



WAY TO GO — Last December LAB NEWS carried a small item in which Mark Percival (5323) asked for volunteers for a rapids running trip down the Colorado River through the Grand Canyon — 310 miles from Lee's Ferry to Lake Mead.

Twenty or so people were needed. Ninety signed up. Here one boatload of Sandians and friends assays Lava Falls, one of the more difficult stretches of white water. That outstretched hand seems almost plaintive . . . but all returned safely.

LAB NEWS

VOL. 25, NO. 16

AUGUST 10, 1973

SANDIA LABORATORIES • ALBUQUERQUE NEW MEXICO • LIVERMORE CALIFORNIA • TONOPAH NEVADA

Two Sandia Devices Patented

Two patents for Sandia inventions were granted to the AEC that cover methods of strain biasing a ferroelectric electrooptic ceramic plate. The strain bias produces birefringence (double refraction) in the plane of the plate and permits control of the birefringence with relatively low voltages applied across the plate thickness.

When a strain biased ceramic plate is sandwiched between crossed linear polarizers, the intensity of monochromatic light transmitted by the sandwich depends on the birefringence of the plate. If a white light source is used, the color of the transmitted light depends on the birefringence.

In 1971, researchers at Bell Laboratories introduced a technique for strain biasing a thin electrooptic plate by bonding it to a Plexiglass substrate to apply tension to the plate. The tension produces alignment of the ferroelectric domains (volumes of parallel aligned electric dipoles within the ceramic) in the direction of the tensile strain.

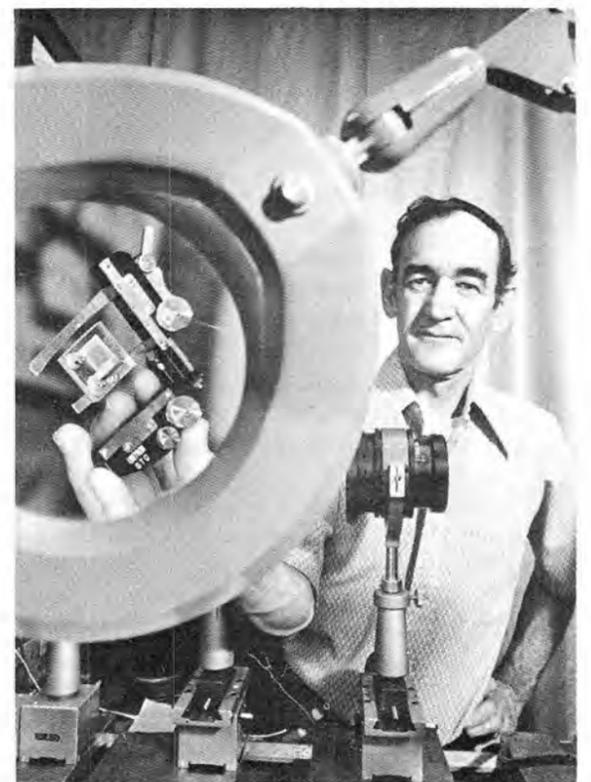
This type of strain bias was difficult to achieve — problems occurred in bonding and in mechanical control and in producing repeatable results.

Cecil Land and Willis Smith (both 5113)

have produced strain bias by purely electrical means under one of the patents. They bonded only two edges of the thin ceramic plate to a rigid substrate and then applied poling and switching voltages between the major surfaces of the plate. Poling and switching produces strains in the ceramic plate which, in turn, produces birefringence — hence the term self-strain bias.

A further modification of the method to induce strain bias in the ceramic was the basis for the second patent. In this case, Cecil, Gene Haertling, a former Sandia employee, and Ira McKinney (5113) bonded the ferroelectric ceramic plate to a substrate of another ferroelectric material and applied voltage to the substrate. Strain and birefringence were introduced in this manner.

Birefringence in the ceramic can be achieved easily with both of the new methods with controllable and repeatable results. Properties of the ceramic are such that small changes in voltage applied to it can cause relatively large changes in birefringence. The devices covered by these patents can be used for a number of applications — large area light shutters, spectral or color filters and arrays of light shutters in computer memories.



IRA MCKINNEY (5113) displays a prototype device, one of two awarded patents recently, which use new methods of strain biasing ferroelectric electrooptic ceramics to produce birefringence. Ira, Cecil Land, Willis Smith, and Gene Haertling are responsible for the new inventions.

Afterthoughts

No Business Like The Advertising Business--These days you've got to be nimble if you write advertising copy. Used to be, if you were selling gasoline, the message was simple: Drive, preferably far, often, and fast, and beat the other guy away from the stoplight with our magic ingredient XQ-310. And we've got clean restrooms too. Today, however, I read a folder from Texaco that comes on like a paean to the stern virtues. Self-denial, moderation are all: "Tread lightly on the accelerator... Keep car speed down... Don't be a jack rabbit... Form car pools." You know, this ecology/energy/pollution thing is probably toughest on copywriters--these abrupt 180° turns in the game plan can be wrenching.

Most Fascinating News Release of the Week (from a NM State Fair release)--"Candidates for queen of the New Mexico State Fair are judged 60% on horsemanship and 40% on personality."

One thing I've noticed about our new badges is that they no longer carry a person's birth date. Which is good or bad, according to your view of your age. Occasionally a badge would flip around and you'd be able to say to yourself, "Boy, Joe is really ancient" (that is, one or more years than the age of the viewer). Now all we see is Joe's social security number, and somehow it just isn't as titillating.

The Common Cause--"The worst sin toward our fellow creatures is not to hate them, but to be indifferent to them; that's the essence of inhumanity." George Bernard Shaw *js

Events Calendar

Aug. 10-12, 16-19, 23-26 — "Everything in the Garden," Corrales Adobe Theater, 8:30 p.m.
Aug. 11 — "The Marriage of Figaro," **Aug. 14** — "La Boheme," **Aug. 10, 16, 25** — "The Merry Widow," **Aug. 15, 23** — "Der Fliegende Hollander," **Aug. 18, 24** — "Le Rossignol/L'Enfant et Les Sortilèges," **Aug. 17, 22** — "Owen Wingrave," (American stage premier), Santa Fe Opera.
Aug. 12 — NM Mt. Club, Six-mile hike, Colorado Canyon in Manzanos, Western Skies, 8 a.m.

Aug. 12 — Santa Clara Fiesta; Corn Dance, Harvest, Comanche or Buffalo Dances.
Aug. 12 — KHFM Opera of the Week, "Aida," **Aug. 19** — "La Finta Giardiniera," 6:40 p.m.
Aug. 15 — Laguna Pueblo: San Antonio Fiesta, Mesita Village Carnival; Zia Pueblo: Asuncion Fiesta, Green Corn Dance.
Aug. 16-19, 23-26 — "A Shot in the Dark," Old Town Studio, 8 p.m.
Aug. 17-19, 24-26 — Albuquerque Civic Light Opera Ass'n. presents "Sweet Charity," Popejoy Hall, 8:15 p.m., Aug. 19 & 26 performances at 2:15 p.m.
Aug. 18 — NM Mt. Club, Seboyeta, four miles, K-Mart, Central & Atrisco, 8 a.m.
Aug. 18-19 — Indian Market, Palace of the Governors and Plaza, Santa Fe.
Aug. 19 — NM Mt. Club, Santa Fe Ski Basin, five miles, Gulf Mart, 7:30 a.m.
 Theater of All Possibilities presents 4th Annual August Festival. **Aug. 16, 23** — "Gilgamesh," ancient Syrian epic; **Aug. 10, 17, 24** — "Marouf," from 1001 Nights; **Aug. 11, 18, 25** — "Baal," by Bertold Brecht; 8 p.m. From Albuquerque take Waldo Exit above La Bajada, go north on frontage road 1-1/2 miles, west on graded road 5 miles. Phone 982-1573.

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Supervisory Appointments



PAUL WILCOX to supervisor of Active Ceramic Materials Division 2521, effective Aug. 1.

Paul joined the Labs in May 1962 as a staff member in a ferroelectric materials engineering group. Four years ago he transferred to his present organization where he has worked with ferroelectric transducers and components. For three months this past spring Paul was assigned to the Radioisotope Power Sources Division 2334. Prior to this assignment he had done support work on the RTG program for this group.

He earned BS and PhD degrees in ceramic engineering from the University of Utah. Paul is a member of the American Ceramic Society and is an enthusiastic sailboater. He and his wife Emily have a three-year-old daughter and live at 1501 Cedar Ridge Drive NE.



ALAN TOEPFER to supervisor of Electron Beam Research Division 5242, effective Aug. 16.

Joining the Labs in October 1968, Al was assigned to the Electro-Research Division and in 1969 transferred to Plasma Theory Division. Since then his work has been concerned with research into the interaction of electron beams with plasma, and study of the theory of relativistic electron beams.

Al earned a BS degree in physics from Marquette University in 1962, and an MS and PhD from the University of Southern California in 1964 and 1968, respectively. He spent one year at the Royal Institute of Technology in Stockholm, Sweden, as a research assistant in experimental plasma physics. He is a member of the American Physical Society and the American Association for the Advancement of Science.

