

A Study of 'Insider' Espionage Cases: Is There a Standard Profile?

During the 1950s, cases of "insider" espionage against the US or its allies could be counted on two hands; they totaled eight. But from 1980 through 1987, cases totaled 62 — an increase of almost 700 percent for a shorter period of time.

Some of the more recent cases became household words; Edward Lee Howard, John Walker, and Clayton Lonetree come to mind. Others, such as Samuel Morrison and Sharon Scranage, probably aren't remembered by more than a handful of people.

But they all betrayed their country.

Why? What made them go wrong? Is there a common thread — a standard "profile" — that might identify potential insider spies?

In an effort to determine the answers to these and other questions, ISEC (internal security) program coordinator Jerry Brown (3400) undertook a year-long investigation. "In part," says Jerry, "the large number of cases in the '80s results from a change in law enforcement attitudes. Because of an increased sensitivity to the damage done by espionage, cases were prosecuted that would not have been in the past.

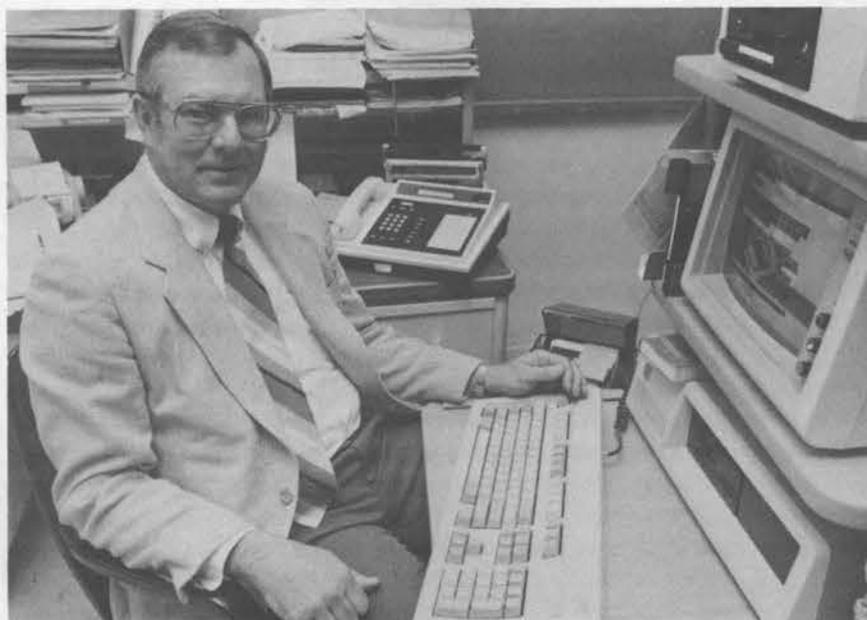
"The big increase in insider espionage cases has definite implications for the national laboratories," Jerry continues. "Because of the nature of the work at places like Sandia, classified information is often an integral part of an employee's job.

"Access is a key word here. An employee's access to information that could be damaging to national security — if the data are in the wrong hands — is what makes him or her an especially inviting target.

"I examined, in detail, more than 100 cases of Communist-Bloc-sponsored espionage against the US or its allies over a 37-year period — 1950 through 1987. That involved looking at motives — revenge, greed, emotional problems, and ideology, among others. From those 100 cases, I profiled 92 Americans prosecuted for espionage to try to get a handle on which of those motives was most influential."

Root of All Evil

Some interesting facts emerged. As Jerry investigated case after case, it became obvious that the most prevalent motive is greed. Money — or the lack



ISEC COORDINATOR Jerry Brown (3400) recently completed a year-long study of insider espionage cases, in an attempt to nail down a predictable profile. Some interesting facts emerged.

of it — figured in some 66 percent of the cases reviewed. "That fits right in with the Soviet premise that every American has a price," says Jerry. "The ironic thing is that most of the informers received only very modest amounts of money for the information they turned over."

But rarely did insiders-turned-spies have a single motivator — money or anything else. Rather, as Jerry puts it, there was a "cocktail of themes." And, he reports, "almost always there was an element of perceived injustice, which led to disgruntlement and a need to 'strike back.' Even so, in cases where revenge was the lead-off motivator, greed often became Number One after the first espionage act."

Trouble is another thing in common among people who turn out to be insider threats, Jerry notes.

"There's nothing in the way of behavior or dress or age that would tip you off," he says. "But the person is usually having troubles — money, emotional, or something else. And looking for a way out of trouble is what makes a person vulnerable.

"There's this great misconception that the only way people get sucked into the espionage trap is that Soviets come here and recruit agents. But, contrary to what the whodunits and spy thrillers would have you believe, most people *volunteer* information; they're *not* recruited. They walk in the embassy door and say 'I have valuable information — how much is it worth to you?'"

In fact, some 70 percent of the individuals whom Jerry profiled volunteered information, rather
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LAB NEWS

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Twenty-Eight Sandians Participate

Nontraditional Careers for Women: Exploring the Unknown

Last Saturday (March 4), 28 Sandians (see box, page nine) pitched in to help on a day-long conference — "Expanding Your Horizons" — that's sponsored annually by the New Mexico Network for Women in Science and Engineering.

The conference seeks to increase young women's interest in nontraditional careers, particularly science and engineering, and to help them establish contacts with women professionals in those fields. This is the 10th such confab sponsored by the Network since its establishment in 1980. More than 8500 students have attended "Expanding Your Horizons" in previous years.

At this year's conference, more than 400 young women from the Albuquerque area, grades 8 through 12, converged on UNM's Woodward Hall to explore career opportunities in nontraditional occupations for women: science and engineering, mathematics, law, medical science, and others.

Hands-On Projects

On the agenda were hands-on projects — for example, building electrical circuits, working with computers, or constructing a basic camera — as part of career workshops designed to give participants a "taste" of what it's like to work in a particular field. The 40 workshop topics included such curiosity-
(Continued on Page Nine)



AMONG SANDIA PARTICIPANTS at the "Expanding Your Horizons" conference March 4 were workshop leaders (from left) Vickie Kurtz (5245), Debbie Fitzgerald (5265), and Rebecca Darnell (5249). The three MTSs described electrical engineers' wide range of activities. Their workshop topic: "Electrical Engineering: From Toys to Telephones to Tracking Terrorists."

This & That

Hello. I'm Not Bruce -- I'm Larry Perrine, now with a little more than nine whole days of experience as LAB NEWS editor, following 5-1/2 months as a writer here. Former editor Bruce Hawkinson, who transferred March 1 to supervise Video Production and Film Processing Div. 3153, had about 14 years of LAB NEWS experience -- the past seven as editor and seven more (in the '70s) as a writer.

After I get 14 years of experience here, please feel free to criticize openly. In the meantime, if the experienced staff doesn't keep me out of trouble, blame Bruce for not training me properly.

* * *

Adios, Antojitos -- Bruce's familiar initials will no longer appear at the end of this column. I can't retire his E-number in his honor, so I'm retiring the name of his column. "Antojitos" -- April 16, 1982, through February 24, 1989 -- rest in peace.

It had a nice ring, but how many of you (non-Spanish-speakers) remember (or ever knew) the meaning of Antojitos? Bruce credits former LAB NEWS writer Carl Mora (now 3151) with the name. Carl says it translates loosely as "hors d'oeuvres," "little bites," or "small whims/fancies."

Modest fellow that he is, Bruce doesn't brag much -- well, maybe just a bit to his closest 300 or so friends -- so I'll brag about him for a paragraph or two.

Bruce took exceptional pride in the LAB NEWS and worked hard and long to make it an effective, readable, and balanced company newspaper. To paraphrase, you can't please all of the people all of the time, but I believe he pleased most readers most of the time -- probably all that any editor can do.

His Antojitos column was one of the finest company-newspaper columns around -- often informative, nearly always entertaining. Many of you agree and have said so. Periodic LAB NEWS readership surveys showed that it was one of the most consistently read items. And, Antojitos has been praised several times in the Ragan Report, a writing/public relations newsletter.

Bruce didn't hesitate to "tweak the system" in his column when he thought things were wrong or could be improved; thanks to the (usually) understanding Sandia management, he got by with it most of the time. On occasion, he listened attentively to some choice management comments.

I hope Bruce remembers these nice words I wrote about him -- especially if he ever becomes my boss again -- and that he never hears those other, nasty things I'm saying about him behind his back because of all the junk he left in my office.

* * *

DMTS Honorees -- Congratulations to the 74 Sandians who have been named Distinguished Members of Technical Staff (see photos and plaque inscriptions in this issue). The DMTS designation, limited to about 10 percent of the non-supervisory technical staff, is awarded for sustained outstanding performance or unique contributions to Sandia's technical missions.

* * *

Helped Start South 14 Project -- Bill Benedick of Div. 1153 -- a man of many interests and good works -- died Feb. 22 after a lengthy illness. The 34-year-plus Sandian helped the Sandia Technical Writing group initiate the South 14 Village Project in the mid '60s. The project distributes funds during the Christmas season to needy families in six villages south of Tijeras. The project's primary source of

income is profit from the sale of Sandia T-shirts and caps, available at the LAB NEWS office in Bldg. 814. We're pleased to help continue this project that Bill supported.

Retired LAB NEWS editor John Shunny remains active in the South 14 project and keeps our shirt/cap supply stocked.

* * *

How, Indeed? -- Many writers want to write a column. The idea has appealed to me several times during my semi-illustrious career, but this is my first opportunity.

