

Staff Salary Procedures Revised

All Sandia Labs staff employees, numbering approximately 4700, are affected by a number of changes in salary administration that have recently been adopted. Ken Smith (3100), secretary of the Salary Committee, announced these changes:

- rescheduling the salary review year from the traditional May-April to July-June so that it coincides with the fiscal year.
- granting increases at 12, 24, etc. month intervals; under the old plan intervals were at 12, 15, 18, 21, etc., months for most staff people (staff assistants were placed under the 12, 24, etc. month interval policy two years ago.)
- making increases effective during the first six months (July through

December) of the salary review year so that increases are more closely coupled to the work performance upon which the increase is based.

With respect to the last item, Lloyd Fuller, Department Manager of Compensation 3110, notes that during the transition period from the old to the new system, prorating of increases may occur. Also during this transition year, the intervals may be longer or shorter than 12 months.

For staff people in the MTS category there is a fundamental change in the system. "We are going from an age base to an experience base for MTS salary administration," says Fuller. "MTS salary statistics will now be based on 'years of professional R&D experience'."

A basic element in the new plan is the es-

tablishment of an "experience date" for each MTS, from which his or her years of professional R&D experience will be counted. For example, an MTS coming to Sandia directly from college with an MS degree begins with zero years experience upon arrival and progresses from there. A PhD coming to Sandia directly from college is credited with four years upon arrival at the Labs.

An experience date has been established for each MTS employee on roll and approved by his or her director, according to Fuller. He adds that otherwise the octile system of salary administration and the use of curves continue essentially as in the past.

Staff people desiring more information about the salary program and experience dates should consult their supervisors.

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

Good For Door-To-Door Salesmen Too

Closure System Used at Nevada Test Site Subject of Patent

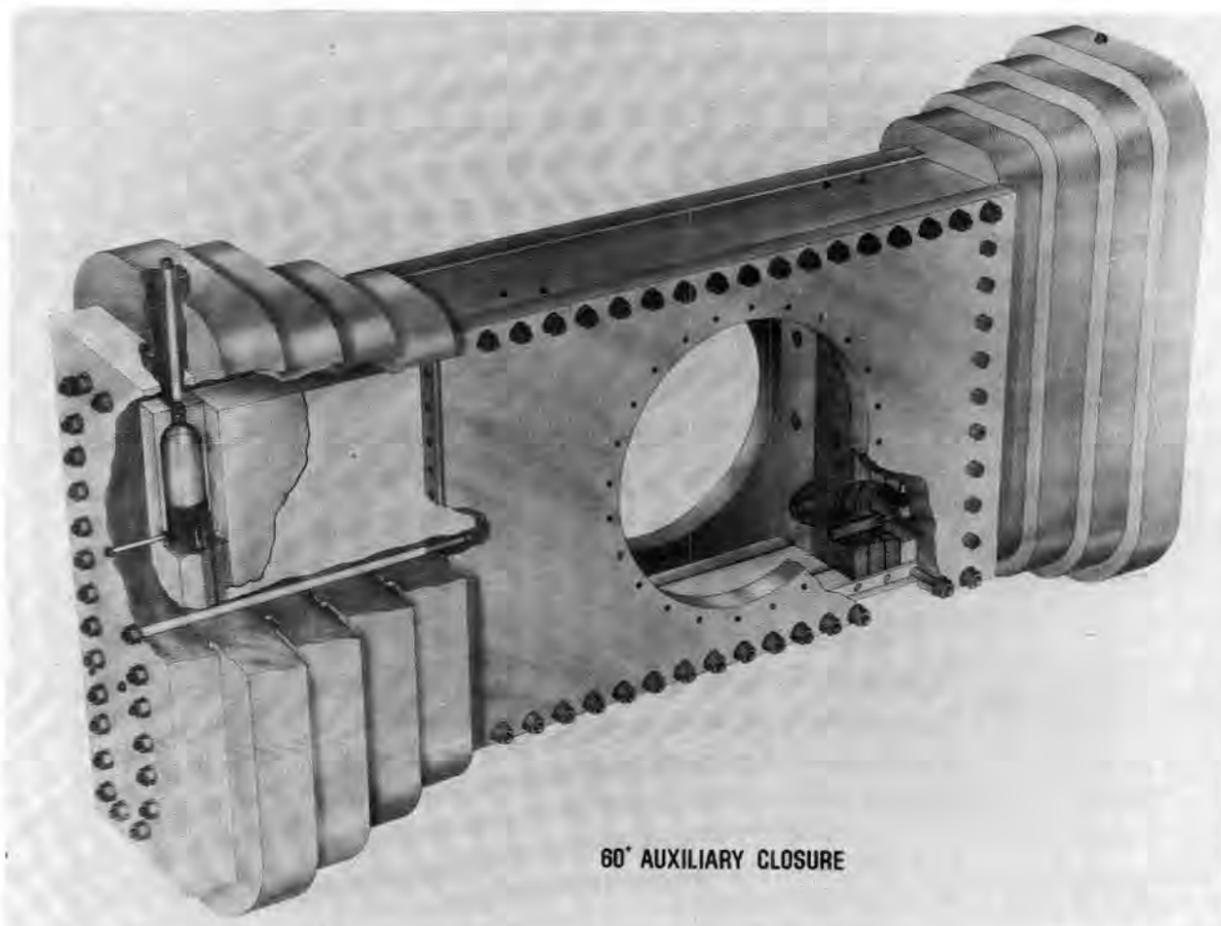
A device used to close the giant doors in underground tunnels at Nevada Test Site within milliseconds after a nuclear detonation has been awarded a patent, assigned to the AEC in the names of inventors Harold Howell, Robert Stinebaugh and Tom Hunter, all of Test Engineering Division 9133.