During the winter Al likes to ski; his other major activity is working on his sports car. He and his wife Jo Ann have two daughters, ages 7 and 8, and live at 4321 San Pedro NE.

Career Conference Coming

Sandia Labs will be a participant in the First Annual Youth Career Conference at the Civic Auditorium from 9 a.m. to 7 p.m. on Aug. 18. Twenty-five to thirty Sandians will be among the people who will discuss their professions/occupations/skills/jobs with area youth seeking career information.

"Talking with a physicist about being a physicist, or with a secretary about what it takes to be a good secretary — that's the opportunity we'll be offering," says Joe Danclovic, part of Bob Garcia's new Employee Relations Department 4230 and local coordinator for the Conference. "We feel that the Conference can be a tremendous asset in helping kids get acquainted with a wide range of possible careers."

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 as does Norma Taylor while
 Bill Laskar takes/makes pictures
 &

In Livermore Lorena Schneider does all

Bikers Like Biking But . . .

They drift into the parking lot one or two at a time — usually with sunglasses on — heads down as they drive into the low morning sun. Their pace is steady, with only a few fantasizing the final sprint of the Tour de France.

These are the Sandia cyclists. From the no-gear coaster-brake-type to the 12-speed high seaters, they all have one common belief: the bicycle is a good mode of transportation. The effort expended to travel East Avenue twice daily makes a strong impression on their fellow workers.

The new East Avenue bike path has spawned an ever increasing number of devotees. A rough survey indicates that Livermore has about 75 cyclists. We talked to a few to find out why cycling is so popular. Some replies:

Carl Lundbom (8432) — "It saves on gas, a second car, and on insurance premiums. It's exercise in a period when the time would ordinarily be spent sitting in a car."

Bill Morehouse (8363) — "Mostly for exercise and also to get one car off the road."

John Cordial (8161) — "This is my first day, and the only reason I'm biking is because my wife had to go to an early college class and my boy has his car in the garage."

Harry Olson (8341) — "I can't afford two cars."

W.C. Scrivner (8400) — "It's good for you, it cuts down on the smog, and it conserves energy."

Although the cyclists were enthusiastic about the exercise biking afforded them, they were not equally enthusiastic about the new bike path. Seven out of twelve felt that hazards still existed.

Arnold Rivenes (8363) — "There are some dangerous spots, particularly on Vasco Road. It's a very dangerous section for bikers heading homewards."

Alec Willis (8111) — "Much of it is safe, but there are some hazardous stretches that should be marked because drivers are not used to seeing bicycles on the left hand side of the road."

Gene Aas (8161) — "Well, it's not a full nine feet wide everywhere, but I believe the path is adequate if bikers who overtake others will give a little warning."

Jim Gruver (8434) — "I think it would have been better to have paths on each side of the street."

More bikeways are planned for Livermore. Alameda County has just completed a nine-mile bikeway between Pleasanton and Livermore. Looks like the saddle and sprocket set are finally pedaling into their own.

Congratulations

Cliff Selvage (8180) and Mary Alarcon, married in Oahu, Hawaii, June 17.

Sympathy

To Hal Faulkner (8431) on the death of his father in Livermore, July 3.

To John Marion (8332) on the death of his father in Bakersfield, July 12.



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Speakers

Taz Bramlette (8111) and R.R. Smith and N.J. Sliski (WPAFB), "A Study of Fin-Induced Laminar Interaction on Sharp and Spherically Blunted Cones," American Institute of Aeronautics and Astronautics 11th Aerospace Sciences Meeting, Wash., D.C., Jan. 10-12, 1973.

Randall German (8313) and Prof. G.T. St. Pierre (Ohio State University), "The High Temperature Thermodynamic Properties of Ni-Ti Alloys," Annual Meeting, American Institute of Metallurgical Engineers, Chicago, Feb. 27, 1973.

Hartmut Spetzler (8314), "Volumetric and Anisotropic Strain Measurements by Holographic Interferometry," Faculty Lecture at the University of Colorado, sponsored by Cooperative Institute for Research in Environmental Science, Jan. 22, 1973.

Tony Thompson (8313), "The Dependence of Polycrystal Work Hardening on Grain Size," Staff Seminar, Carnegie-Mellon University, Pittsburgh, Pa., Apr. 6; Technical Seminar, BTL-Murray Hill, N.J., Apr. 9.

Hartmut Spetzler (8314), "Holographic Interferometry in EOS, Failure and Creep Measurements," Society of Experimental Stress Analysis, Western Regional Strainage Committee, Los Angeles, March 12, 1973.

Dan Hartley (8364), "The Application of Lasers to Experimental Fluid Mechanics Studies," graduate seminar, Mechanical Engineering Department, University of California at Davis, Feb. 15, 1973.

Carl Schoenfelder and Jim Swisher (both 8313), "Kinetics of Thermal Decomposition of TiH₂," Annual

Meeting, American Institute of Metallurgical Engineers, Chicago, Feb. 27, 1973.

Ron Musket (8313), "Surface Analysis with 350 keV Protons," Technical Seminar, California Institute of Technology, Pasadena, Calif., March 13, 1973.

Ed Barsis and Cliff Skoog (both 8342), "Pressure and High Temperature Dependence of the Resistivity in Some Cu Alloys Containing Titanium," American Physical Society Meeting, San Diego, Calif., March 1973.

Art Hull (8415), "A Noncontacting Method for Stress Measurements Using Magnetic Sound," Society for Experimental Stress Analysis Meeting, Los Angeles, March 1973.

Jim Shelby (8331), "Gas Permeability in Glass," Ceramic Engineering Department Seminar, University of Missouri/Rolla, Apr. 24-27.

Authors

Hartmut Spetzler (8314), C.G. Sammis (Penn State University) and J.C. O'Connell (Harvard University), "Equation-of-State of NaCl: Ultrasonic Measurements to 8 Kbar and 800 °C and Static Lattice Theory," JOURNAL OF PHYSICS AND CHEMISTRY OF SOLIDS, Vol. 33, pp. 1727-1750.

Hartmut Spetzler (8314), Edward Schreiber (Queens College, Flushing, New York) and Richard O'Connell (Harvard University), "Effects of Stress-Induced Anisotropy and Porosity on Elastic Properties of Polycrystals," JOURNAL OF GEOPHYSICAL RESEARCH, Vol. 77, No. 26, pp. 4938-4944.



Bus Notes

Area V shuttle bus service begins Monday, Aug. 13, for the Sandians in that area who bike, bus, or car pool to Area I. Board the shuttle at the Tech Area cafeteria or Gate 10 about 7:45 a.m. The evening run will leave Area V in time to make connections with all special buses. Walt Vandevender (5223) is the Area V honcho.

* * * *

It's gone through some ups and downs, but there are more of the former than the latter. So Leo Sanchez, of Sanchez Charter Coach, has announced that the Belen route has passed its probationary period and is now permanent. Leo wants to thank current patrons and to encourage new ones. Frank Garcia, Jr. (7115) gets most of the credit for the route — in fact he's changed his earlier plans to move to Albuquerque now that Belen has commuter service to Sandia.

* * * *

On Aug. 13, Los Lunas and Belen bus riders, like their city cousins, will have the convenience of bus passes. Los Lunas passes are \$10 each, Belen \$15. Each can be punched 22 times, so that's two free rides per pass. They're available at the Credit Union for members and at First National Bank (Bosque Farms and Los Lunas) for anyone who wants

to stop by. Or you can keep on robbing the piggy bank every morning. . . .

* * * *

Shuttle service to Area III has been picking up to the point that a large bus is now necessary. Area III Sandians who bike, bus, or car pool to Area I are encouraged to use the service.

* * * *

City bus service from the Far East area doesn't look good. Unless we find a private carrier — but that's just in the idea stage yet. We'll keep you posted in this column.

* * * *

Still no positive word on a mountain bus. One carrier is definitely interested — but he's got to find a suitable coach first. After all, school buses are going to be busy again in two or three weeks.

* * * *

Thank you, Kip Blossom, Cec Jordan, Jerry Jercinovic, (all 9540) and the escorts and guards in Bill Martin's security group (9550). The procedures have been ironed out, the signs prevent hassle, and the whole in-area bus service is running smoothly.

Speakers

H.C. Monteith (9344), "ESP Research in Russia, England and America," and "Creativity," Silva Mind Control Society, June 5, Albuquerque.

H.H. Patterson (1230), "Mexico and the Sea of Cortez," Los Altos Kiwanis Club, June 21.

R.M. Jefferson (5222), "The Current Power Crisis," Downtown Optimist Club, June 22.

L.V. Rigby (1642), "The Future of the Quality Profession," ASQC Amarillo sub section, June 7, Amarillo, Texas.

E.F. Hartman (2115) and J.C. King (2500), "Calculation of Transient Thermal Imbalance within Crystal Units Following Exposure to Pulse Irradiation," Frequency Control Symposium, June 12-14, Cherry Hill, NJ.