Sitting down and getting started on this first one made me feel like the fellow on the phone in the TV commercial, who -- when asked by his boss if he can be in Memphis Tuesday, Cleveland Wednesday, and somewhere else Thursday -- replies each time, "I can do that!"

Then, when his boss hangs up, the fellow asks himself aloud, "How am I gonna do that?"

Gitcher Own 'Little Blue Book' Now -- It's Easy

Did you know that Sandia is a world leader in the development of shoebox-sized computers with the computational power of desk-sized, general-purpose computers? (They were originally developed for weapon uses, and the technology has been transferred to industry for a commercial product.) Or that Sandia has the largest arms-control verification technology program in the country?

More about these and other topics, as well as some statistical info on Sandia personnel -- MTSs on roll at Sandia outnumber MLSs by more than four to one, for example -- are included in the "Little Blue Book," the Sandia information booklet officially titled "Sandia National Laboratories."

The 1989 issue is now available. It's a handy guide to Sandia programs, facilities, and personnel statistics -- copies are being sent to all Sandia supervisors.

You can get a personal copy by sending a self-addressed internal mailing envelope (9"x12") to Div. 3162 (no phone calls, please).

December 1988 Earnings Factors

	Earnings Factors
Savings Plan for Salaried Employees (SPSE)	
AT&T Shares	.9723
Government Obligations	1.0051
Equity Portfolio	1.0211
Guaranteed Interest Fund	1.0072
South Africa Restricted Fund	1.0062
Diversified Telephone Portfolio	
Unrealized Appreciation	.9904
Realized Appreciation	.0089*
Savings and Security Plan -- Non-Salaried Employees (SSP)	
AT&T Shares	.9727
Guaranteed Interest Fund	1.0073
South Africa Restricted	1.0068
Diversified Telephone Portfolio	
Unrealized Appreciation	.9911
Realized Appreciation	.0088*

* The 1 has been removed from the earnings factor. Current month's DTP earnings may be calculated directly: Earnings Factor x DTP Current Worth = Current Month's Earnings.

Death



wife, son, and daughter.

Bill Benedick of Shock Wave and Structural Physics Div. 1153 died Feb. 22 after a lengthy illness.

He was 63 years old.

Bill was a member of the technical staff and had been at the Labs since September 1954.

He is survived by his



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Middle-East Trip Gives More Than Tourist's-Eye View

After hearing an Anglican bishop from Jerusalem speak in San Francisco last summer, Val Pestanas (8286) and Karen Siegfriedt (8514) decided to take a Middle-East trip that would not be just a typical tourist's vacation.

Karen, who plans to enter a seminary later this year in preparation for the Episcopal priesthood, dined with the bishop, who is a Palestinian. He invited her to visit a Palestinian refugee camp for a firsthand view of what most Americans see only in newspapers or on the TV news.

Val, a seasoned traveler who has visited 19 countries, had already planned a trip to Israel over the Christmas holidays. So, last Dec. 19, Karen and Val left for three weeks in Israel and Egypt.

"My reason for going to Israel was to try to understand the struggle between the Palestinians and Israelis. I wanted to really communicate with the people up close and get a feel for what it's like living under such strained conditions," says Karen.

"The most important thing we experienced there," adds Val, "was the people — and the conflicts among cultures."

"In the crowded area of Jerusalem," says Karen, "especially in the Old City, are Moslems, Jews, and Christians of various sects, all struggling to make a living and coexist peacefully — or as peacefully as they can."

Visiting Palestinian Families

While in Jerusalem, Val and Karen stayed in the Anglican Church hostel, a 20-minute car ride from the Al-Jalazon refugee camp. Their guide at the camp was a YWCA staffer and interpreter who took them into the homes of displaced Palestinian families.

"These families are living in hardship," says Karen, "yet they remain very close-knit. They are warm and friendly to outsiders, and they manage to retain their self-esteem."

On Christmas Eve, Val and Karen attended services in Bethlehem's Church of the Nativity, which is divided into three denominational sections — Roman Catholic, Greek Orthodox, and Armenian/Anglican. They joined the Anglican celebration, singing Christmas carols and hearing a sermon.

Then they went to St. George's Anglican Cathedral for a midnight mass celebrated by the bishop of Jerusalem, the clergyman whom Karen and Val had met in San Francisco. The next day, they and other guests had Christmas dinner with the bishop's family.



REFUGEE CAMP Al-Jalazon, north of Jerusalem, is where Val and Karen visited Palestinian families.



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"When we were visiting Bethlehem on Christmas Eve, there were more soldiers than tourists," says Val. "Because of clashes between troops and civilians, a lot of tourists stayed away."

Val and Karen were troubled to see commercialism carried on in places revered by many religions. It seemed, they say, that everyone was hustling items claimed to be "holy."

When Val asked what made some of the merchandise "holy," the seller replied, "Three shekels," and then mumbled something about American tourists.

Val's and Karen's departure from Tel Aviv's Ben Gurion International Airport was traumatic. They were detained for nearly three hours, during which their luggage was repeatedly searched, and were interrogated and finally strip-searched. At last they were allowed to leave, but only after — for some unrevealed reason — the confiscation of Val's travel iron.

They joined a group tour for the Egyptian part of the trip. Books and experienced travelers had advised them to do so because independent travel-

ers could be frustrated by continual delays in a country where, as Val puts it, the attitude is that "things can wait."

No Hurry

"You wait for almost everything," says Val. "For instance, if you have to make a phone call or catch a bus, you wait. You could spend most of your time just waiting."

The tour schedule emphasized standard tourist sights. The group saw museums in Cairo, pyramids, tombs, and temples. And there were special meals: "We did a lot of eating!" says Karen.

But they also got some sense of the Egypt
(Continued on Page Eight)

Congratulations

To Vicki and Ed (8522) Hathaway, a son, Charles Edward, Feb. 5.

To Jill Hruby (8441) and Don Sweeney (8435), a daughter, Kara Hruby Sweeney, Feb. 5.



READY TO MOUNT a camel for a ride around the Pyramids are Val Pestanas (8286, left) and Karen Siegfriedt (8514).

LEAP to Give \$150,000 to Agencies

With the Livermore Employees Assistance Plan (LEAP) campaign for 1988 now complete, some 30 charitable agencies have been notified of the amounts they may receive this year. The amounts could vary, depending on the number of contributing employees who retire or leave Sandia's employment during the year, according to LEAP committee chairman Louie Tallerico (8284).

The agencies and final estimates of donated dollars are American Indian Center, \$439; Anthropol Foundation, \$632; Buenas Vidas Youth Ranch, \$8860; Hope Education Center, \$5263; Hope Hospice, \$12,109; Horizons Youth Counseling, \$3040; Kaleidoscope Center, \$2838; LARPD Extended Student Services, \$1113; Livermore Association for Guiding and Teaching Students (LAGATS), \$1034; Livermore Emergency Fund Center, \$1426; MATCH, \$1608; Nursery School Scholarship Fund, \$3536; Nurses Welfare Fund (for needy patients), \$819; Student Education Loan Fund, \$1010.

Also, The Center & Family Crisis Center, \$5724; Tri-Valley Community Fund, \$3996; Twin Valley Learning Center, \$3698; We Say No program, \$1297; Agency for Infant Development, \$1010; Eden Express, \$1124; M-2 Sponsors for Prisoners, \$1083; Northern California Society for the Prevention of Blindness, \$1010; Parental Stress Service, \$1010; Spectrum Community Services, \$1010; Love Thy Neighbor, \$2413; United Way of the Bay Area, \$51,105; United Way of San Joaquin County, \$20,781; United Way of Stanislaus County, \$2953; Combined California Health Agencies, \$6241; and Guide Dogs for the Blind, \$2176.

Sandians also used the donor option plan to contribute funds to four additional groups — the Arthritis Foundation, Suicide Prevention, Multiple Sclerosis Society, and the American Narcolepsy Association. The total amount donated to all charities and agencies by Sandia Livermore employees during the October 1988 campaign was more than \$150,000.

Distinguished Members of Technical Staff

74 More Sandians Honored

Seventy-four new names have been added to the list of Sandia's Distinguished Members of Technical Staff. The new honorees bring the total to 247 named to the DMTS roll.

The program began in March 1983; more DMTSs were named in December 1983, May 1985, and March 1987. Each DMTS receives an inscribed plaque (the inscription appears on these pages with each photo), a pin, and \$2000 during a presentation by the employee's vice-president.

The DMTS program honors employees who have sustained outstanding performance or made a unique contribution to the technical missions of the Labs. All non-supervisory members of the technical staff with 10 or more years of professional experience are eligible. The total number of awards is limited to approximately 10 percent of the non-supervisory MTS population.

Of the 173 prior DMTS honorees, 24 have been promoted to supervisor, and 27 have retired or left Sandia.



Thomas Lockner (1264)

For his technical excellence and leadership in high-energy electron- and ion-beam research for Sandia programs in inertial confinement fusion and directed energy weapons research.



David Haaland (1823)

For his pioneering development of chemometric techniques and application of those techniques to infrared spectroscopy and for his distinguished work in the application of Fourier transform infrared spectroscopy to support Sandia's nuclear weapon and energy programs.

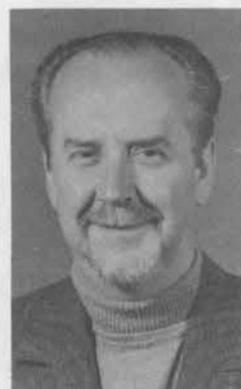
Stephen Slutz (1265)

For his sustained contributions to Sandia's inertial confinement fusion program, contributions that have led to significant advances in understanding of ion-beam-driven targets and ion diodes. His insight, creativity, and breadth of technical understanding have made major contributions to the development and application of intense ion beams.