Although the design is not restricted to certain size doors, the device has been chiefly useful in closing the 4000-lb. forged aluminum doors of nuclear experiment chambers. Two gas bottles (one for each door) containing nitrogen at 16,000 psi are explosively opened, and gas energy drives each door across the five-foot circular entrance. Within 16 milliseconds the opening is essentially closed as the doors cross the centerline. Within 32 milliseconds full closure is achieved. Pads of honeycomb aluminum absorb closure shock.

Another way of describing closure time is this: If you were standing 50 ft. from the opening with a rifle, and you actuated the closure system as you pulled the trigger, the bullet would not enter the chamber. The doors would be closed before the bullet arrived.

The doors and closure system are mounted within a steel housing that somewhat resembles a quality padlock. The huge mass of the unit — 90 tons — both contains the energy of the expanding gas and protects experiments within the chamber from the environment produced by the nuclear explosion. Thus far, four of the systems have been successfully used in experiments.

The Defense Nuclear Agency at the Nevada Test Site has used the design for past tests and plans to use it in future tests. Since the system can be built any size, numerous other applications are possible. • dg



60" AUXILIARY CLOSURE

ARTIST'S DRAWING shows closure system used at the Nevada Test Site to seal experiment chambers within milliseconds after detonation. Cutaway section at left shows one of the gas bottles. Upon explosive release, pressurized gas drives the two-ton doors across the five-foot circular opening. Closure is achieved within 16 milliseconds.

INVENTORS Tom Hunter, Robert Stinebaugh and Harold Howell (all 9133) check plans for installation of one of their chamber closure systems in an underground tunnel at Nevada Test Site.



Credit Union Reporter

Social Security: Facing Problems

(The following article was prepared by Western Electric's economics organization and appeared in WE Newsbriefs.)

The Social Security system has once again become a newsworthy item as a result of recent legislative changes that have significantly increased the level of Social Security taxes. On January 1, 1973, the maximum individual payment jumped from \$468 on \$9,000 of income to \$631.80 on \$10,800 or more and, as currently enacted, by 1978 the maximum payment will rise to \$726 on wages of \$12,000 or more. Employers, of course, match their employees' contributions.

While this will represent about an eighty percent increase in the maximum payment over a period of only seven years, even this increase is an understatement. After 1974, Social Security benefits are scheduled to rise automatically whenever consumer price increases go up three percent. Correspondingly, the Social Security tax rate will be applied to a wage base that rises automatically as wage levels rise. What is behind these increases and what problems do they foretell?