J.H. Metcalf and B.L. O'Neal (both 3313), "Remote Monitoring of Airborne Radioactive Effluents at the Nevada Test Site," Health Physics Society Meeting, June 17-21, Miami Beach, Fla.

R.A. Langley (5111) and R.S. Blewer (2413), "Technique for Accurately Measuring the Stopping Cross Sections of Reactive Metals by Ion Backscattering"; J.A. Borders (5111), "Ion Backscattering Analyses of Complex Binary Systems (Cu:Au)"; D.K. Brice (5111), "Theoretical Analysis of the Energy Spectra of Backscattered Ions"; S.T. Picaux, J.A. Borders and R.A. Langley (all 5111), "O₁₆ Contamination in He_α Analysis Beams"; W. Beezhold (5112), "An Ultra-High Vacuum System for Ion-Induced Characteristic X-Ray Analysis," International Conference on Ion Beam Surface Layer Analysis, June 18-20, Yorktown Heights, NY.

R.A. Hill (5642), "A Focused, Multiple-Pass Cell for Raman Scattering"; P.C. Lysne and D.R. Hardesty (both 5131), "The Equation of State of Nitromethane to 100 kbar"; E.L. Burgess (5156), "Interdiffusion of Platinum and Silicon"; P.C. Lysne, "A Shock-Wave Induced FE-PE Transformation in Lead Zirconate Titanate," APS meeting, Michigan State University, June 18-20, East Lansing.

W.H. Vandevender (5223) and M.R. Scott (2642), "On the Calculation of Eigenvalues of Elliptic Partial Differential Equations Via Dynamic Programming and Invariant Imbedding," 1973 SIAM meeting, June 18-21, Hampton, Va.

F. Schkade (7624) and J. Long (2644), "Sandia Interactive Graphics System," Symposium on Interactive Graphics for Computer-Aided Design and Engineering, June 19-23, Picatinny Arsenal, Dover, NJ.

D.W. Doak (1544) and G.M. Ferguson (5714), "Water Entry Cavity Pressure Measurements," ASME

1973 Cavitation and Polyphase Flow Forum, June 20-22, Georgia Institute of Technology, Atlanta, Ga.

S.D. Stearns (4711), "A Comparison of Errors in Linear Digital Models," 1973 Joint Automatic Control Conference, June 20-22, Columbus, Ohio.

G.J. Simmons (5120), "Command Graphs," International Colloquium on Combinatorics, June 23-July 1, Keszthely, Hungary.

J.F. Reed (5645), "Anomalies in the Calibration of an S-Type (Staubscheibe) Pitot Tube," Annual meeting of the Air Pollution Control Association, June 24-28, Chicago, Ill.

P.M. Richards (5132), "Light Scattering from Spin Fluctuations in Heisenberg Magnets," Oxford University, July 5, Oxford, England; and "Magnetic Resonance in One and Two-Dimensional Systems," Series of four invited lectures to be given at E. Fermi Summer School on Physics, July 9-21, Varenna, Italy.

F.H. Mathews, R.I. Butler and B.W. Duggin (all 9321), "Line Initiation of Explosives with a Long Electrically Exploded Bridgewire," International Conference of the Center for High Energy Forming, July 9-13, Vail, Colo.

J.V. Otts (9333), "Vibration Test Techniques Used to Simulate Transients and Match Shock Spectra," Society of Environmental Engineers, Imperial College, July 4-5, London, England.

J.E. Kennedy (5131), "Wavespeed Limitations to the Efficiency of Chemical Explosives in Accelerating Metal," International Colloquium on Gasdynamics of Explosions, July 10-13, La Jolla, Calif.

E.K. Beauchamp (5316), "Fracture and Strain Energy Release in Prestressed Glass and Glass Ceramics," The Conference of Fracture Mechanics of Ceramics, July 11-13, University Park, Pa.

P.R. Owens (7615), "The Good News and the Bad News about Pensions for Engineers," Annual Meeting Texas Society of Professional Engineers, June 27-29, Brownsville, Texas.

R.C. Hughes (5514), "X-Ray Induced Photoconductivity in Organic Insulators," Eastman Kodak Company, July 13, Rochester, N.Y.

J.C. King (2500) and H.H. Sander (2110), "Rapid Annealing of Frequency Change in High Frequency Crystal Resonators Following X-Irradiation at Room Temperature," 27th Annual Frequency Control Symposium, June 12-14, Cherry Hill, NJ.

G.B. Varnado (9353), "The Coupling of High Frequency Electromagnetic Energy into Large Systems," IEEE International Electromagnetic Compatibility Symposium, June 23, New York.



ARE you a bottle and can saver for ecology? Good. But beware of bottles. This motley collection had been stored in a wicker basket and, apparently, a bottle focused sun's rays in such a way as to set fire to the basket — fortunately some distance from a residence. Storing bottles under cover would be a good idea in sunny Southwest.

Letter to the Editor

Can We Afford To Buy Foreign Cars?

Once our home was the largest purchase we made. Now we spend as much or more for cars over the period of our life time. This in itself doesn't create a problem until we start buying foreign cars. Sending so much of our money out of the country produces an adverse effect on our balance of payments. Our trade deficit causes the price of the dollar to drop on the world market, everyone loses confidence in the U.S. and the dollar, the stock market drops, and we have an economic crisis. This situation will continue until we achieve a favorable balance of trade, and confidence is restored in America.

I find it difficult to understand our apparent lack of concern over this serious situation. Each new foreign car sold in this country adds to the problem. Those of us whose salaries are paid by tax dollars should be especially aware of this problem. How much of our salary is paid by German or Japanese automobile workers?

. . . we cannot continue to buy foreign automobiles costing in the thousands of dollars and survive. The situation worsens when we have to spend dollars abroad to buy foreign gasoline to run our foreign cars.

It's true other things hurt our balance of payments such as the cost of maintaining troops all over the world. However, a citizen does not exercise the degree of control over these outflows that he does in his personal expenditure for a car. Here, each of us alone makes the determination.

s/ H. C. McIlroy (7513)

Congratulations

Mr. and Mrs. Timothy Ristine (7624), a son, Eric Eugene, July 20.

Mr. and Mrs. Douglas Greenway (2121), a son, Steven Douglas, July 16.

Sympathy

To Bob Ferguson (3148-3) on the death of his mother-in-law in Denver, July 10.

To John Bodine (7626) on the death of his mother in Missouri, July 25.

To Jimmy Lee (1126) on the death of his step-father.



LINDA GARCIA — Sandia's prettiest recruit in the New Mexico Air National Guard. Last week Linda (2134) began a four-month military leave-of-absence during which she'll do six weeks basic training at Lackland AFB in San Antonio. This will be followed by on-the-job training for her assignment as administrative specialist in the Operations Office at KAFB (West). After Linda returns to the Labs, she will serve in the Reserve one weekend a month and two weeks a year on active duty.

Take Note

Alan Campbell (9481) earned his PhD degree in EE this month from the University of New Mexico. Title of his dissertation was "A New Sampling Theorem for Causal (Non-Band Limited) Functions." Work was performed under Sandia's Educational Aids Program. Alan joined Sandia in 1965.

He earned his BS in EE from Kansas State University in 1960, his Masters from the University of Nebraska in 1964.

* * * *

Two Sandia alumni have received promotions in Western Electric. Emil Deutschle was elected Secretary Treasurer of the company by the WE Board of Directors, and Warren Corgan was promoted to succeed Deutschle as a General Manager in WE's Customer Planning Division.

* * * *

There's an interesting collection of old maps of New Mexico and Arizona on display in the lobby of Bldg. 802. Gene Harling (9400) loaned the collection, which represents the work of Army Lt. George Wheeler during the 1870's (and after whom Wheeler Peak is named).

These exhibits are the responsibility of Joe Laval in Community Relations Division 3163. Joe welcomes comments and suggestions, especially those relating to possible future exhibits. Preference is given to artistic work performed by Sandians, but any artistic work is given consideration. Because of space limitations, exhibits are generally restricted to two-dimensional objects such as paintings, photographs, and the like.



A PREVIEW of Monday next and special parking areas for car poolers. Here Fran Gross (7331), Earl Wangerin (4123), Hedy Kurowski, and Rose Griffin (7331 too) show us how it's done.



PRESIDENT MORGAN SPARKS is greeted at Tonopah Test Range on a recent visit, his first, to the test facility in northern Nevada. Sam Moore, TTR manager 9470, welcomed Mr. Sparks and later conducted technical briefings.



PSYCHO-CYCLIST (No.3) — The bumbling biker sails down the sidewalk, another no-no. Sharon Erickson (5112) stays on the Tech Area street, as a good biker should.

Ken Miller Restores Terrone

Ken Miller, writer/director in Motion Pictures and Video Services Division 3153, is a quiet man, an introspective artist who manages an air of detached amusement as he contemplates life and the pursuit of an old homestead.

"Biggest laugh I ever had was buying this old ruin," Ken says about his 10-room terrone house in the North Valley. "Anyone who would attempt to restore something like this either craves endless work or else he's an idiot."