Norman Brown (2132)

For his outstanding and sustained contributions in the area of contamination reduction and analytical chemistry applications. His individual contributions and technical understanding have led to major improvements in the manufacturability and reliability of weapon system components for the DOE weapon complex.



Merle Riley (1126)

For his many outstanding contributions to quantum and classical optics, laser science, photophysics, and electron and molecular collisional dynamics.



Anthony Russo (1511)

For his sustained contributions in research and engineering in support of weapon and energy programs. His physical understanding, engineering judgment, and creativity have led to the solution of numerous problems in weapon component design, reentry physics, geophysical fluid mechanics, and pulsed laser welding.



Stewart Kohler (2334)

For his sustained contributions to the development of inertial navigation and pointing systems in support of Sandia programs. His insight, creativity, and project leadership skills have made major contributions to the solution of problems in both military and energy applications.

Ralph Dawson (1144)

For his outstanding contributions to Sandia's compound semiconductor program, including the first molecular beam epitaxy growth of strained-layer superlattice structures and development of materials for the rad-hard photodiode and far-infrared detectors.



Melvin Baer (1512)

For his outstanding contributions to the fundamental understanding of multiphase reacting flows. His combination of physical models and numerical algorithms has enabled the detailed modeling of explosive and pyrotechnic components.



Billy Brock (2343)

For his sustained contributions to the understanding of electromagnetic and radar-cross-section analysis and characterization. His innovative designs, analyses, and computer models have made and continue to make major contributions to the advancement of Sandia technology.



Peter Feibelman (1151)

For his pioneering theoretical work in surface science, including studies of the nature of electromagnetic fields at metal surfaces, mechanisms of stimulated desorption, and properties of isolated adsorbates.



Steven Burchett (1521)

For his sustained application of sound mechanical analysis to weapon component design and his contributions to the development of specific components.



Philip Stanton (2514)

For his consistently outstanding contributions to the development of advanced detonating components and diagnostic systems. His broad-based technical skills, leadership qualities, and insight have made and continue to make major contributions to the Laboratories' weapon development mission.

David Johnson (1264)

For his continued excellence in innovation, design, and experimentation in the areas of high-power electron beam diodes, high-power ion beam diodes, intense beam transport and focusing, and extraction ion diodes. These contributions have had a major impact on the inertial confinement fusion program.



Peter Rand (1813)

For his innovative use of foam technology in solving engineering problems at Sandia.



Robert Bickes, Jr. (2515)

For his sustained contributions to Sandia's component and weapon development technology. His ingenuity, leadership, and dedication to excellence have allowed him to make major contributions to technology of benefit to Sandia, the Department of Defense, and the public through his efforts in technology transfer.





James Moreno (2541)
For his continued outstanding contributions to Sandia's programs. His broad-based technical skills, combined with dedicated and unselfish effort, have made and continue to make major contributions toward the solution of our national problems.



Arlin Cooper (5145)
For his sustained contributions to Sandia's programs, many of which have enhanced nuclear weapon safety and have led to a better technical understanding of the processes involved.



Herbert Sutherland (6225)
For his sustained, outstanding contributions in the areas of solid mechanics and energy research at Sandia. Particularly noteworthy are his significant achievements in geotechnical simulation and in wind turbine fatigue.

Gary Shepherd (2614)

For his leadership and foresight on technical computing issues, noteworthy contributions in designing computer-related educational facilities, success in addressing time-critical problems involving the use of computer systems, top-quality consulting support, and innovations in the use, adaptation, and dissemination of new computer technology.



Roger Abbott (5153)

For his long-term contributions to Sandia's test and evaluation programs, contributions that have led to a higher confidence in our nation's stockpile. His drive, technical competence, and persuasiveness have led to better designs and better programs.



John Eichelberger (6233)

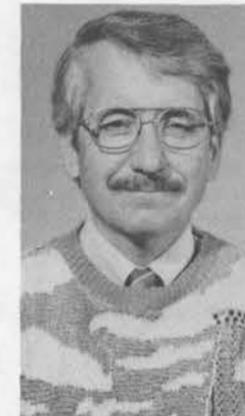
For his sustained contributions to Sandia's geoscience programs. His creative research and innovative applications of scientific drilling have made major contributions to understanding the thermal regimes of the continental crust and have led to international recognition in the geosciences.



Suzanne Kelly (2645)
For her sustained contributions to Sandia's computing environment, contributions that have led to improved capability, reliability, and maintainability. Her insight, motivation, and technical abilities have made and continue to make major improvements in facilities available for sharing information among the general computer user community.



James Rea (5220)
For his sustained contributions to Sandia's programs in the field of safety, security, and survivability of the deployed nuclear weapons in NATO and his corresponding contribution to those NATO organizations with concomitant goals. His insights, perseverance, and technical knowledge have made and continue to make important contributions to Sandia's programs and to national and international efforts.



Douglas Drumheller (6252)
For his sustained technical contributions to the field of wave phenomena in structured materials. His theoretical models of composite materials and mixtures have advanced the state-of-the-art and have found practical applications of national importance.

Patrick Chavez (2814)

For his contributions to the development, implementation, and integration of software tools for engineering analysis. His insight, knowledge, and technical expertise have made and continue to make significant contributions to computer-aided engineering in support of Sandia's mission.



Ronald Madsen (5234)

For his outstanding contributions in improving the physical security systems for safeguarding nuclear weapons in storage and deployed on aircraft in the defense of our country.



Peter Lysne (6252)

For his sustained technical contributions to Sandia's programs, including recent geotechnology efforts in logging and research drilling. His creativity, planning, careful evaluation, and good judgment have led to many successes of national importance and have earned the respect of diverse outside groups, from drillers to theoretical scientists.



James Metcalf (3212)
For his sustained contributions to Sandia's environment, safety, and health program at the Nevada Test Site. His insight, creativity, and technical understanding have made and continue to make major contributions to the solution of ES&H and associated problems in nuclear weapon effects testing.



David Kendall (5252)
For his sustained contributions to Sandia's programs, which have led to the establishment of important new areas of endeavor. His creativity, dedication to quality, and technical breadth have made and continue to make major contributions to the solution of national problems.



James Todd, Jr. (6257)
For his long-term sustained contributions to Sandia's weapon, nuclear safeguards, and energy programs. His thoroughness, sound analyses, and imaginative designs continue to make an effective contribution to real national problems.

Robert Baker (5121)

For his sustained contributions to the Sandia weapons program. His insight, tenacity, and problem-solving abilities have supported the successful development and deployment of important national systems.



Billy Caskey (5267)

For his numerous contributions to a wide arena of Sandia programs. His technical insights, dedication to quality, and concern for success have been major contributions to Sandia's national security activities.



Ronald Iman (6415)

For his distinguished research in both applied and theoretical statistics and contributions to reactor safety and waste management through development and application of state-of-the-art sensitivity and uncertainty analysis techniques.



DMTSSs



Jeremy Sprung (6415)

For his sustained and distinguished research and development in the area of reactor safety and consequence modeling.



Alexander Hachigian (7213)

For his sustained technical contributions to the maintenance of a reliable stockpile of nuclear weapons through his excellence in weapon training and contributions to the solution of problems in the field.



Fred Cericola (7542)

For his sustained and innovative contributions to the field of quality-controlled dynamic testing, leading to improved testing technology and vibration-tolerant products.

Larry Bustard (6447)

For his sustained outstanding performance and contributions to nuclear power plant equipment qualification and plant life extension, which has led to increased safety and enhanced availability of commercial nuclear power generation in the United States.



Kenneth Hessel (7234)

For his continuing contributions to Sandia's weapons program in the areas of instrumentation and use-control systems analysis. His insight, creativity, and technical capabilities have provided widely recognized solutions to problems.



Kenneth Chen (7553)

For his sustained original contributions to electromagnetic coupling theory resulting in accurate electromagnetic pulse, electromagnetic radiation, and lightning coupling models for many Sandia weapons.



William McCulloch (6511)

For his sustained outstanding leadership and conspicuous technical contributions in experimental and analytical research in space and terrestrial nuclear power systems, weapons testing, and terrestrial solar applications.



Christian Schroeder (7252)

For his many contributions to the national defense, and his insights and concerns for quality and costs relative to weapon material.



Larry Seamons (7823)

For his significant contributions in several Sandia programs, including development of special nuclear materials transportation systems and the design and construction of specialized experimental facilities to support research in solar energy, inertial confinement fusion, and nuclear weapon effects simulation.

Gordon Hansen (7126)

For his significant contributions and dedication over many years to the design, development, and fielding of state-of-the-art instrumentation systems in support of Sandia's nuclear test programs.



Kenneth Flynn (7262)

For his significant contributions to the development and evaluation of Sandia weapon programs. His insight, creativity, and technical understanding have made and continue to make major contributions to Sandia's goals.



David Dean (8132)

For his significant contributions in the design and development of warhead electrical systems, including those for the B77, B83, and W87.



John Weydert (7133)

For his contributions to Sandia programs in the design of rockets, wind tunnels, and underground nuclear test closures. His insight and creativity in the design of modified auxiliary and gas-sealed auxiliary closures for underground nuclear testing have substantially improved the containment of underground nuclear tests.



James Collier (7266)

For his sustained contributions to Sandia's evaluation programs for artillery-fired atomic projectiles and cruise missiles, which form a crucial part of the nation's nuclear deterrent. His insight, creativity, technical ability, and dedication have resulted in programs that help ensure the continued viability of these weapons.