For more than a century the United States has been undergoing gradual change from a farm-based culture to an industrial society requiring a skilled work force. Small urban families replaced large rural families and medical advances increased the life span. Together, these developments caused a general deterioration in the economic status of the aged: old people were living longer, had fewer children to support them, and maintained an increasingly tenuous position in the labor market.

The depression of the 30's greatly accentuated the problem and was instrumental in overcoming Americans' traditional distaste for government support plans — and Congress in 1935 set up the machinery of the Social Security program.

As Originally Conceived . . . The result was an insurance plan to provide contribution-related pensions to retired workers, financed by a compulsory payroll tax shared equally by employees and employers. Not intending to provide all of the retirement income of the aged, the program offered a floor of protection to be supplemented by individual savings and private pension plans.

By the time the first benefits were paid in 1940, Social Security had expanded beyond mere insurance and into the realm of social welfare. The first retirees were paid "meaningful" pensions despite having paid practically nothing into the system.

In order to accomplish this, the original plan of accumulating a large trust fund to guarantee future benefit payments was abandoned in favor of depending mainly on current tax receipts to finance current pensions. Also, the working poor were to receive greater benefits relative to their contributions than those at the top of the wage base.

While the addition of survivors, disability, and hospital insurance has expanded the original insurance function of Social Security, the dimensions of the welfare function have grown even more. Benefit levels have been raised regularly as pensions are increasingly viewed as adequate only if they are high enough to fully support the elderly. The scope of the program today and the basic principles on which it is financed have brought Social Security much closer to a universal pension system than the supplementary insurance plan originally intended.

What the Future Holds . . . The American public has fully supported this expansion, evidently because it continues to regard the tax payments as insurance premiums for future benefits. As the Social Security program continues to expand, however, a conflict of interest is likely to intensify between the generation that has retired and is collecting its benefits and the generation that is still working and paying the taxes. In 1953 there were 10 contributors to the program for every one beneficiary; in 1960 there were five and in 1971 there were 3.5. If birth rates continue to drop to the point where labor force expansion eventually slows considerably or even stops, the relatively small working population in the future may balk at the high taxes required to maintain the pensions of a relatively large number of retirees born during the postwar baby boom.

There is other potential for conflict as the tax burden rises in the future. In contrast to the progressive rate structure of the income tax, the Social Security payroll tax is highly regressive. Poor and middle income workers pay higher percentages of their earnings in Social Security than the well-to-do and rich. An individual earning \$100,000 in 1973, for example, paid no more Social Security tax than an individual earning \$10,800. Although it is also true that the former individual receives no greater benefit than the latter, it has become increasingly popular to argue that it is more equitable if those with the greater ability to pay contribute a greater percentage of their wages.

To some extent, the regressiveness is alleviated each time the wage base is raised by Congress, but the ultimate solution appears to be the abandonment of the payroll tax and the inclusion of Social Security under general revenue financing, a common practice in other countries. While overcoming the regressiveness of the payroll tax, this move would not in itself contribute to holding down the overall cost of the program.

While a number of cost-cutting suggestions have been advanced, no legislation has yet been enacted significantly affecting the present scheme. The point is, however, that the anticipated cost burden of our present SS system will undoubtedly call forth demand for change of some kind in the future.



Fidencio Sandoval

Sandian Named To Two Committees

Fidencio Sandoval, a systems analyst in Configuration Management Data Systems Division 5414, has been named to two federal-sponsored committees.

He is one of 11 persons appointed by the Bureau of Census to the Census Advisory Committee on Small Areas. This committee advises the Census Bureau on development of programs to provide metropolitan communities as well as smaller units with data on a wide variety of subjects such as transportation, urban renewal, and public facilities.

Health, Education, and Welfare Secretary Elliot Richardson extended the invitation to Fidencio to accept appointment to the second committee, the Regional Advisory Committee which counsels HEW on issues and problems in a five-state area whose headquarters are located in Dallas, Texas. The committee is designed to reflect a variety of perspectives, including those of women, youth, and minorities. Major goal of the advisory group will be to facilitate communication between top HEW policy makers and the citizens affected by HEW programs.