Ken kicks a terrone brick lying on the patio, a leftover from a recent addition. "I guess I fit both descriptions," he says, kicking the brick again.

A former owner purportedly established that the original house was built about 1784 by a colonial honcho from Spain named Don Pablo Yrisarri. But Ken doesn't worry about that, or the supposed ghosts, or the rumored treasure in the walls, or the skeletons in the closet. What Ken worries about isn't metaphysical — the plaster, wiring, plumbing, heating, cooling, roof, floor, windows, doors, five fireplaces, walls and the grounds.

"One of these days, I'm going to fix all that," he says.

During the six years the Millers have lived in the house, Ken's fixed all that at least once. Everything was a major project: jackhammer out the old crooked concrete floors so that a new brick floor could be laid, chop holes in the walls for new windows, toss out the old kitchen cabinets, spend a year or two building fancy new ones (free standing — there's nothing level or square in the house except the new cabinets and maple counter tops with built-in appliances), build a new bathroom, rework the roof, rewire the electrical system, add stain to the weathered vigas of the ceiling and paint a new white interior throughout.

"This is the oldest continuous do-it-yourself project in Albuquerque," Ken says. "For almost 200 years, a professional has never touched this place."

Still, the house is as solid as a terrone brick — sod cut in 50 to 70-lb. chunks from swampy areas along the river and then sun dried. Roots and other organic matter become part of the brick. Walls of the house run from 24 to 30 inches thick.



NEW SWIMMING POOL and patio area was built by Ken Miller (3153) last spring. In background is north wing of his 3000-sq.-ft., 10-room, U-shaped, 200-year-old house. Ken and his family have spent six years making it comfortable.

"If you want to, say, add a window," Ken says, "you get an axe and then you chop for a couple of days before you have a hole in the wall. That terrone, the 200-year-old-kind, is tough. I guess in the old days this place was a fort, a stop on the Chihuahua trail, a ranch headquarters, a cantina and a general store. And a ruin. I've never found any arrowheads in the walls but one of the former owners found a few bullets. This place has seen some action."

Lately, the action takes place around a new swimming pool in an area enclosed by a seven-foot-high, 200-foot-long adobe wall, a project Ken completed last spring with help from his wife Donna and daughters Kelly, 14, and Misha, 4.

After that, Ken took a break from the house and put together a one man show of his watercolors and sketches for Touchstone

Gallery in Old Town, which is still on display, and some oils and watercolors for the New Mexico Arts and Crafts Fair.

In the meantime, the house is a comfortable place in which to live with the solid, substantial charm of massive walls, brick floors, high ceilings and vigas, and five fireplaces. The kitchen is marvelously efficient. Interior decor is a mix of the very old and the very modern. Ken's paintings and Indian weavings decorate the walls.

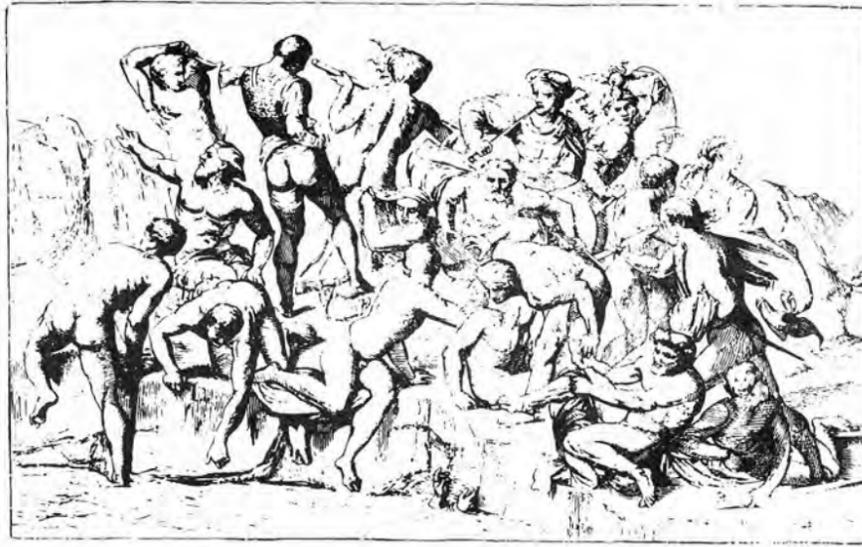
"There's always something to do," Ken says. "What I want to do is interrupted by what has to be done. We're getting there. When I look at the place and remember what it was like when we moved in, I feel tremendous satisfaction. Then I look at the place and see what remains to be done and I get this feeling in my gut. My God, the rest of my life. . ." • dg

KITCHEN CABINETS, maple counter tops and built-in appliances along with brick floors were major building projects for Ken. Each piece in the paneled cabinet doors was individually cut and fitted.



ENCLOSING new pool and patio area, this 200-ft. adobe wall was completed last spring.





"I still think Employee Services should provide uniforms for us. . ."

Recreation Notes

FUN & GAMES

Flag Football — The season begins in September and Terry Otero (7134) is undertaking preliminary organization. Send Terry your name, organization, and extension if you are interested.

* * * * *

SGA — The Sandia Golf Association held its annual Fred Given Memorial golf tournament July 21 at Arroyo del Oso. Low gross champions were Preston Herrington (1255) and D.C. Klein (AEC/ALO) with 76's. The low net trophy was won by Leon Keck (1231) with a 65. Flight winners were: A Flight, Dick Blose (5531); B Flight, Ralph Campbell (3148); C Flight, Leon Keck (1231); D Flight, John Stanalonis (7614).

Next tournament: the Summer Classic to be held at Los Alamos on Aug. 25. The format will be "4 man/2 best ball." John Ford (2336) will be tournament chairman.

* * * * *

Chess — Next club meeting is Aug. 20 at 7:30 p.m. in the El Dorado room of The Coronado Club.

* * * * *

Sharpshooters — Sandians participated this spring in the nation-wide annual postal rifle and pistol matches sponsored by the National Industrial Recreation Ass'n. and the National Rifle Ass'n. Dick Vivian (1611), Ray Mosteller (1132), Dave Bennett (2515) and Bill Stephenson (2411) were on the air pistol team that won the national championship. The .22 pistol team placed 4th nationally, while Dave Bennett placed 2nd nationally in the air pistol event; in addition, two other Sandians placed nationally while nine individuals and teams placed regionally.

CU Bulletin Board

As part of its normal audit procedure, the Supervisory Committee recently mailed statements to members with account numbers from 6000 to 6999, 8000 to 8999, and 9000 to 9999. If your account number is in any of these series and you have not received your statement, please notify Joe Holdridge (4121), committee chairman.

Sandia Runners Ass'n. — In that poignant tale about the squished jogger in last week's Focus, a new route is described and "assigned." It takes the runner south on Pennsylvania (instead of Texas), presumably into some happy running ground virtually devoid of automobiles. Chairman Dennis concludes that the new route is the work of a man unencumbered by any knowledge of Pennsylvania Ave. during the noon hour. "SRA is working on it," says Dennis.

* * * * *

Softball — Team No. 6 managed by Jim Freese (5324) defeated (score 9-8) Fidel Perez' Team No. 3 in the championship playoffs last week at the new Sandia diamond north of the AEC complex.

Winning team members included Manager Freese, Ron Allred (5314), Denny Mottern (5533), John Curro (5511), Dick Pettit (5324), Len LeCrone (5324), Dan Drummond (5155), Roger Assink (5511), Karl Boultinghouse (5531), Gene Hauser (5214), Kent Wischmann (5513), Dave Haaland (5324), Keith Johnstone (5315) and Henry Black (5532).

* * * * *

Bowling — An organizational meeting of the Womens Sandia Labs Bowling League will be held Aug. 15 in Bldg. 836, Rm. 114 during the lunch hour. Current members as well as newcomers are invited to attend. Women interested in substituting for regular team members should contact Dora Montoya (1542), tel. 242-5958, or Aurora Baca (7631), tel. 266-6644. The season begins Sept. 6.

Retiring



Clem Wagner (2344)



ANCIENT TERRONE WALL, almost 200 years old, might contain souvenirs of 18th and 19th century battles. Ken Miller's North Valley home has supposedly served as a colonial hacienda, a fort, a cantina and a general store.



BESIDES restoration and modernization work on his home, Ken finds time to paint in this high-ceilinged studio.