Joseph Grant (8154)

For his significant contributions to the analysis and test endeavors for the W71, B77, W89, and several advanced systems.

Paul Cooper (7133)

For his sustained contributions to Sandia's programs and his national recognition in the areas of explosives engineering and safety. Application of his expertise has resulted in significant contributions to the solution of national security problems.



William Burd (7483)

For his resourceful contributions to the development of CAD/CAM technologies for application in Sandia's prototype machine shop and in the nuclear weapon complex manufacturing facilities. His work in software development and testing is state-of-the-art and very practical, and his influence on the design of ANVIL has been extremely valuable. His efforts in expert systems to automate numerically controlled programming functions have benefited and will continue to benefit Sandia and the weapon complex.



Dennis Beyer (8163)

For his leadership and significant contributions in the design and development of mechanical components for nuclear projectiles, including those for the W79 and W82.





William Mason, Jr. (8243)

For his outstanding enhancement of Sandia's capabilities to perform structural and thermal-mechanical calculations. In addition, for continuous technical contributions to Sandia's computing capability, which enable the Laboratories to fulfill its national engineering responsibilities.



Donald Adolphson (8431)

For his continued outstanding contributions to materials technology both at Sandia and throughout the weapons complex and, most recently, for his role in development and production of key strategic defense materials.



Jerry Cashen (8479)

For his significant influence on weapon designs through his unique combination of skills and experience in the areas of electronics, digital logic hardware and software design, reliability, nuclear safety themes, statistics, and command and control.

Stewart Griffiths (8244)

For his outstanding contributions to the understanding and development of Sandia components used in national defense programs. In addition, for significant contributions to Sandia's capabilities in fluid mechanics research, development of pyrotechnics, and the understanding of geological fracturing.



Martin Hinckley (8431)

For his outstanding and innovative contributions in mechanical engineering and design of weapon systems.



Chittoor Subramanian (8511)

For his outstanding contributions to the understanding of the potential consequences of nuclear reactor containment and operational accidents. He led Sandia's efforts in establishing design bases for the response of the Yucca Mountain waste repository structures to seismic loads.



Donald Nissen (8313)

For his numerous contributions to Sandia programs. His technical innovations, insightful approach to problems, and ability to motivate and inspire others have allowed him to play a vital role in solving a number of problems of national importance.



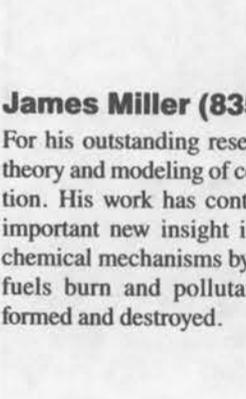
Patricia Falcone (8435)

For her major contributions to Sandia's programs in solar energy and rocket plume modeling.



Marcus Bunting (9014)

For his many years of exemplary service in the evaluation of critical national security issues. His objective and professional analytical assessments of competing advanced technologies and adversarial response capabilities have provided invaluable guidance to program management.



James Miller (8353)

For his outstanding research in theory and modeling of combustion. His work has contributed important new insight into the chemical mechanisms by which fuels burn and pollutants are formed and destroyed.



Ronald Stoltz (8441)

For his major contributions to the materials technology and component development programs.



Robert Hughen (9110)

For his broad contributions in Sandia's nuclear weapon design and intelligence programs. His contributions to arming, fuzing, and firing system design, and to the understanding of foreign weapon systems and technologies have been of critical importance to Sandia success in these areas central to the national security.



Roger Farrow (8354)

For his outstanding research and commitment to excellence in developing the fundamental technology base for nonlinear spectroscopic diagnostics in combustion applications.



James Wang (8441)

For his major contributions to the combustion sciences and component development programs.



Robert Nellums (9122)

For his sustained contribution to Sandia's programs in both energy and advanced conventional munitions technology. His creativity, technical insights, and dedication have led the way into new areas of activity for the Laboratories and have set a high standard of excellence.

Reginald Mitchell (8361)

For his outstanding research on the theoretical and experimental aspects of coal combustion phenomena. His comprehensive evaluation of the reactivity of coal chars provides unique insight into the relative importance of gas phase and heterogeneous chemical reactions, and of mass transport during coal char combustion.



Larry Brandt (8478)

For his significant contributions and leadership in systems analysis, especially in support of Sandia's strategic defense programs.



Ronald Tucker (9132)

For his expertise in the areas of flight dynamics and dynamic system simulation and his significant contributions to Sandia's maneuvering reentry vehicle development programs. The precision and excellence of his work is widely recognized and regularly sought by his peers and by many other Sandia organizations.



DMTSSs



Carolyn Hart (9133)

For her valuable contributions to many Sandia programs. Her work in synthetic aperture radar development has demonstrated a high level of technical insight and leadership.

Fred Wymer (9211)

For his sustained exceptional contributions to Sandia satellite programs in the design of electromagnetic pulse systems, high-speed digitizers, high-voltage power supplies, complex digital logic, and other subsystems over many years. His reliable, innovative designs in meeting new technical challenges continue to set the standard.



Russell Abbink (9222)

For his years of valuable contribution to Sandia satellite programs in the design of optics, analog and digital electronics, and photodetectors. His innovative solutions to the technical challenges posed by ambitious mission requirements continue to be critical to program success.

Thomas McConnell (9235)

For his innovative designs in sensor systems for the broad spectrum of Sandia missions. His insightful application of technology continues to allow him to produce the elegantly simple solution to extremely difficult problems.



(Continued from Page Three)

Middle-East Trip

behind the usual attractions. Fortunately, says Karen, most of the people in their group wanted to know the Egyptians better.

"Our group was led by an Egyptian, and there were local guides at the places we visited. They thought that a bunch of Americans would just want to snap a picture of a temple and leave, but when we asked, we were able to learn more about the people.

"We were told that there are lower-class people, and people aspiring to the middle class, but no real upper class any more. The middle class usually have only one or two children in a family. Poor people usually have many children, because, for them, children represent economic security — they can work and bring in money."

Christmas Again

After a few days in Cairo, the group took a five-day cruise down the Nile from Aswan, stopping to view temples in several towns. When there was free time, Val and Karen walked around the towns, visiting the markets and churches. The cruise ended at Luxor, the site of a large and famous temple. Then the group returned to Cairo by plane, finishing the organized tour.

Back in Cairo, Karen and Val attended a Coptic

(Continued from Page One)

Espionage

than being recruited after entrapment or blackmail.

Jerry found that most people drawn to espionage had serious character flaws. "In virtually every case," says Jerry, "they had deep-seated problems dating back to early life — problems stemming from abuse or neglect, for example.

"And, more often than not, those early problems spawned others — excessive drug and alcohol use, for instance — as they grew older."

Everyone has problems. Why, then, do some people resort to espionage? "A more basic question," says Jerry, "is 'Why do some people resort to crime of any sort to solve their problems?' Once that decision is made [to resort to crime], it follows that they'll choose a crime that most easily meets their needs.

"If they have access to classified information, they possibly may decide that selling it would be an easy way out of the problem. So that becomes the crime of choice.

"If such a person really stopped to think it through, he or she would realize that the chances of being caught — at least in recent years — are tremendously high."

Three 'Faces'

Jerry says, not surprisingly, that it's not possible to develop an accurate, predictable insider-spy profile, but the subjects he studied did have some things in common: the aforementioned deep-seated problems and serious character flaws, above-average intellect, and an extraordinary fascination (almost to the point of obsession) with espionage and related cloak-and-dagger topics.

Because they often have access to classified

information, national laboratories employees should never lose sight of the fact that they're appealing espionage targets, notes Jerry. The most basic targeting approach, he says, is through establishment of a close friendship. "People have what we call three 'faces': a business face, a social face, and an at-home face," says Jerry. "If you're a target, an IO [Intelligence Officer] or agent will work on cultivating the third face — establishing the deepest kind of friendship, with all the facets: love, trust, a relationship where they can ask favors. Insidious? You bet. Does it work? You bet."

(IOs are professional intelligence people — the "brightest and the best," according to Jerry. Agents might be competent professionals — scientists, for example — recruited to gather information.)

Another approach is establishing a professional relationship over a period of time. A target is much more likely to talk openly after the fifth meeting than the first, Jerry points out. And, though spy thrillers give a great deal of credence to the blackmail approach, that one isn't likely these days — at least in the US. "It's a better possibility in foreign countries, where the target is in unfamiliar surroundings and can't exercise the same basic freedoms that we all take for granted," he says.

"No matter what the approach, it's well to keep in mind that these folks are very, very patient," Jerry continues. "They may spend years watching a target to get a bead on the person's vulnerability; then, if they feel there's a chance of success, they'll move in.

"Through ISEC [LAB NEWS, Oct. 23, 1987], we hope to make Sandia employees aware of the pitfalls — the traps — and how to recognize an espionage approach by someone with less than honorable intentions. Because once in the espionage trap, most people find it extremely difficult to get out."

If you're interested in learning more details about Jerry's findings, he's available for line organization briefings. Just give him a call on 4-9170. ●PW

Diamond Rings and Toothbrushes

Implications for the National Labs

Jerry Brown (3400), after a year-long study of espionage insiders, has concluded that the spy threat is one that can't be overlooked or under-assessed by the national laboratories.

"Reassessing our access priorities might be one way to prevent damage in the areas that would suffer the most harm if not protected," Jerry suggests. "I'm reminded of a statement a number of years ago by Dean Van Vleck of Harvard University. He made the observation that 'the moment we start guarding our toothbrushes and diamond rings with equal zeal, we usually lose fewer toothbrushes but more diamond rings.'