CU Bulletin Board

Tax Assistance — The Internal Revenue Service in Albuquerque is now open until 6 p.m. each weekday and from 9 a.m. to 1 p.m. on Saturdays. The hours have been extended during the filing period for the convenience of taxpayers who cannot visit or call IRS during regular hours. For assistance by phone, call 843-3401.

* * * *

About Those Bonds — The yield on Series E and H U.S. Savings Bonds has been improved, retroactive to June 1, 1970. Both new issues and outstanding issues are affected by the new rate. Series E Bonds now on sale return 5½% interest, compounded semiannually, when held to maturity of 5 years, 10 months. They earn 4.01% the first year; thereafter interest increases on a graduated scale; at maturity, they receive a ½% bonus, raising the yield to 5½% from issue date to maturity. Older E and H Bonds also have had their yields improved, so there is no advantage in redeeming present holdings to buy new Bonds. More information may be obtained by calling the Savings Bonds Division in the Federal Bldg., 843-2486; the same number may be called for information about redemption values of Bonds already issued.

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SST Exhaust Effects To Be Discussed at Feb. 8 Colloquium

Certain chemicals in SST exhaust which destroy ozone in the stratosphere will be the subject of a colloquium to be held at Sandia Laboratories Livermore, Thursday, Feb. 8. The speaker will be Dr. Harold S. Johnston of the University of California at Berkeley.

Dr. Johnston received an AB degree in chemistry from Emory University in Georgia and his PhD in chemistry from Cal Tech. Subsequently, he was on the Stanford University faculty for nine years and has been professor of chemistry at UC/Berkeley since 1957.

His fields of research include study of chemical warfare agents involving chemistry and meteorology, kinetics of the reaction of nitrogen dioxide and ozone, and most recently, gas phase reaction kinetics and photochemistry, kinetic isotope effects, shock tubes, atmospheric chemistry, and reaction rate theories. Dr. Johnston has testified before Senator Proxmire's sub-committee which is investigating SST feasibility.

Tickets are required for admission. Jerry Jones (8164) is host.

Speakers

Jack Dini and Rudy Johnson (both 8312), "Joining by Plating," Los Angeles Board of the American Electroplaters' Society, Jan. 10.

Authors

Rick Wayne (8331) and Walt Bauer (8334), "Helium, Solubility, Mobility, and Implantation Effects in Potassium Bromide," Vol. 6, pp. 3966-3973, PHYSICAL REVIEW B.

Congratulations

Karen Yung (8137) and Don Tharp, married in Aptos, Calif., Dec. 15.

Mr. and Mrs. Lynn Zirkle (8136), a daughter, Mandy Lee, Dec. 15.

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Livermore Gal Takes to the Slopes in Ski Patrol Work

No doubt about it — skiing is fast becoming one of the more popular sports. But along with the funsy part of the "skiomania" that's sweeping the country comes its not-so-funsy, or at least more serious, aspect. Here is where the role of Marlene Ballou (8264) fits in.

An avid skier for the past seven years, Marlene has passed the various tests qualifying her as an auxiliary with the National Ski Patrol System. A member of the Skyline Auxiliary out of Palo Alto, Calif., she is now working toward the basic patroller rating, entitling her to wear the Patrol cross patch on her parka.

"At this point as an auxiliary, I'm assigned to work with full-fledged patrollers, or possibly professional patrollers, depending on the policy at the various Sierra ski areas," she explains. "I work under their direction in administering first aid, primarily on the slopes. Until I reach patroller status myself, however, I'm not permitted to take the initiative at the accident scene."

Marlene points out that women are not new in the patrol system, but the record shows that over the years their number has been few. This is changing, though. Requirements and qualifying tests remain identical for both men and women. Women's lib has had its impact. "At one of our patrol meetings," says Marlene, "the patrol leader made the statement that there no longer are 'patrolmen' — the word is now 'patroller'.

