and sons (over 12) will get \$1 off the buffet price. Brunch is served from 10 a.m. to 2 p.m. and costs \$6.95 for adult Club members, \$7.95 for guests, \$2.50 for kids 4-12, and free for 3 and under. Starting at 1 p.m., enjoy the tea-dance music of Bob Weiler and Los Gatos — they'll play until 4 p.m. Reservations required — call 265-6791.

DEALS FOR JOINERS — During the Club's membership drive March 22 through April 9, first-time members signing up for a one-year membership will receive one month free. Regular memberships are \$96 a year; it's \$48 a year for Sandia and DOE retirees. You can sign up at the Club Monday through Friday from 8 a.m. to 4 p.m. Call 265-6791 for more information. And for another good deal, read on.

POOL SPECIALS — Pool passes are already on sale, and you can get a discount if you purchase yours by May 1. Examples of the savings: A one-person pass costing \$30 after May 1 is only \$20 now, and a six-person pass costs \$66 now instead of \$100 later. Members of the T-bird retiree group get a special discount. You must be a Club member to buy pool and patio passes.

WHILE YOU'RE WAITING for summer to get here so you can head for the fun at the pool and patio, head for the fun tonight, March 19. The ever-popular Trio Grande will be on stage from 7 to 11 p.m. Dinner will be grand, too: shrimp scampi (\$9.95), filet mignon (\$11.95), or the all-you-can-eat buffet (\$6.95) featuring baron of beef, baked ham, and roast turkey breast. Dinner is served from 6 to 9 p.m. Call 265-6791 for reservations.

For Your Benefit

Dental Claims Administrator Changing to The Travelers April 1

As announced in the Feb. 5 LAB NEWS, The Travelers has been chosen as the new Claims Administrator for the Sandia Dental Expense Plan. The Travelers' Preferred-D is the new dental network. As of March 20, send no more claims to Metropolitan Life Insurance Company; instead, begin submitting claims to The Travelers. Between March 15 and 26, you will receive at your home address The Travelers' claim kit, which includes claim forms, a listing of Preferred-D dentists and other information about this transition. Below are answers to frequently asked questions about this transition.

I am undergoing orthodontic treatment which was started under Metropolitan. Do I continue sending claims to Metropolitan or to The Travelers?

Metropolitan will bundle and ship to The Travelers all unpaid claims and claims in process as of March 20. The Travelers will begin processing transferred and newly received claims beginning April 1. This group of claims will include all in-process claims such as orthodontia, dentures, and periodontal treatment. There should be no difference in the scheduled frequency or amount of payment for orthodontic treatment paid by The Travelers; however, as in any transition, there may be delays or inadvertent errors. You should verify with your dentist or compare your Explanation of Benefits from The Travelers with prior Metropolitan payments to ensure that no changes in your orthodontic scheduled benefits (or other on-going treatments) have occurred.

I obtained a Pre-Determination of Benefits from Metropolitan for a group of dental procedures scheduled to be performed next month. Will The Travelers accept the approvals issued by Metropolitan?

Yes. When you file your dental claim, attach a copy of Metropolitan's Pre-Determination of Benefits to The Travelers' claim form.

I have scheduled an appointment with my dentist on March 25. Should I cancel this appointment?

Although there is a change in the Claims Administrator to The Travelers, there is no change in the level of benefits or type of coverage under the Dental Expense Plan. Scheduled appointments are not affected by this change. If your dentist is a PDP dentist, our contract with the PDP and the negotiated fees ends on March 31. If your dentist joined the Preferred-D Network, a similar negotiated fee arrangement will be available to you as of April 1. A listing of Preferred-D dentists is included in your claim kit.

Where can I get additional Travelers claim forms?

Two claim forms are included in The Travelers' announcement packets sent to home addresses. Also, an initial distribution of The Travelers' claim forms was made through Just-In-Time (JIT) to all Center secretaries during the week of March 8. This initial distribution will minimize the chargebacks for ordering new claim forms. For future JIT orders, the order number is WHS 697770 (EA). On-roll employees should obtain The Travelers claim forms from their secretaries. Retirees can obtain the forms through Sandia Line (845-6789) using the Quick Key (enter 9, enter 1088, and leave your message). If you live out-of-town, use 1-800-242-8456, then enter 845-6789 and use the above Quick Key method. Discard all Metropolitan claim forms after March 20.

If you have questions about this transition, call Louise Loudon (7543) on (505) 845-9706. •

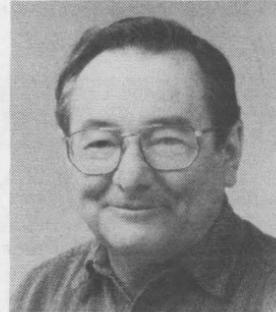
Recent Retirees



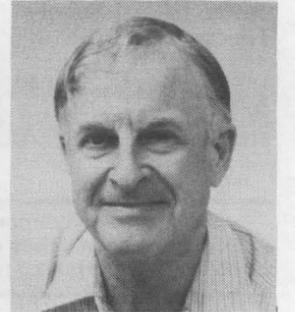
Angelina Gurule
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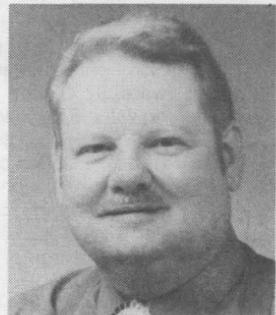
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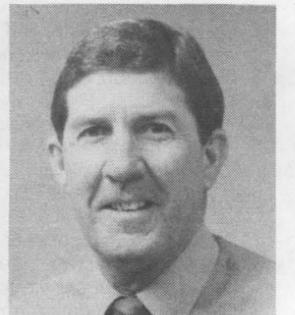
Gene Aronson
6904



Donald Sharp
1841 21



Curtis Mueller
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Adron Pritchard
7151 30

Open House

The Labs is holding an open house in honor of retiree Marie Vaughn (7033) in the Bldg. 831 conference room on Thursday, April 1, from 2 to 4 p.m. Refreshments will be served. Friends and acquaintances are invited.



COMBUSTION AWARD RECIPIENTS — Peter Witze (8362, left) and David Chandler (8353) were this year's winners of the two top combustion research awards at Sandia/California. Pete received the E. K. Bastress Award, which recognizes a Sandian who has made a significant contribution to a strong and effective coupling of combustion research programs with the needs of US industry. He developed a fiber-optic instrumented spark plug and an ion-probe instrumented head gasket. Pete also spent considerable time working with industry customers to meet their needs. Dave won the O.W. Adams Award for blending excellence in science with other accomplishments to make the CRF a model for government-supported "user" facilities. He has helped put Sandia on the map in the field of chemical physics. Dave and his research team have studied the energetics and dynamics of a variety of fundamental molecular processes important to combustion and have developed new, broadly useful experimental techniques.