"Providing absolute protection of everything within a facility such as a national laboratory is probably a hopeless task. So maybe we should continue to protect our 'diamond rings' and spend less time on the 'toothbrushes.'"

Analyzing Access Opportunities

"That means identifying people with problems, analyzing their access opportunities, and reacting appropriately," Jerry continues. "For instance, if problem-people have access to information that, if compromised, would significantly endanger national security, they should be moved to a less sensitive area. And we should place emphasis on helping employees resolve potentially devastating personal burdens; that could

very well head off an espionage problem before it begins."

Routinely scheduled security reinvestigations are also vital, Jerry points out. In many cases, personal, professional, or financial problems may develop long after an initial background investigation.

Keeping tabs on foreign travel is another essential. A recent Air Force study concluded that initial espionage contacts overseas were much more successful than those occurring in the US. In fact, there are few reported instances of continuing agent-contact within the continental US. "So we're attempting to do a better job of briefing and debriefing employees on foreign travel," says Jerry. "It's important for employees to understand some of the traps out there, and to be able to recognize a 'setup' when they see one.

"Sandians take their security responsibilities seriously," Jerry adds. "The fact that there's never been an insider espionage case at the Labs is testimony to that. The ISEC program's designed to build an even greater security awareness and to point out additional ways for people to protect themselves and to protect classified information.

"If employees have ideas on how to strengthen anti-espionage security, I'd welcome them."

service for Christmas — on January 6, the date the Coptic church celebrates it.

"That was interesting," says Val, "even though the service was in Arabic and we couldn't understand it. It was a chance to see some of their practices. For instance, the men sat on one side of the church and the women on the other. It's that way throughout the Middle East; the women are always separated. In Moslem mosques, women have to stay in the back, or upstairs in a balcony."

They stayed a few days more in Cairo. Karen became ill, so Val saw the sights on foot while Karen recuperated. "It's probably one of the safest cities to walk in," says Val. "Cairo citizens are friendly people."



Conference

whetting titles as "Like Math? Make Money With It!," "Yellowstone Fires and Civil Engineers," and "Electrical Engineering: From Toys to Telephones to Tracking Terrorists" (see photo).

Closing out the day were panel discussions during which professional women representing 14 career fields described why their jobs were exciting and the kind of preparation needed to equip them for their work.

The Network's overall goal (and that of other organizations) is to increase the number of women interested in — and qualified for — science- and mathematics-related jobs.

On the home front, the number of women in technically oriented jobs at Sandia has steadily increased during the last 10 years. Women's Program Coordinator Debbie Eaton (3510) reports that in 1978, 3.2 percent of Sandia on-roll MTSs (Members of Technical Staff) were female; ten years later, 8.5 percent of MTSs were female. Females made up 0.7 percent of Labs Technical Staff Associates (TSAs) in 1978 and 5.8 percent of TSAs in 1988.

Take Note

Friends of the Albuquerque/Bernalillo County Public Library is sponsoring the 20th annual book sale March 15-18 in the basement of the Main Library (6th and Copper NW). Approximately 125,000 items (including 95,000 books) will be for sale. Proceeds benefit children's programs in the Albuquerque Public Library system, the Center for Books' endowment fund, and the Reichmann Framed Print Collection. For more information, contact Duane Arlowe (DMTS, 5261) on 298-1770.

Sandia Colloquium

James Chafin, DOE Assistant Chief Counsel, will discuss DOE's patent process and guidelines for determining patentability at the Technology Transfer Center (Bldg. 825) March 24 at 9 a.m. Call host Kurt Olsen (4050) on 6-8492 for information.

The Albuquerque Gem and Mineral Club's annual Gem and Mineral Show, "Natural Treasures of New Mexico," is March 18-19 at the old airport terminal building (straight south on Yale Blvd., past the turn to the new airport terminal). There will be competitive and noncompetitive individual and institutional displays; faceting, lapidary, and silver-smithing demonstrations; a raffle; rock and mineral identification area; and sales. For show information, contact Tom Massis (2515) on 299-5584 or Paul Hlava (1822) on 265-4178.

Resolve of New Mexico, Inc., a nonprofit charitable organization offering infertility education and peer support, presents a symposium, "Surviving Infertility," March 11 at St. Paul's Lutheran Church (1100 Indian School Rd. NE) from 8:30 a.m. to 4:30 p.m. Keynote speaker is Joan Weiss, PhD, who will discuss "Couple Communication During Infertility." Infertility specialists from UNM Hospital and private practice will also speak, and 14 workshops about medical, emotional, and social aspects of infertility will be given by local professionals. For information, contact Lynn Nichols on 266-8210 or Beth Wells on 255-5475.

KNME-TV 5 will air historical-theme programs that may be of interest to Sandians during KNME's pledge drive March 3-19. Included are two episodes of "War and Peace in the Nuclear Age," 7 and 8 p.m., March 13 (repeat 11:05 p.m., March 16); "How Hitler Lost the War," 9:10 p.m., March 13 (repeat 1 p.m., March 18); "Portraits of Madness" (Third Reich), 10:40 p.m., March 13; "Jimmy Doolittle: An American Hero," 7 p.m., March 14 (repeat

Nontraditional Way To Spend Saturday

Running the usual Saturday errands or pursuing other weekend activities wasn't in the cards for 28 Sandians last Saturday (March 4), when they gathered to help out at the "Expanding Your Horizons" conference at UNM.

Members of the conference steering committee were Ellen Cronin (1200), Donese Mayfield (9224), Michi Wada (2113), and Eleanor Walther (9221). (Eleanor is also a member of the State Board of the New Mexico Network for Women in Science and Engineering, which sponsored the conference.)

Sandians who participated in career work-

shops and panels at the conference: Jim Bailey (1237), Naomi Christensen (7484), Rebecca Darnell (5249), Ellen Edge (3718), Hazlet Edmonds (3431), Debbie Fitzgerald (5265), Barbara Funkhouser (5268), Mary Green (7471), Kathie Hiebert-Dodd (9115), Vickie Kurtz (5245), Glenn Kuswa (1237), Merri Lewis (1131), Kathleen McCaughey (2543), Judith Mead (7213), Jennie Negin (3140), Jane Poppenger (7485), Mary Sagartz (5268), Debra Spencer (5221), Carol Stein (6233), Mary Ann Sweeney (1265), Pat Trellue (2315), Jayne Ward (5268), Suzanne Weissman (1821), and Marge Whipple (7844).

Retiring



John Foster (7212) 38



Doris Ramel (7476) 20



Bob Donohoe (7123) 31



Tony Chavez (3428) 40



Francis Graham (121) 30



Gordon Williams (9213) 30



Paula Stronach (5142) 24



Howard Romme (140A) 29

2:30 p.m., March 18); "Hirohito: Behind the Myth," 8:05 p.m., March 16 (repeat 4 p.m., March 18); and "Memories of Hell: Bataan Death March," 10:05 p.m., March 16.

The eighth annual symposium of users of Digital Equipment Corporation computers (New Mexico DECUS) is scheduled March 30-31 at the Albuquerque Hilton Hotel. Included are one-day seminars and technical presentations about operating systems, workstations, office automation, new hardware, and software. Program information may be obtained from Paula McAllister (1265) on 6-6372 or Robb Edwards (DOE) on 4-4380.

Retiring and not shown in LAB NEWS photos: Paul O'Brien (6311), Gene Mead (5126), Gilbert Larsen (7111), Donald Jones (7253), and John Ames (5231).

Sympathy

To Sue (3321) and Charles (3423) Tenbroeck on the death of her brother and his brother-in-law in Dallas, Jan. 27.

To Manuel Avila (3154) on the death of his father in Algodones, Jan. 29.

To Vicky Cibicki (1141) on the death of her father-in-law in Albuquerque, Feb. 10.

To Ray Mosteller (7132) on the death of his mother in Tucson, Ariz., Feb. 24.

To Bobby Corbell (9243) on the death of his grandmother in Arkansas, Feb. 26.

Welcome

Albuquerque

- Ann Beecher-McDonald (21-1)
- Peggy Desko (22-2)
- Joseph Durham (144)
- Judy Easterling (22-2)
- Sally Ek (21-1)
- Ruth Griffis (22-2)
- Fay Hooper (21-1)
- Valene Kicklighter (22-2)
- Debra Lujan (3426)
- Laura Sanchez (21-1)
- Shirley Tormey (21-1)

Arizona

- Michael Hess (2826)

Illinois

- Randy Brock (2853)
- Mary Girven (2853)

New Mexico

- Joann Danelle (21-1)
- Jerome Jakubczak (2173)

North Carolina

- William Dunn, Jr. (1522)

Wisconsin

- Matthew Brown (7265)

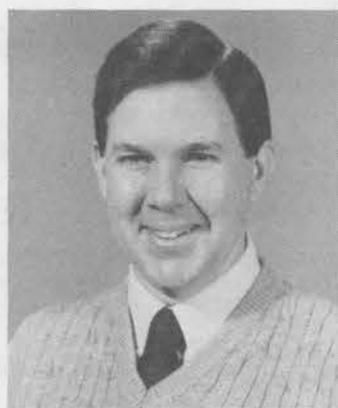
MILEPOSTS

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Don Peterson (DMTS, 2814) 30