"But this is as it should be since everyone is expected to do the same work," she continues. "Ironically, though, from what I have observed, women are sometimes better in the area of toboggan handling. The traditional way of getting a rescue toboggan off the hill with a victim in it is to snowplow down, a technique in which your skis are in a v-shape and you generally come directly down the fall line. This is a ski maneuver that women seem to perform much better and more easily than men. I remember at our proficiency tests this year we chuckled when a number of the fellows who were just fantastic parallel skiers could not snowplow, failing the test. They had become such proficient skiers, they just never use the snowplow anymore, even when stopping. But with a rescue toboggan it's necessary to snowplow for utmost control and safety."

Marlene's convinced that many injuries occur because people fail to take time to adjust their bindings properly. The binding doesn't let go and the bone does. Bindings may need to be adjusted as snow conditions change. Leather boots may swell when wet and their increased size may make it necessary to readjust the bindings.

Another bit of advice is for beginners. "I've seen many — never been on skis before — go to the top of the hill and come down, sometimes screaming to get everyone out of their way," says Marlene. "This is sort of terrifying. For your own safety and everyone else's, go to ski school for a few lessons. If nothing else, you'll learn how to stop and how to fall. You'll learn correct technique too. Besides, you have so much more fun if you have some control on the slopes."

Marlene's enthusiasm for skiing is not a passing fancy, but rather something she has thought out in terms of a long-range endeavor. When she reaches retirement age, she plans to ski and travel around the world. "By that time, hopefully, I'll have made it all the way through the patrol to the professional level, which means a paying job. In this way, I won't have to sling hash and skiing will be my means of support. My intent is to spend six months to a year in a country, preferably in a small community off the beaten path. Skiing, and ski patrolling especially, provides an involvement with people, and I find skiers generally a nice bunch." • Is

Take Note

Roger Everett of Aerodynamics Division 8354 has been appointed to the American Institute of Aeronautics and Astronautics' technical committee on the Application of Aerospace Technology to Society (AATS). As the representative from the AIAA western region, Roger will serve on the State and Local Planning Subcommittee. Function of the regional representative is to provide a communication channel from the section to the national level.



AT 9800 FEET, atop Sunrise Run in the Sierra's new Kirkwood ski area, Marlene Ballou (8264), left, of the National Ski Patrol System's Skyline Auxiliary out of Palo Alto, stands with senior patroller Mary Ross of the Modesto Patrol.



JIM AND MARIE SOUTH won't be the only ones to miss Sumio Yuyama when he returns to his home in Tokyo on Jan. 30. Sumio and Jim's dog, Speckles, became good friends on the first day of his visit 19 months ago.

East Meets West — Amity, Other Good Things Result

"A friend called me one evening to ask if my wife and I would be willing to take a Japanese student into our home. I called him the next morning and said we would be delighted to have the young man live with us." That was the beginning of the happy association between Marie and Jim (7122-2) South and Sumio Yuyama of Tokyo.

Sumio arrived in Albuquerque in June 1971 with a rather meager English vocabulary — about 20 words. He returns home next week, a poised young man, quite articulate in English.

"At first we had a terrible time communicating," Sumio says. "Mrs. South is an elementary teacher and every evening we read aloud from news magazines and she corrected my pronunciation. I also enrolled in a summer session English class. After five or six months I stopped thinking in Japanese — now I even dream in English."

Sumio attended Sandia High School for one semester in the fall of 1971 and has since completed two semesters at UNM. He'll enroll at the University of Tokyo in March. "I plan study in a new field offered by my University — human relationships," he says. "I'd like to offer useful ideas to society so that we can better function together. The United States has been and probably will continue to be a strong influence. You can see it in the patterns of Japanese industry and especially in education. My people are now becoming concerned about our own environment — air, water and space.

"When I left Japan I was no longer in my own country and I wasn't an American so I thought I didn't have to worry about what happened in either place. I could listen to stereo, play my guitar, do what I wanted to do but it's not like that. I wouldn't trade my 19 months with Mr. and Mrs. South for anything — it's wonderful having a home in Japan and one in America — but I've also

learned to appreciate my native culture. I think a strong relationship between each individual and his culture is essential before you can help and understand others. You can't isolate yourself, you have to be involved and once you understand this it turns you on."