Fred Clifford - 2111

10



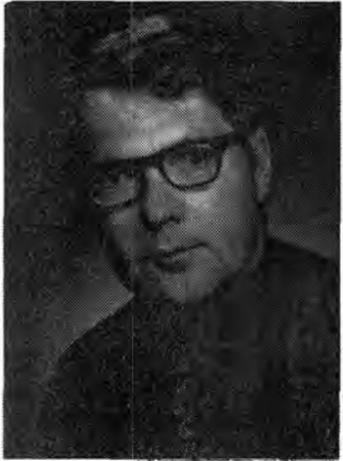
Odilia Silva - 1612

20

MILEPOSTS

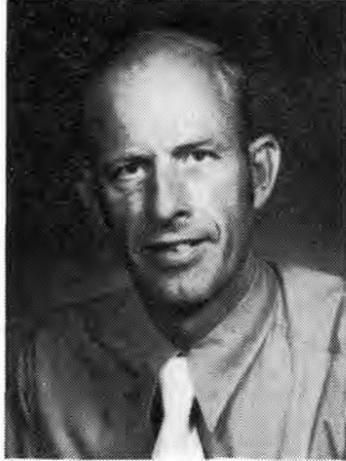
LAB NEWS

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James Bear - 9313

15



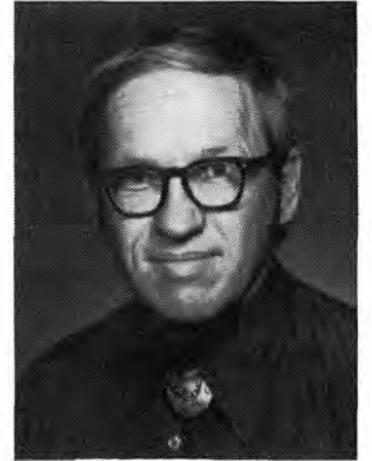
Carlton Sisson - 1543

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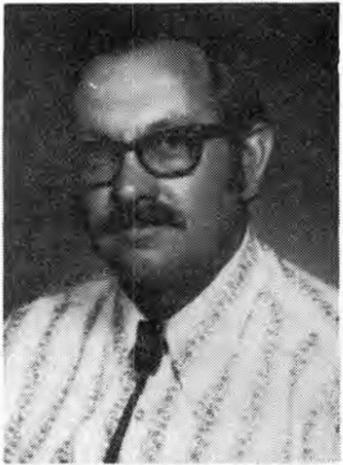
Luke Heilman - 9500

25



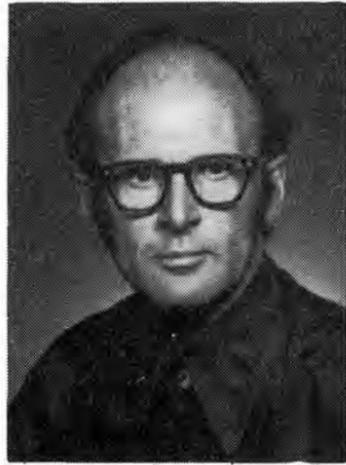
Richard Knutson - 2432

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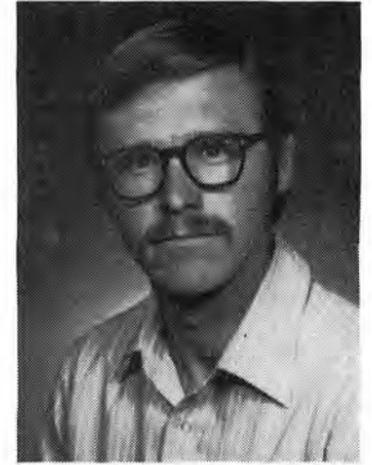
Paul Spellman - 9532