Charles Field (2362) 20



Tom Barger (7232) 20



Harold Roberts (7132) 30



Joe Santana (2851) 20



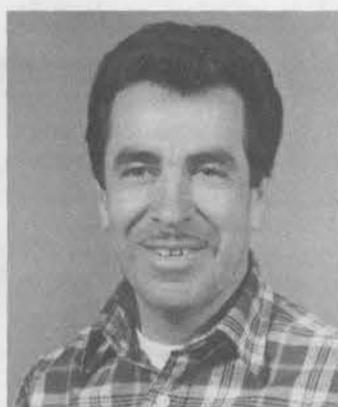
Glen Kepler (1890) 25



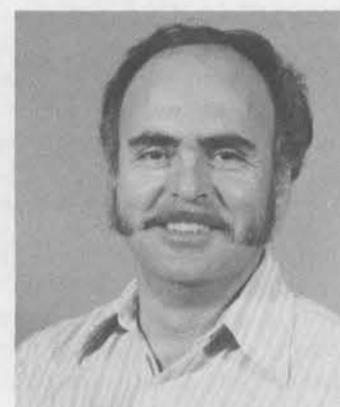
James Dishman (1126) 15



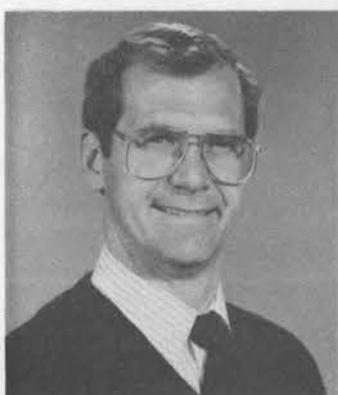
David Waymire (9112) 15



Ernie Vigil (3424) 25



Louis Sanchez (3425) 15



Wayne Shirley (7823) 20



Lloyd Nelson (6427) 25



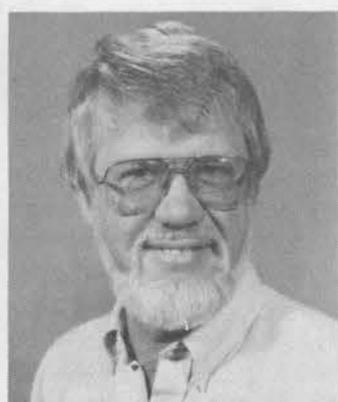
Tom Cordova (3411) 25



Helen Finley (2110) 20



Roy Diesing (9141) 30



Floyd Braaten (2513) 20



Jimmie McDonald (6514) 20

Congratulations

To Kathy and Mark (1233) Hedemann, a daughter, Erin Rebecca, Jan. 21.

To Mary Beth Aragon (7822) and Don Tidwell, married in Albuquerque, Feb. 11.

To Laura (7843) and Tim (9243) Draelos, a daughter, Callie Michelle, Feb. 11.

To Maureen and Cory (2341) Otteson, a son, Mitchell Cory, Feb. 20.

To Beverly and John (1144) Reno, a daughter, Elizabeth Ann, Feb. 23.

To Sylvia (3510) and George Hands, a daughter, Leanne Marie, Feb. 26.



TO THE VICTORS BELONG THE TREES! VP Dan Hartley (right) threw down the gauntlet — he challenged the four directorates in 6000 to see which could come up with the greatest percentage of participants in the recent "Don't Drive One in Five" Challenge Week. Virgil Dugan's (left) Advanced Energy Technology Directorate 6200 picked up the honors — and the trees — with 42 percent participation, 12 percent better than the second-place group, Nuclear Regulatory Research 6400. Each participant in the winning directorate (and the winning department — 6010, headed by Dan Arvizu) was presented a fast-growing evergreen at a ceremony in the TTC. The trees were provided by Greg Fancher (second from left) of the Mora Research Center, an off-campus agricultural experiment station of New Mexico State University. Bob Kestenbaum (center, 4000) and Otis Cox (second from right, 130), representing the Sandia-wide winners, participated in the ceremony.

Dress for Success



Rent-a-Dress shops offer women a less expensive way to dress up. Patterned after men's tuxedo stores, shops that rent special-occasion dresses are opening up across the country. Fees range from \$30 to \$350. One Night Stand, New York, stocks about 700 dresses, including designer gowns that retail for \$4,000. "It has to be done with style," says president Joanna Doniger.

Wall Street Journal

UNCLASSIFIED ADVERTISEMENTS • UNCLASSIFIED ADVERTISEMENTS • UNCLASSIFIED ADVERTISEMENTS • UNCLASSIFIED ADVERTISEMENTS

Deadline: Friday noon before week of publication unless changed by holiday. Mail to Div. 3162.

Ad Rules

1. Limit 20 words, including last name and home phone.
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.

MISCELLANEOUS

- YAMAHA G-231 GUITAR, played 12 times, \$125. Risse, 869-2037.
- SOFA SLEEPER, country floral print, colonial wingback, \$225. Sons, 294-6219.
- BLACK WROUGHT-IRON PLANT STAND, spiral, 4' high, 5 shelves. Guynes, 881-3982.
- SKI BOOTS, size 5-1/2 and 6; beginner's skis and poles; gloves (med.); child's down jacket; answering machine, new; Bronco II/Blazer nose bra. Burke, 294-8073.
- PATIO FURNITURE: white iron love seat, 2 swivel rockers, club chair, ottoman w/cushions, \$200. Nowicki, 294-6572 after 5.
- FRENCH PROVINCIAL SOFA, tufted quilting, pale blue fabric, 8' long, \$395 firm. Blewer, 268-9019.
- TRANSFER CASE, fits FWD '78 Jeep Wagoneer, \$150. Schuch, 344-4622.
- SEVEN-PIECE DINETTE SET: 6 chairs, table w/2 leaves, \$85 OBO. Roesch, 296-8248.
- UPRIGHT FREEZER, frostless, 18.7 cu. ft., adjustable shelves, used 2 years, cost \$700, sell for \$350. Sepulveda, 299-2805.
- HIGH CHAIRS, standing and clip-on; infant seat; crib linens, quilt, mobiles, mirror, bumper pads; infant scale. Kaye, 292-4242.
- CABLE UPRIGHT PIANO, original finish, \$550. White, 266-1779.
- PICKUP FRONT RACK, for SWB, 53" wide, 36" high, made of white pipe, w/steel screen, \$40. Chavez, 842-6374.
- '85 FORD PICKUP SEAT, red, \$75; garbage compactor, \$25. Schuler, 821-8944.
- STERLING SILVER, service for 8; treadmill; Remington adding machine, w/tape; dishes; outdoor barbecue; twin-size mattress and box spring. Kent, 256-1221.

- FIREPLACE INSERT, w/glass doors, stainless-steel tubes, blower motor, \$200 OBO. Prevender, 296-8586.
- STEREO COMPONENTS: Heathkit AA-15 amp, AD-15 Dolby cassette deck, Pioneer TX-9100 tuner; w/manuals and cables. Lambert, 293-8825.
- TOPSAIL, 6.6m², camber-induced, mylar, tape and glue construction, no rips or tears, \$165. Ritchey, 298-4311.
- HEAT PUMP, complete Lennox system, including thermostat; electric hot-water heater, make offer. Miller, 296-8724.
- CAMPER SHELL, for LWB, \$300. Campbell, 294-6000.
- MOVING BOXES: wardrobe w/metal bar, \$5/ea. Johnson, 296-8923 or 296-1917 leave message.
- SOFA AND LOVE SEAT, tan and gold stripes, \$150. Caster, 299-4308.
- BALDWIN CONSOLE PIANO, 2 yrs. old. Mak, 298-2479.
- WESTBEND ROWING MACHINE, model 5100, \$150; exercise bike w/gel seat, \$125. Hoffman, 255-6451.
- EPSON LX800 PRINTER, new, still in box, \$175. Acton, 299-3276.
- MOTORCYCLE HELMET, Bell Tourstar II, black, size 7-1/8, \$25. Hesch, 268-6122.
- FOUR MINIATURE SCHNAUZERS, AKC-registered, salt & pepper, silver, females, dewclaws removed, tails bobbed, shots given, \$250. Lenhart, 898-1200.
- CHILD CRAFT CRIB and mattress, \$200. Tomari, 836-1772.
- FROST-FREE REFRIGERATOR, Westinghouse, 14 cu. ft., top freezer, lime green, \$50. Leeman, 299-9149.
- TEMPORARY POWER POLE, for home construction, w/meter and outlet box, \$250. Hubbard, 281-3959.
- WEDDING DRESS, size 3, \$50. Gutierrez, 821-6715.
- BOUVIER des FLANDRES PUPPIES, AKC-registered, male, show and pet quality. Boal, 296-4660.
- KAWAI PIANO, 8 months old, 10-year warranty, \$3000. McKay, 293-2716.
- BABY CHINCHILLAS, need special home, New Mexico-bred, parents on premises, 1 male, 1 female, \$100/ea. Still, 266-4529 leave message.
- AM/FM STEREO UNIT, w/dual speakers, phonograph, and approx. 20 8-track tapes (mostly C&W), \$75/all. Schubeck, 821-3133.
- FINGERNAIL TIPS, approx. 400, small size, glamour length, \$25. Smith, 296-8668.
- '77 AIRSTREAM TRAILER, 23', \$7200. Mares, 2726 Dallas NE.
- FOUR ANGEL FIRE SKI LIFT TICKETS, good Mon.-Fri. rest of '89 season, \$35. Brown, 884-8581.
- RATTAN SECTIONAL SOFA, brown/blue, seats 4, \$125; new treadmill, \$125; new, gray La-Z-Boy, \$300. Beasley, 298-3398.
- AMIGA COMPUTER, A1000, w/monitor, JX80 color printer, external disks, memory expansion, software. Buttz, 822-1448.
- GRANDFATHER CLOCK, Herman Mil-

- ler, 18th-century-style cherry wood case, works but needs adjustment, \$175. Gosselin, 242-3702.
- BORDER TERRIER, AKC-registered, rare breed (6000 in US), has shots, \$250; student desk, center drawer, 3 drawers on right side, \$30. Lawson, 821-0360.
- KIMBALL SPINET PIANO, \$1000; 2 or 4 spaces in Sandia Memory Gardens, below market, \$445/ea. Prusak, 298-7782.
- STEEL-BELTED RADIAL TIRES: P185/75R14 and P165/80R13, \$4/ea. Kerschen, 821-2848.
- SET OF TWIN-SIZE BEDS, floral-print mattresses, headboards, \$60; full-size bed, bookcase headboard, footboard, mattresses, \$150. Norwood, 266-2717.
- MACINTOSH SE COMPUTER, 20MB, hard drive, ImageWriter II printer, modem, software, \$2500 OBO. Hernandez, 266-5395 after 5:30.
- BETHANY FOLD-OUT CAMPER, sleeps 6, stove, heater, sink, refrigerator, awning, 2 butane bottles; mobile-home axles, w/tires; 2 floor mats for S-10 pickup. Padilla, 831-2114.