Jim and Marie, who have no children, agree that it will be like losing a son when Sumio goes home. "Having him with us," Marie says, "has been a real pleasure. It was a challenge and has been an education for us as well as for Sumio. We have traveled with him, enjoying his excitement over such things as the Grand Canyon and Carlsbad Caverns."

Sumio feels that young people in Japan and America are basically alike. But one exception: "In Japan we have no system to care for older people — it is the responsibility of the child to care for his parents. Few young people leave their parents and establish their own home."

Sumio has seen much of the U.S. Last summer he worked as a bus boy in a resort in Maine, and visited New York and Washington, D.C. "I really liked Boston," he says. "I felt like I was very close to American history in that city, but I do like the Southwest. I like the climate, although I'll be happy to be back among the fragrant, green pine trees at home; I like the architecture and the uncrowded environment — it's much nicer than crowded Tokyo. I like 'trick or treat,' your Christmas celebrations, luminarias, forced air heat and hot water at the turn of a tap, American and Mexican food, a wink, a wave or a friendly hello from strangers. I don't like the drab colors of the landscape around Albuquerque, extremely long hair, dirty or ragged blue jeans, blackeyed peas and beans."

"Having Sumio with us has just been great," Jim says. "We're going to miss him and already we're making plans to visit him and his family in Tokyo." •nt

Events Calendar

- Jan. 26-28, 30-31 — Albuquerque Little Theater, "Dangerous Corner," 242-4750.
 Jan. 27 — N.M. Mt. Club, Tent Rocks, Gulf Mart, 8 a.m.
 Jan. 28 — Ski Touring Club, Valle Grande, Gulf Mart, 7 a.m.
 Jan. 29 — Faculty Lecture Series, Chief Donald Byrd, APD, 8 p.m., Kiva, UNM.
 Jan. 29 — Audubon Wildlife Film, "Mexican Adventure," 7:30 p.m., Popejoy Hall.
 Feb. 1 — Museum Without Walls, Le Corbusier, 7:30 p.m., Popejoy Hall.
 Feb. 3 — Basketball: UNM vs UTEP; Feb. 8 — UNM vs Arizona; Feb. 9 — UNM vs Arizona State, 7:30 p.m., UNM Arena.
 Feb. 4 — N.M. Mt. Club, snowshoe/ski tour, San Pedro Wilderness, Gulf Mart, 7 a.m.
 Feb. 7 — Albuquerque Arts Council special meeting with representatives of GenCoe to discuss costs, scheduling and facilities for public use of Cable-TV, downstairs in Convention Center, 7:30 p.m.
 Feb. 8 — ASUNM Lecture Series, Senator Mark Hatfield, 8 p.m., Popejoy Hall.

Sympathy

To R.L. Pickering (7113) on the death of his wife Jan. 6 in Albuquerque.

To R.J. Dill (7150) on the death of his father Jan. 10 in Chandler, Ariz.

To Lorella Salazar (LOA) on the death of her brother.

To Harry Pastorius (4540) on the death of his mother Jan. 7 in Albuquerque.

Recreation Notes

FUN & GAMES

Paul Souder (1513) and Bob Lassiter (3131) finished first and second in the Sitzmarker/NASTAR ski race held recently at the Purgatory Ski Area near Durango, Colo. Paul's time through the course was 33.5 seconds and Bob's was 34.2. Concerning the '76 Olympics, both aver no interest, but sources close to the racers feel the NASTAR event is a warm-up for them.

* * * *

The annual membership drive meeting of the Sandia Golf Association (Women) will be held Feb. 6 at 12 noon in Bldg. 802, Rm. 229. All female employees of Sandia Laboratories and AEC are invited to attend.

* * * *

I've pored over dozens of cook books, I've read the food editor's columns in newspapers, I've bought gourmet food magazines — and it's still a challenge — the art of turning game bagged by three hunters in my family into appetizing — or even acceptable — dishes. So I quickly clipped the following recipe from Outdoor Reporter — now I'm really prepared:

Elephant Stew

- 1 medium-size elephant
- 2 rabbits (optional)
- salt and pepper

Cut the elephant into small, bite-size pieces. Add enough brown gravy to cover. Cook over kerosene fire about four weeks at 465°. This will serve 3800 people. If more are expected, two rabbits may be added. But do this only in emergency; most people do not like hare in their stew. •mt



Albq Citizens vs Albq Air

(Part One)

Albuquerque passed, more or less safely, through an Air Pollution Alert last week. The level of invisible, deadly carbon monoxide reached the Emergency level for awhile, but thanks to a Wednesday morning wind, it wasn't as bad as the one of Christmas 1971. And any reputable crystal ball will tell you it wasn't as bad as some we're going to be facing in the future.