15



Eddy Jacobs - 2411

15



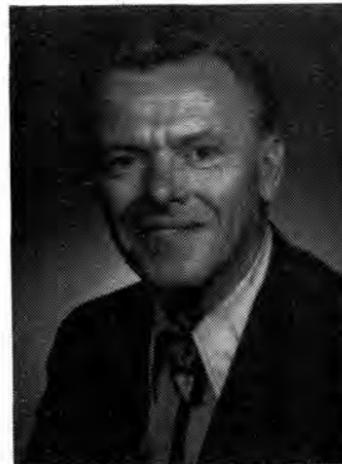
Kenneth Grothaus - 2522

10



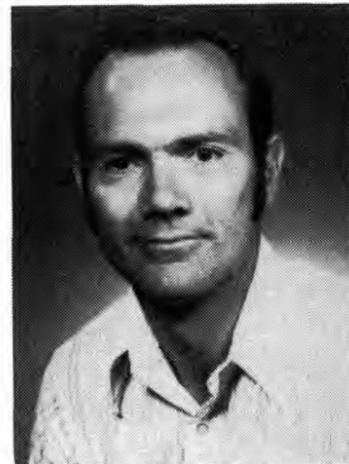
Leo Brady - 1131

15



Williams Crawford - 1522

15



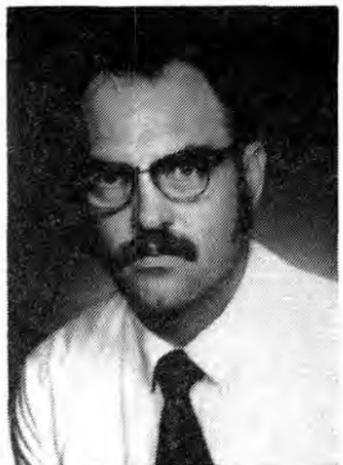
Richard Precit - 9481

15



Alma Mischke - 4152

20



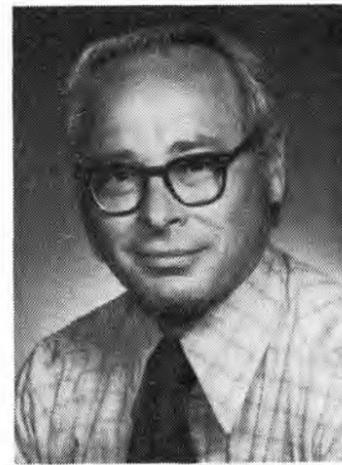
Donald Holck - 2111

15



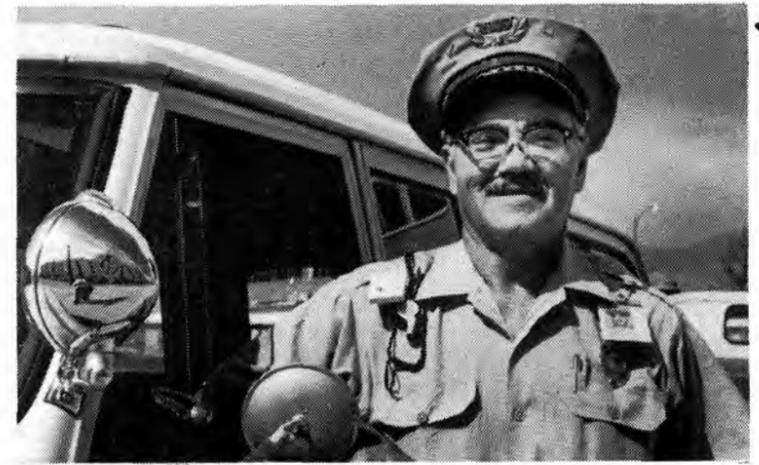
George Staller - 2441

10



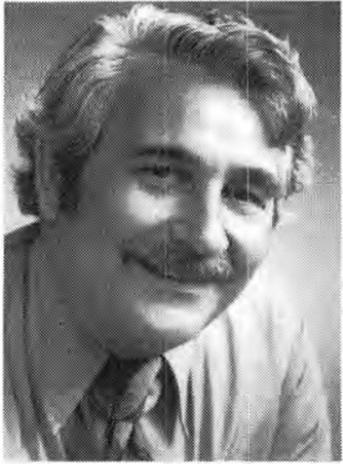
Thomas Flanagan - 1116

15

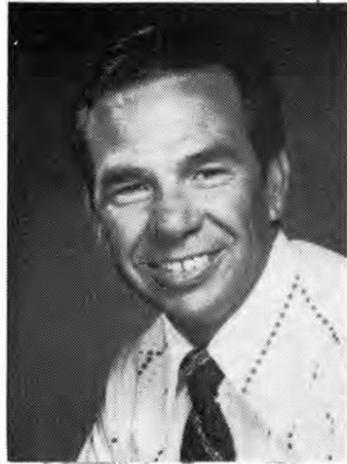


Larry Avila - 9550

15



John Miller - 8423 15



Chris Padilla - 7623 25



Bob Hopper - 7500 25



Alfredo Fernandez - 7554 25



Robert Baron - 2433 10



Ken Foster - 8256 25



Mary Ann Melo - 1120 20



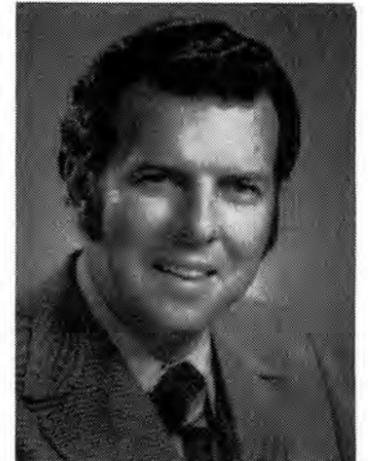
Shary Holmes - 7122 25



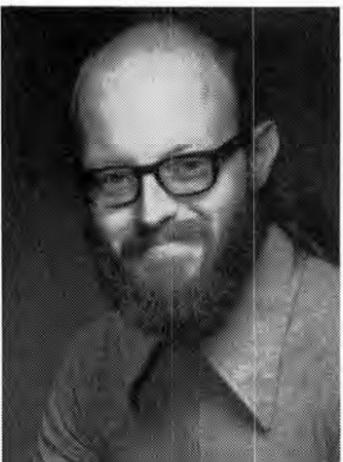
William Myers - 4124 20



Frank Duggin - 7312 25



Jon Meeks - 8342 10



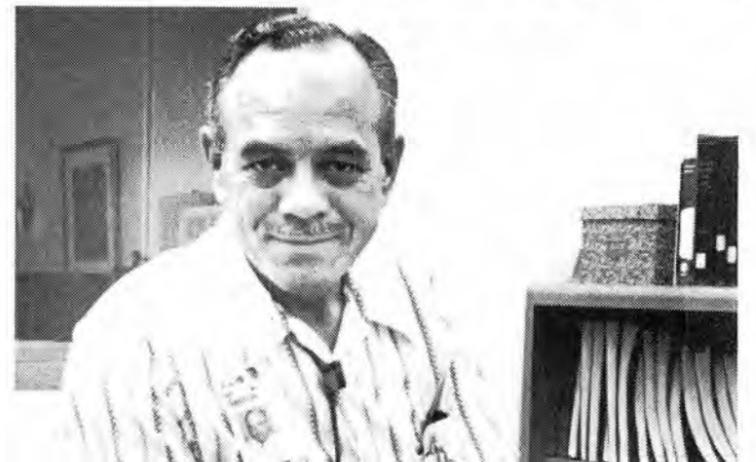
Leander Pickard - 2121 10



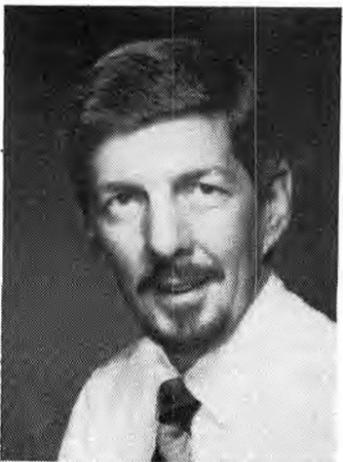
Ron Johnson - 9313 15



Lina Harbo - 8213 10



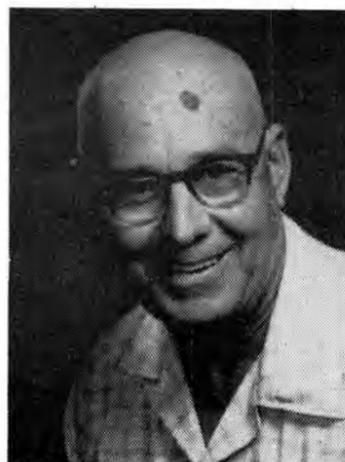
James Laffoon - 7515 25



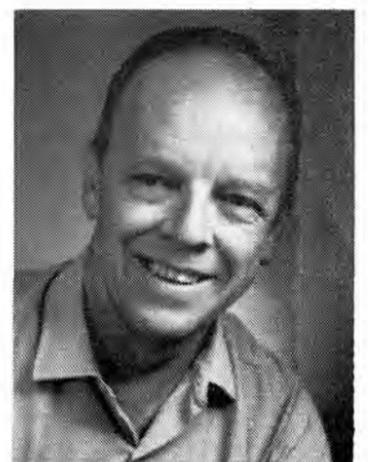
Richard Jankowski - 2334 15



Earl Noel - 9550 15



Joe Ferguson - 7518 20



R. T. Petersen - 8412 10



NOT VERY GRAND, but few things connected with the poor are.



HEAD MAN Titus Scholl and client. Titus is a minister.

Our Town

The Storehouse: Not Exactly Saks 5th

Its director calls it a "project in kindness," and that's a pretty fair description. The Storehouse is a bare-bones, non-bureaucratic project specializing in giveaways.

A young mother comes in needing a crib and some clothing for her child. She had been referred to the Storehouse by the welfare agency just around the corner. The head man, Titus Scholl, chats with her briefly, gets her name, and proceeds to round up one crib and some infant's clothing. No probing interviews, no forms in quintuplicate, no chain of approvals. The entire transaction is done with dignity and consideration.

Titus Scholl is an unusual man. A minister in the Lutheran church, he elected several years ago to get closer to poor people who, he felt, were not being adequately helped by society. For a while Titus and his wife worked as caseworkers in the welfare department, but they found that highly institutionalized, by-the-numbers operation oppressive. "That place over there," he says, pointing to the welfare building, "is filled with frustrated caseworkers. You can't do what should be done."

Two Sandians Named 1973 ASNT Fellows

Doug Ballard and Bill Mottern, Nondestructive Testing Division 9351, are recipients of a new honor established by the American Society for Nondestructive Testing: 1973 ASNT Fellows. Selection of Doug and Bill was made by the national ASNT board of directors for being members of unusual professional distinction and having made significant contributions to the advancement of the science. The 1973 ASNT Fellows will be honored at the annual fall convention to be held in Chicago in October.

Doug is a charter member of the Albuquerque Section of NDT and has served as national president. Currently he serves as a member of the national long-range planning committee, and as ASNT representative to the Federation of Materials Societies, a group concerned with the materials crisis. He has been with Sandia for 23 years.

Bill has served two and a half terms as local chairman and was a member of the educational committee which sponsored a six-week lecture series on NDT. On the national level, he has worked with three committees — radiation, nominating, and infrared and thermal. Bill has been with the Labs 22 years.

The welfare people had an unused Butler building, and it was here that Titus and a few friends set up the Storehouse. A mimeographed handout states: "The Storehouse is a distribution center for food, clothes, and household goods for those with emergency needs. Money is given too." About 400 people are helped each month and it's a busy place.

The Storehouse, needless to say, has needs: food, clothing, household goods. And money. But Titus is especially eager to get volunteers, men and women, to help out. The Storehouse would be an excellent place for a Sandia retiree, or perhaps a teenaged son or daughter, to spend a few hours weekly, helping where help is genuinely needed. People who can repair appliances could make a real contribution — Titus has all manner of stoves, refrigerators and the like that could probably be returned to a useful life.

The Storehouse is located at the corner of Stadium and William SE and is open from 9 to 12 noon daily (phone 843-6491). Stop in — it's a good way to gain a better appreciation of what poverty is all about. •js

The LAB NEWS needs copies of the following issues: March 17, 1972; April 28, 1972; May 12, 1972; June 15, 1973; June 29, 1973. If anyone has extra copies, we would appreciate receiving them. Send to Division 3162.

Henry Monteith to Present Psychotronics Lecture Series

Henry Monteith (9344) will present the first of a series of lectures tonight at 8 p.m. at the First Unitarian Church, 3701 Carlisle Blvd. NE.

The lectures will review events and ideas discussed recently in Prague at the First International Congress of Parapsychology and Psychotronics. At the conference, Henry presented a paper, "Consciousness and Modern Theoretical Physics."

Second lecture is scheduled at 8 p.m. Sunday, Aug. 12, at the Church. The third lecture, same place, same time, is set for Friday, Aug. 17, and will be called "Conjectures Upon the Nature and Origin of Man" and includes a movie, "In Search of Ancient Astronauts."



TITUS HOPES that a clever Sandia retiree will put these appliances back in operation.

Deaths

Burnest Benjamin of Tester Fabrication Division 7133 drowned last week in a boating accident in northwestern New Mexico. He was 49.

He had worked at Sandia since 1961.

Survivors include his mother, five sons, four daughters and six grandchildren.



* * * *

Bernard Bueffel of Engineering Applications Division 2342 died July 28 after an illness. He was 57.

He had worked at Sandia Laboratories since July 1952.

Survivors include his widow, a daughter and son and three grandchildren.



Authors

B.W. Marshall (5644) and A.A. Trujillo (5645), "Experimental Evaluation of a Roll Control System for a Shrouded Cone," Vol. 10, No. 6, JOURNAL OF SPACECRAFT AND ROCKETS.

E.L. Clark, Jr. (5645) and A.E. Hodapp (5625), "Experimental Determination of Asymmetry-Induced Trim Angles of Attack," Vol. 10, No. 5, JOURNAL OF SPACECRAFT AND ROCKETS.

A.W. Johnson and J.B. Gerardo (both 5212), "Electronic-Recombination Coefficient of $^3\text{He}_2^+$ Compared to $^4\text{He}_2^+$," Vol. 7, No. 4, PHYSICAL REVIEW A.

R.A. Langley (5111), "Fluorescence Efficiencies of Nitrogen and Air Excited by Neon and Sodium Ions of 0.3-2.0MeV," Vol. 58, No. 9, THE JOURNAL OF CHEMICAL PHYSICS.

G.E. Laramore and A.C. Switendick (both 5151), "Low-Energy-Electron-Diffraction Intensity Profiles and Electronic Energy Bands for Lithium Fluoride," Vol. 7, No. 8, PHYSICAL REVIEW B.

B. Morosin (5132), "Crystal Structure, Linear and Nonlinear Optical Properties of $\text{Ca}(\text{IO}_3)_2 \cdot 6\text{H}_2\text{O}$," Vol. B29, Part 5, ACTA CRYSTALLOGRAPHICA.