TRANSPORTATION

- '67 MUSTANG, all original, sell or trade for General Motors 1/2-ton pickup. Hindi, 299-8996.
- MOUNTAIN BIKE, Schwinn High Sierra, 22" frame, some accessories included, \$250. Knittle, 294-6625.
- '81 FORD F-100 PICKUP, 5-spd., 1/2-ton, 6-cyl., long bed, new motor and brakes, \$3300. Romero, 299-5604.
- '79 MGB CONVERTIBLE, 40K miles, custom wheels, paint, and interior, \$5000. Koontz, 892-8437 leave message.
- '77 CHEV. IMPALA SW, 9-passenger, 350 V-8, \$750 OBO. Smith, 294-4531.
- '81 TOYOTA CELICA, 2-dr. liftback, AT, AC, AM/FM cassette stereo, \$2950. Iacchetti, 822-8284.
- '76 CHEV. MONZA, 4-cyl., 5-spd., new rear tires, \$700. Hodge, 266-6501.
- '87 DODGE RAIDER (Mitsubishi Montero), 5-spd., on-demand 4-WD, 4-cyl., 2.5L, AC, AM/FM tape, 33K miles, \$8500 OBO. McGrath, 281-9826.
- '73 HONDA CB350, needs work, w/2 helmets, shop manual, \$100. Miller, 296-8724.
- '67 MUSTANG, 289 engine, \$2200. Rhoden, 293-5301.
- '78 HONDA CX-500, Windjammer fairing, \$750. Babicz, 299-5938.
- '75 DODGE COLT SW, 4-spd., AC, snow tires, \$600. Kavet, 299-1793.
- '78 CHEV. MALIBU, V-8, 4-dr., 79K miles, AT, PS, PB, new brakes and bearings, \$1000. Coslow, 281-5508.
- '83 OLDS. CUTLASS SUPREME, \$5800; '79 Apollo RV, 30', 20.8K miles, loaded, \$9000 down. Hoffman, 255-6451.
- '79 HONDA XL250S MOTORCYCLE, new tires, \$350; '76 Kawasaki KE-

- 100 motorcycle, \$150. Romero, 821-7629.
- '82 CHEV. PICKUP, 3/4-ton, long step-side, V-8, 4-spd., Positraction, dual tanks, PS, PB, AC, 41K miles, \$5000. Walter, 884-4282.
- '84 HONDA GOLDWING GL1200I, chrome and accessories, type II radio, CB, \$3500. Dewhurst, 292-2615.
- '82 NISSAN 280ZX, AT, AC, T-tops, louvers, leather seats, extras, \$4300 negotiable. Erdman, 292-0258.
- '78 FORD FAIRMONT, 6-cyl., AT, AC, PS, PB, 4-dr. sedan, \$975. Nagel, 298-2779.
- '81 YAMAHA 750 SECA, 15K miles, w/fairing and 2 helmets, \$1000 firm. Boston, 291-8810 or 298-9727.
- '86 FORD RANGER PICKUP, extra-long bed, V-6, AT, PS, PB, AM/FM cassette, 60K miles, \$5900. Federico, 892-3634.
- '80 FORD FAIRMONT SW, PS, PB, AC, 62K miles, \$1700. Anderson, 298-0477.
- '76 CHEV. MALIBU, 2-dr., AT, 6-cyl., radio, \$450. Huerta, 930 Louisiana SE, Apt. 98.
- MOUNTAIN BIKE: woman's Bianchi 18-spd., 17" CRMO frame, \$250 OBO. Goodson, 294-8179.
- '80 CHEV. CAPRICE, fully equipped, PS, PW, power seats, \$2500. Campbell, 889-0961.
- '77 CHEV. MALIBU, AT, PS, AC, \$500. Manke, 281-4473.
- '73 CHEV. C-10 PICKUP, 454 V-8, AT, AC, PS, AM/FM cassette, trailer-towing equipped, shell, 3 gas tanks, \$2200. Imbert, 294-8176.
- '87 OLDS. DELTA 88 ROYALE BROUGHAM, 4-dr., white w/blue interior, 6K miles, \$12,950. Larsen, 299-3496 after 5.
- '88 CHEV. 4x4, 11K miles, 5-spd., block heater, AM/FM cassette, custom paint, tow package, 2-ton jack, extras. Brantley, 294-1169.
- '71 MERCEDES BENZ 300 SEL. Luna, 821-9110 after 5:30.
- '88 MERCURY TOPAS LTS, 4-dr. sedan, blue/silver, power everything, 5-spd., \$8700. Sargent, 865-3227.
- '79 MOBILE TRAVELER MMH, 18-1/2', sleeps 5, roof AC, radial tires, \$9900. Sharp, 243-1498.
- FOURPLEX, at Lomas and Tramway, assume 8-1/2% on FHA. Cook, 255-7396.
- 3-BDR. HOME, for rent or sale, 4 yrs. old, semi-custom built, near Spain and Tramway, 9-1/2% 15-yr. fixed. Lau, 294-2687.
- 2-BDR. TOWNHOUSE, 2 yrs. old, fully landscaped, NE Heights, assumable FHA loan, \$75,900. Powell, 298-5335.
- ONE-THIRD ACRE R1, lot 24, Glenwood Square subdivision, underground utilities, \$55,000 OBO. Sepulveda, 299-2805.
- 2-BDR. TOWNHOME, 1-3/4 baths, kitchen w/built-in appliances, LR, DR, double garage, off-street parking,

- grills, patio, SE, \$95,000. Manhart, 266-1068.
- 2-BDR. HOME, 1-1/2 baths, pitched roof, storage shed in back, assumable 9.5% loan, \$69,900. Miller, 292-5067.
- 2-BDR. MOBILE HOME, '79 model, 14' x 60', 1-1/2 baths, W/D, skirted, in adult park, \$8000. MacKenzie, 299-1806.
- TEN ACRES, 7 miles south of Moriarty, terms, \$9000 cash, w/take good economy pickup down, balance at 6%, \$10,000. Smith, 1-384-5182.
- 3-BDR. HOME, Nob Hill area, 2 baths, 1600 sq. ft., fully remodeled, 10% FHA assumable, no qualifying, \$96,000. Foty, 268-0412.
- 4-BDR. HOME, Academy Acres, LR, DR, FR w/FP, 2 baths, kitchen w/nook, 2-car garage, landscaped, 1740 sq. ft., \$89,900. Romero, 821-7629.
- 2-BDR. 2-STORY TOWNHOME, 2 baths, 2-car garage, Comanche/Tramway, mountain and city views, security system, skylights, FP, assume 9-1/2% FHA loan, \$98,500. Darnell, 294-5665.
- 3-BDR. HOME, 1 bath, on cul-de-sac lot, \$11,000 down, assume \$560/mo. payments. Zirzow, 294-7296.
- 2-BDR. MOBILE HOME, '84 Cameo, 14' x 72', 2 full baths, oak cabinets, \$19,000. Eaton, 869-2847.
- NINE AND THREE-FOURTHS ACRES, below Sandia ski runs, views, trees. Clement, 299-2324.
- BRICK HOME, Dellwood addition north of Sandia High School, 2450 sq. ft., new circle drive, new furnace, immediate occupancy, \$139,900. Baack, 296-2312.

WANTED

- COMPUTER, Radio Shack model I, any condition, running or not. Hall, 299-0009.
- TELESCOPE, Astroscan 2001, made by Edmunds, image erector, tripod adapter, and carrying bag. McDonald, 265-2842.
- ROOMMATE, mature employed person, share 3-bdr. home near Chelwood and Menaul, \$190/mo. + 1/2 utilities. Callier, 296-9331.
- TO BORROW: "THIS IS GLEN MILLER AND THE AAF BAND," on RCA album or cassette, regardless of condition. Magnuson, 821-5330.
- WATSON GUPTILL BOOKS: "Guide to Acrylic Painting 1983" and "American Landscape Painting 1984." Keith, 296-3077.
- GOALIE, for men's 2nd div. city league soccer team. Cropp, 296-1877.
- ENCYCLOPEDIA, used. Marrs, 281-9889.
- HOUSEMATE, female, to share 3-bdr. 2 bath home near Chelwood and Candelaria, \$200/mo. + 1/2 utilities. Bauhs, 292-5571.
- US ATLAS, pre-1900, will buy, for school project. Esch, 298-8914.
- '73 SUPERBEETLE right-front-wheel spindle. Martinez, 344-8862.