R.L. Park and J.E. Houston (both 5114), "Electron Binding Energies of Uranium," Vol. 7, No. 5, PHYSICAL REVIEW A.

L.I. Weingarten (1542), "Forced Motion of Cylindrical Shells: A Comparison of Shell Theory With Elastic Theory," Vol. 11, No. 6, AIAA JOURNAL.

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Deadline: Friday noon prior to week of publication unless changed by holiday.
A maximum of 125 ads will be accepted for each issue.

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1. Limit: 20 words
2. One ad per issue per person
3. Must be submitted in writing
4. Use home telephone numbers
5. For Sandia Laboratories and AEC employees only
6. No commercial ads, please
7. Include name and organization
8. Housing listed here for rent or sale is available for occupancy without regard to race, creed, color, or national origin.

MISCELLANEOUS

CAMPER, 10-1/2' Cavalier, sleeps 6, gas/elec. stove, refrig., twin sinks, oven, lavatory, 2 closets, intercom, 20-gal. water system, clip jacks, ext. bumper. Ross, 299-9608.

MIN. SCHNAUZER, male, 3 mos., ears cropped, all shots, very good pedigree; dbl. bed w/mattress, box springs. Kelly, 294-0284.

TOY COLLIE, AKC, good w/children, \$60; spayed, declawed, calico cat; 2 black kittens, 8 wks., free. Hickman, 298-3804.

PORTABLE Signature sewing machine, straight & backstitch, buttonhole atch. included, \$35. Schamaun, 298-5192.

ELECTRIC built-in oven, Sears; front steering assembly & rear wheels for Go-Cart. Barber, 299-4287.

STEEL sash windows, 3x3 & 3x2; 2 sets bed frames, brand new, never used. Garcia, 256-7606.

HEATHKIT FET-VOM fully assembled w/batteries, at kit price plus cost of batteries, never used, \$25. Hale, 298-1545.

TRAILER HITCH, Drawtite, fits '69-70 Chevrolet, \$10. Kelsey, 266-6460.

CHINA CABINET, Early American, solid maple, 28", silverware drawer, linen drawer, \$175. Owens, 256-0606 after 6.

NEW CAMPER PARTS or services of your choice; \$50 worth for \$35. Harley, 898-0594.

ADHESIVE resorcinol formaldehyde, three gallons, all or part \$10/gal. Haskins, 281-3748.

FOR CAT DROWNING, hiccough curing, popcorn smuggling, even garbage disposing — 30-gal. plastic trash bags, \$2/pkg. of 50. LAB NEWS, 802/100.

'72 **MOBILE** HOME, 14x60, lg. 2-bdr., all appliances, near Wyoming entrance to Base, adult park, price negotiable. McClure, 294-1912.

2-BDR. sets, \$125 & \$150; redwood furniture, \$100; rugs, hooked, 2 lg., 4 small, \$45; other misc. furniture. Klentschy, 344-4297.

GOLF CLUBS, new, used twice, lady's left-handed w/yellow leather bag, 7 irons, 3 woods, 1 putter. Otero, 294-0060.

ELECTROSTATIC HI FI speaker systems; vinyl car top luggage carrier; 40-yr.-old Victrola

console; Head Vector skis w/bindings & boots; charcoal BBQ grill-smoker w/rotisserie. Church, 299-2175.

VANITY, hardwood, one-dwr., 34x18x30, swing-out arms hold decorative skirt, mirror top plus 3-way vertical mirror, stool, cost \$50, sell for \$25. Ristine, 298-8383.

PUPPIES to give away, 1/2-Irish Setter. Dunn, 255-9213.

ALUM. screen door, 36x80" w/auto. closure & all hwd. attchs., \$10. Johnson, 265-2734 after 5.

BABY BED, \$5; stroller, \$6; car seat, \$3; infant seat, \$1.50; auto. baby swing, \$4. Dahlgren, 299-4763.

6-PC. **APOLLO-PEARL** drum set, used 8 mos., \$300. Sanchez, 344-6931.

4-PIECE black sectional LR furniture set, \$25. Roberts, 255-9527.

THOMASVILLE antique white w/green trim dressing table w/lg. framed mirror; lg. desk w/hutch bookcase, \$200 total. Harper, 268-8357.

CHROME WHEELS, 4 ea., 6 hole 15" for Chevy 1/2-tons, \$65; tires, L78-15, mounted on above wheels, \$85; \$140 total. Lee, 256-0905 after 5:30.

LOVE SEAT, 1 yr. old, tones of green flowers on white, adjustable arms for resting, foam back pillows, zipper covers. Simpson, 299-8159.

BELL 500 TX helmet, cost \$38, sell for \$25; size 7-1/4; 30" Tappan elec. range w/eye level oven, \$50 or best offer. Campbell, 268-8445.

NORWEGIAN ELKHOUND, male, 6 yrs. old, black & silver, AKC reg., \$100. Reynolds, 294-1349.

GERMAN SHEPHERD puppies, sire: Lavaland's Kovaya's If, dam: Britannica of Lusty Glaze, \$75 to \$200 based on conformation. Shay, 299-2634.

TENT TRAILER, Sears Model 200, spare tire, 2" foam pads, \$150. Davis, 345-1143.

TROMBONE, Vincent Bach Stradivarius Model 6 w/case, \$130. Fabiano, 898-5803.

CAMERA, 35mm single lens reflex, Contaflex made by Zeiss, f2.8 lens, leather case, \$45. Coleman, 299-2377.

15-1/2" **JUZEK** VIOLA, \$175 firm. Welter, 255-3839.

AUTO HARP, \$30; youth bed, 65" long w/mattress, \$30; twin bed w/box springs & mattress, \$40; 14 Spanish records, HS level one, \$1.50. Beatty, 299-3429.

RADIAL SAW, Sears 10", \$130. Van Slambrook, 299-7808 after 5.

SET OF 4 w/w car tires, size H-78-14, \$49. Silva, 877-2423.

KITCHEN CABINETS: wall & base units, Mossman made, 1 section w/drop-in GE elec. stove, other w/double sink. Day, 296-4154.

OAK VANITY, recessed center, 5 dwrs., lg. mirror, painted white, 1940 vintage, \$25.

Saffle, 268-0682.

MONAURAL Heathkit AM-FM tuner, preamplifier, power amplifier; reg. 8mm projector; boy's 20" bicycle. Fitzgerald, 298-4143.

250 **GALLON** water tank trailer, \$75; 2 typewriters, \$45 ea. Foster, 281-3975.

SLIDING PATIO DOOR, heavy glass, alum. frame, 6' wide, \$60. Beck, 256-3350.

LIGHTED, decorative fountain for patio or indoors, 46" diameter pool w/7" spray ring, \$100. Bidwell, 256-0718.

BABY ITEMS: Cradelette, \$6; swing, \$5; Strollee buggy combination, \$35; GM auto seat, \$9; Strollee auto seat, \$14. Gauster, 299-3745.

EUROPEAN HEALTH SPA membership, take over balance of year, \$13.19/mo., 8 months, for female membership. Eagar, 298-0522.

SKID PLATE for Volkswagen, \$18; hand powered lawn mower, \$5 or best offer. Conrad, 298-2989.

CHAIN SAW, Home Lite XL-12, 24" bar, manual oiler, 2 yrs. old, \$165. Liquori, 256-3613.

NMMI uniforms, pants size approx. 32/32, shirts size 15. Stixrud, 298-0478.

CLARINET, new case, books & reed included. Funk, 836-2598 after 6.

GENERAL ELECTRIC refrigerator, \$65. Wilson, 268-6287.

TRANSPORTATION

'69 **HONDA** 160cc, \$200, includes helmet, manual, extra parts, has signals & rack. Davidson, 299-6508.

BOY'S 3-spd. Schwinn 26"; girl's 3-spd. Stingray Sears bike; 2 steel sash windows. Fenimore, 298-8052.

'62 **FORD** str. wg., \$300. Villa, 298-0435.

'70 **DODGE** 8" sweepline, AC, PS, 318, 30,300 miles, 8-ply mud & snow tires, below NADA book. Valerio, 266-3204.

'72 **CHEVY** El Camino S.S., AC, PS, low mileage, 402 V8, air lift shocks. Archuleta, 344-1005.

'67 **PLYMOUTH** Fury III, 8-cyl., 4-dr., AT, PS, PB, AC, \$700. Nelson, 255-2364.

'65 **SUNBEAM** Alpine, \$100 or trade for camper shell. Riley, 869-2119.

'68 **DODGE** van, 108" wheel base, deluxe interior, V8 engine, \$1500. O'Nan, 299-1803.

CAMPING TRAILER, 12' Roadrunner, \$875; Pontiac Tempest, 4-cyl. str. wgn., \$275. 10424 San Jacinto NE, Maes, 298-2294.

'66 **FORD** Falcon, 4-dr. sedan, stick shift, 53,000 miles, \$425. Higgins, 298-0235.

'67 **LEMANS**, bucket seats, R&H, PS, PB; '66 Corvair, low mileage. Hopper, 294-5717 after 6.

BIKES: 2 ea. Schwinn girl's bikes, \$10 ea., 1 Sears Spyder, 20", 3-spd., \$10. Kyger, 299-6398.

GIRL'S 26" bike w/thornproof tubes, \$20. Wyant, 298-0371.

'68 **BARRACUDA** 2-dr. HT 6, AT, new brakes, new tires, shop manual, 2 studded snow tires. Hall, 268-4825.

'68 **HONDA** CB350, adult owned & ridden, 13,500 miles, \$395. Schkade, 293-7453.

AIRPLANE: 1948 Bellanca, 4 place low wing retractable gear, disassembled for rebuild, not wrecked, no instruments or prop. Bechtel, 299-2107.

'70 **CAMARO**, red w/black interior, V8, turbohydromatic, radial tires, disc brakes, \$1600. Peters, 266-0017.

'66 **PLYMOUTH** Belvedere 4-dr., std. trans., 318 cu. in. V8, AC, \$525. Patterson, 877-3158.

'62 **SCOUT**, 4-wd, Positraction, heavy duty axles, new clutch & engine overhaul, \$650. Patterson, 877-3158.

'72 **CHEVROLET** 3/4-ton pickup, 4-wd., many extras. Causey, 299-0089.

2 **SCHWINN** 5-spd. fast-backs, one violet & one coppertone, \$80 ea. or both for \$150. Will take Lionel pre-war on trade. Campbell, 299-4830.

'60 **EL CAMINO**, PS, AC; 4 Mag wheels, 2 wide tires, will fit Chev., Pont., Olds. Ward, 298-7230.

'68 **DATSUN** 4-dr., 4-spd., low mileage, 30 mpg, \$875. Doro, 299-6505.

'71 **KAWASAKI** 175 Enduro, 3000 miles, \$400; 2-bike trailer, 16" wheels, \$100. Wagner, 298-8373 or 299-2347.

SCHWINN Varsity 10-spd. bike, 27" wheels, lady's frame, thorn resistant tubes, \$85. Sasser, 298-1439.

'71 **VW** Squareback, 25,900 miles, AM-FM stereo radio, 23 mpg, \$1725. Shunny, 265-1620.

10-**SPEED** BICYCLE Numano Speedometer, lock & center-pull brakes, \$75. Eagan, 298-0196.

'72 250 **HUSQVARNA** 5-spd. WR, extras, must sell below book, \$695. Lewis, 296-7896.

14' **BOAT**, 35hp motor & trailer, heavy duty tilt trailer, windshield, boat cover, elec. start, skis, etc., \$625. Perryman, 294-7040.

'66 **JEEP** Wagoneer, 4-wd. V8 engine, AT. Sebrell, 299-4772.

'67 **EL CAMINO** pickup, 327 V-8, AT, \$500. Hawkinson, 281-5239.

REAL ESTATE

3-BDR., 2 bath, Crestview Heights, lg. den w/fp & bar, paneled 2-car garage, cash to 6-1/2% loan or refinance. Uhler, 299-8271-by appt. only.

5 **ACRES** near Cuba, tall ponderosa & pinon trees, about 7500', 5% min. down, 12 years to pay. McGuckin, 299-1342.

3-BDR., garage, nice yards, refrig., oven & range, \$19,500, assume 5-1/4% on \$8950.

10605 San Jacinto NE, Shaw, 299-5557, 296-2531.

3-BDR., den, 1-1/2 bath, heated garage, corner lot, \$22,500, 6% FHA. McGinnis, 299-0091.

WORK WANTED

RETIRED employee desires clientele for auto tune-up maintenance at your home, 40 yrs. exp., satisfaction guaranteed. Hayes, 299-1220 for appointment.

WANTED

MATERIALS needed for classroom reading center, anyone w/magazines or paperbacks to donate, please call for pickup. Schimmel, 296-2295.

TRADE 100cc Bridgestone trail bike for 10-spd. bike or will sell for \$100. Peterson, 256-7514.

HEAVY-DUTY wheelbarrow, good condition. Garcia, 256-7606.

BLADES, animal clipper for Oster A-2. Ristine, 298-8383.

10-**GAL.** aquarium w/equip. Seknan, 293-7961.

2 **OPERA** TICKETS for "Merry Widow" Sat., Aug. 25. Winter, 344-4456.

PACK SADDLE & related rigging. Souder, 281-3121.

FOR "HALFWAY HOUSES" at Los Lunas Hospital & Training School, house furnishings, end & bedside tables, chests, drapes or curtains, throw rugs or carpets, etc.; sports equip; volleyball, badminton (they have a net) or what have you that's serviceable. Liguori, 256-3613.

INFORMATION regarding child delivery under Mastercare when pregnancy occurred under Equitable. King, 298-2991.

GOOD HOME for Siamese kitten, Seal Point, good features & markings, very nice well-behaved lovable pet. Freyermuth, 299-2053.

FOR RENT

WESTGATE ADDITION, 4-bdr., 1-3/4 baths, stove, refrig., washer, dryer, drapes, AC, \$200/mo. Miller, 255-1838.

CONCHAS LAKE MOBILE HOME by the week, attractive 1972 model, 2 bdrs., 1 w/bunks. Schubeck, 298-6697.

3-BDR. furnished mobile home at Conchas Lake, day, week or month, 1 block to water mooring & sandy beach. Getz, 299-4865.

3-BDR., carpeted, garbage disposal, dishwasher, modern kitchen, near schools, storage areas, lawn care available, \$200/mo. Ledever, 268-6934.

LOST AND FOUND

LOST — Rx glasses, 15-yr. pin, clip-on sunglasses. **LOST AND FOUND**, tel. 264-3441, Bldg. 832.

Coronado Club Activities

Movies, Parties, More Mazatlan, Summer Olympics And Kitchen Sink

MAX NEWSOM (5724) is the newly named president of the Coronado board of directors, elected by the board following the annual meeting this week. George Horne, Jr. (2634) is vice president, Dick Baughman (5154) is secretary and Bill Davis (4151) is treasurer.

Other board members are Bud Rufsvold (AEC), Shirley Dean (9000), Pete Gallegos (2336), Bill Swartz (9424), Herb Pitts (4232) and Julian Lovato (4154). Bill Fay is the AEC representative and Ken Sutton (4250) is the Sandia representative.

The new board welcomes comments and suggestions from members.

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TOMORROW night is Family Vaudeville night at the Club. The Baca family will perform. People who saw this show last year say it's great entertainment. One of the youngsters plays 10 different instruments. The movie is "The Trouble with Angels" starring Rosalind Russell and Hayley Mills. Super sandwiches will be available around 6 p.m. Admission is free to members and families.

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CINEMA CLASSIC this month features a couple of jewels with W.C. Fields — "It's a Baby" and "You're Telling Me." Anyone who hates dogs and kids can't be all bad. A Betty Boop cartoon is also on the program. It starts at 7:30 p.m. Admission is free to members.

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SATURDAY SESSION Aug. 18 will feature the Rhythmaires, Happy Hour bar prices, and free admission. Enjoy from 8 to midnight.

BICYCLE SAFETY DON'T BE A SHOW OFF RIDER!



DEADLINE for picking up tickets for the Club's Western Barbeque Patio Party is Saturday, Aug. 18. Club manager Jim Schultz is practicing for perfection when he does the barbequed ribs, beef and chicken for the big event Aug. 25. Vicki Clarkson and Dorothy Sanchez (both AEC) offer encouragement. Country Road will play for dancing, and Adler and Sinclair will entertain with contemporary songs.

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TEENAGERS should dig something called Morning Star which will be wired into the bandstand from 7:30 to 10:30 on Thursday, Aug. 23. Don Nelson of KQEO will emcee the evening. Member parents should pick up tickets for their youngsters at the Club office.

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SUMMER OLYMPICS, Coronado Club style, will begin in the patio area Saturday, Aug. 18 and continue through Sunday. Both men and women may compete in three age groups — 14-20, 21-39 and 40 and up — and in 12 events: horseshoes, darts, cribbage, ping pong, 25 and 100 yard swim, diving, 50 yard dash, shot put, weight lifting and chipping to a pin from both grass and sand. Should be great to be a participant instead of a spectator. You must enter six of the events to qualify for the prize trophies. The pool office has copies of entry blanks and event schedules.

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TRAVEL NEWS — More seats are available on the Mazatlan trips scheduled Nov. 5-12 and 12-19! The Club has managed to obtain a larger airplane for the Mazatlan package and more rooms at the luxurious Playa Mazatlan hotel. The lengthy waiting list for both trips has now been taken care of and about six more seats are available on each tour. The package costs \$216 for double occupancy, \$230 for singles. Final payment is due at the Club office by Aug. 15.



CORONADO CLUB Summer Olympics start Saturday, Aug. 18, at 11 a.m. with 12 events for men and women including weightlifting, demonstrated by Kathy Pitts (2331) and golf chip shots — Dave Renninger (7626) was going to demonstrate this but couldn't seem to concentrate. Entry blanks (no fees) and schedule of events are available at the pool office.