REAL ESTATE

Irish Eyes Are Smiling: Check Out the Corned Beef and Cabbage

EVEN IF YOU'RE NOT IRISH, next Friday (March 17) is your lucky day. Leave the shillelaghs at home and head for the annual St. Patrick's Day blast. Everybody's favorite Irishman, Bob O'Banks, tickles the ivories in the main lounge with tunes from the old country (5:30-7 p.m.); while you're singing along with Bob, enjoy one of the many drink specials that will be available (maybe green beer?). The Friday night dinner features (what else?) corned beef and cabbage for just \$5.95 — or, if you prefer something less traditional, order filet mignon or halibut (\$9.95). Afterward, dance the evening away to the mellow music of the Roland DeRose Orchestra from 8 to 11. This one's always a sellout, so make your reservation early (265-6791).

TAKE THE CHA-CHA/CHILE CHALLENGE tonight. A magnificent Mexican Night menu headlines fajitas or a combination plate for \$6.95/person. Then limber up to the tunes of Lumbre from 8 p.m. to midnight.

ANOTHER BRACING BRUNCH is scheduled this Sunday (March 12) from 10 a.m. to 2 p.m. The bountiful buffet features all kinds of family-pleasing food at family-pleasing prices: \$6.95 for adults and \$3.50 for kids ages 4 to 11.

Speaking of brunch, here's a word to the wise: Better make that Easter Sunday (March 26) champagne brunch reservation right now; in years past, the event's been SRO. First-class food choices (served from 10 a.m. to 2 p.m.) include carved turkey with giblet gravy, Virginia baked ham/cherry sauce, baron of beef, green chile stew, western omelet (much different from the eastern variety), scrambled eggs, pan-

cakes, tossed salad, and an array of sinfully delicious desserts. Cost is \$10.95/adults, \$5.95/children ages 5 to 11, and free/toddlers 4 years old and younger. A visit from the Easter Bunny between 11 and 1 makes this the hoppiest of holidays.

AN EGGSELLENT EGGSPERIENCE is on tap for the kids on Saturday, March 25, when they attend the annual Children's Easter Party from 10 a.m. until noon. The fun includes an egg hunt and other games (and all kinds of ribbons and prizes), along with a visit from Mr. Cottontail. Free refreshments include cookies and punch for the kids and coffee for parents. This one's open only to members' children; admission is free, but bring along the membership card.

T-BIRD CARD SHARKS get together for more fun and games next Thursday (March 16), starting at 10 a.m. — a civilized time of day, if there ever was one. Dynamic-dealer Jim McCutcheon says he'll wear his rabbit ears (for Easter), as well as his green eyeshade (for St. Patrick's Day), so this is definitely a show you won't want to miss!

CORONADO SKI CLUB MEMBERS will elect new officers at the monthly meeting on Tuesday, March 21. Come on out and socialize (something this group does very well!) between 7 and 7:30 p.m., when the voting starts. Be there: Not only is this your chance to have a say about who's in charge next ski season, but you also may carry home one of those fabulous door prizes.

Events Calendar

March 10 — "Beethoven + Goode = Great," New Mexico Symphony Orchestra with pianist Richard Goode, performing Beethoven's Piano Concerto No. 5 in E-flat Major, Op. 73 (Emperor); 8:15 p.m., Popejoy Hall, 842-8565.

March 10-12 — "Premieres and Encores," Southwest Ballet Company performance of works by choreographers George Balanchine, Eleanor King, and Rodney Griffin; 8:15 p.m. Fri. & Sat., 2:15 p.m. Sun.; KiMo Theatre, 294-1423.

March 10-19 — Exhibit, "Houses by Bart Prince," drawings and architectural models; 9 a.m.-4 p.m. Tues.-Fri., 5-9 p.m. Tues. evenings, 1-4 p.m. Sun. (gallery talk, video on the architecture of Frank Lloyd Wright, 5:30 p.m. March 14); UNM Art Museum, 277-4001.

March 10-24 — Exhibit, "Whistler Etchings," selection of 10 etchings from the Thames Suite by James Abbott McNeill Whistler; 9 a.m.-4 p.m. Tues.-Fri., 5-9 p.m. Tues. evenings, 1-4 p.m. Sun. (gallery talk by O.J. Rothrock, 5:30 p.m. March 21); Study Gallery, UNM Art Museum, 277-4001.

March 10-April 30 — "High Country," photography/video exhibit detailing plants and animals in the harsh environment above 11,000 feet in New Mexico's Sangre de Cristo Mountains; 9 a.m.-5 p.m. daily, New Mexico Museum of Natural History, 841-8837.

March 11 — "Can't Pay, Won't Pay," La Compania de Teatro de Albuquerque comedy about two housewives who solve grocery-bill problems in the style of Lucy Ricardo and Ethel Mertz; 8 p.m., South Broadway Cultural Center, 848-1320.

March 14 — Concert, Chamber Orchestra of Albuquerque with guest trumpeter David Hickman; 8:15 p.m., St. John's United Methodist Church (2626 Arizona NE), 881-0844.

March 15 — Barbershop Cabaret, presented by the

New Mexichords and the Duke City Jazz Band; 6:15 p.m., Pistol Pete's (San Mateo Blvd. & Candelaria Rd. NE), 844-5904.

March 19 — Sinfonietta/Choral Series 4: New Mexico Symphony Orchestra and Chorus perform "Die Sieben Worte Jesu Christi am Kreuz" (Seven Last Words of Christ on the Cross) by Heinrich Schütz and "Jesu, Meine Freude" (Jesus, My Joy), Motet No. 3, by Johann Sebastian Bach; 3 p.m., First United Methodist Church (4th and Lead SW), 842-8565.

March 25 — Family Days Workshop: Weaving in Albuquerque, program of guided tours and hands-on activities related to current museum exhibits (children of all ages welcome); 2-4 p.m., Albuquerque Museum, free with paid museum admission, 243-7255.

March 25-26 — KiMo Spring Dance Festival: "Fiesta de Flores en la Primavera" (A Celebration of the Flowers of Spring), Ballet Folklorico and the Mariachi Tapatio, dances and music from 12 Mexican regions, with surprise guests; 8 p.m. Sat., 2 p.m. Sun.; KiMo Theatre, 848-1370.

March 28-April 9 — Exhibit, "Fundamentals of Photography: Early Beginnings," works from museum's permanent collection featuring an overview of the history of photography, coinciding with the sesquicentennial of its discovery in 1839; 9 a.m.-4 p.m. Tues.-Fri., 5-9 p.m. Tues. evening; UNM Art Museum, 277-4001.

Tube-Truth Turn-On



Kids believe TV more than newspapers, says a survey by the *Weekly Reader*. Some 57 percent of fourth, fifth, and sixth graders surveyed believe TV news "a lot," compared with 47 percent for newspapers. Radio, books, and magazines are even less credible. Only 15 percent believed magazines "a lot."

Wall Street Journal

Fun & Games

Archery — William-Tell types and others looking for a place to practice archery skills may want to check out the Manzano Archery Club's practice and field ranges. You must be a member to use these facilities. For membership information, contact Dewey Reed (KAFB) on 4-4558 or 265-2687 or Kerry Lamppa (1263) on 4-2273 or 299-1119.

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Bowling — Winners of the SANDOE Bowling Assn. Four-Game Mixer Tournament at Iceland Bowl Feb. 18-19 were Leroy Tafoya (2314) and Arlene McConathy (guest) with a 1506 combined handicap series. Second went to Daniel Baca (7813) and Andrea Garcia (guest) with a 1478.

January Bowlers-of-the-Month: Scratch — Tomas Archuleta (7485), 650; and Patty Jajola (3731), 533; Handicap — Lyle Davis (2825), 610 and 685; and Dorothy Castro (DOE), 520 and 676.

A Four-Game, No-Tap Tournament is scheduled for March 18-19 at Iceland Bowl. For information, contact Dora Gunckel (6400) on 6-0835.

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Golf — Sandia Women's Golf Assn. (SWGA) will hold its annual membership-drive party March 14 from 4:45 to 6 p.m. in the Sandia Cafeteria (Bldg. 861). SWGA membership is open to all employees, retirees, and dependents. In addition to league and tournament play, SWGA offers a mentor program to help new golfers get started. Beginning and intermediate group lessons are also available through the UNM-South Golf Course (lessons begin the first week in April; registration deadline is March 25). If you're interested in joining, call Maria Feliz (3731) on 6-9885, Teri Carpenter (3712) on 6-6716, Marijo Hinrich (3544) on 6-0464, or Teresa Mills (3732) on 4-3495.

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Windsurfing — Two-time world champion windsurfer Cort Larned will conduct a windsurfing clinic March 24 from 6 to 9 p.m. at the Coronado Club, Fiesta Rm. The clinic will cover equipment-rigging and sailboard-handling techniques with an emphasis on jibing. Included is a video on technique, a demonstration on rigging 1989 Gaastra sails, and a question-and-answer period. Door prizes will be awarded at the end of the clinic. This free clinic is open to windsurfers of all ability levels. To ensure your place, contact Stan Ford (SERP) on 4-8486.



MIDDLE-EASTERN DANCE STEPS are demonstrated by Mary Gallegos (3731) and Dino Pavlakos (2643) as they prepare for Sandia's International Day on May 12. If you're a Polish dancer, Spanish guitarist, Parisian accordionist, Irish harpist, Japanese koto player, Scottish bagpiper, Aztec dancer, or you have other ethnic talents to share, contact John Gardner (3153) on 6-0282 to participate in International Day entertainment activities.