The thermal inversion (a layer of warm air serving as a lid over a colder, pollution-filled, layer) sometimes gets the blame: it does to the city what a plastic bag over the head does to the person. But a thermal inversion is only a scapegoat, not a cause. The local topography, plus very natural weather conditions, means that thermal inversions have created an almost nightly lid over Albuquerque since it was a one-burro town. (Luckily, the winds of the day usually serve as an effective flushing system.)

Let's try putting the blame somewhere else — like on automobiles. They are not natural phenomena. They spew out vast amounts of pollutants. And these pollutants, unlike those from the burro and his ilk, are not the kind that make gardens grow. In fact, they're the kind that can kill gardens. And trees. *And people.*

Admittedly the pollution levels generally rise no higher than the danger level for infants, the elderly, and those with respiratory problems. The rest of us take pride in being the tough ones — we can take it. Too bad about those others.

Even the tough ones have simply to contemplate a quarter-hour in a closed garage with an engine running to realize that toughness isn't enough to assure survival. Pollution levels today are not that high (nor are they pure carbon monoxide), but it's just a matter of degree — and time.

We're buying time when we encourage the government to require car manufacturers to install emission control devices on their products. They really do help; a later article in this series will discuss the statistical side. But they're stop-gap measures. It's like saying we improved the burro when we hired a street-sweeper. By 1980, or even sooner, the pollution levels will be back up to 1970 levels simply because of the increased population, the increased number of cars, and the increased number of miles driven.

As metropolitan air goes these days, Albuquerque's is generally better than average. It's certainly worth saving, if not improving. It is, after all, one of the area's prime natural resources, one of the qualities which make the area a desirable habitat for all of us.

We're fouling that habitat in lots of ways, but our primary means is the automobile. According to the 1970 Atmospheric Emissions Inventory, it causes 92 percent of the city's total pollution.

So the auto is the villain? In one sense, that's true. Even when tuned properly and when equipped with all the emission control devices, the present internal combustion engine is a notoriously inefficient means by which to convert a fossil fuel into energy. Better energy sources may be on the horizon,

but it's a Texas-type horizon — a far piece down the road.

In the meantime? In the meantime, bad-mouthing the automobile engine won't do much good. We've got to look past the immediate villain and assign blame where blame is due. As Pogo once put it, "We have met the enemy and he is us." We've simply got to decrease our driving.

This decrease could come about in any of several ways: 1. Legislation — restrict large engines or miles driven or gas purchased on the grounds that it's a community health hazard (Los Angeles is presently contemplating gas rationing a la WWII); 2. Catastrophe — a particularly unfavorable combination of meteorological conditions that caused a couple of hundred deaths overnight would likely outrage the survivors into taking drastic steps; or 3. Economic pressures — charging a dollar a gallon tax on gasoline would (a) provide funds to subsidize and expand public transportation (and bikeways) and (b) restrict automobile use to the very necessary — or the very affluent.

We can postpone, if not avoid, these measures to the extent that we as a community voluntarily curb our use of automobiles — to the extent, in other words, that we accept responsibility for the (noxious) consequences of our (vehicular) actions. What's your role in our town's smog drama? For starters, how about knocking off the excuses and getting into a car pool? •bh

Executive Changes Announced at Bell Labs

James Fisk has been elected chairman of the board of directors of Bell Labs. Fisk, now president of the Labs, will assume his new office on Feb. 1. William Baker, VP, research and patents, will succeed Fisk as president on the same date. He was also elected a member of the board of directors.

In two other executive changes, also effective Feb. 1, Kenneth McKay, now an AT&T VP, was named executive VP at Bell Labs, replacing the late Julius Molnar. And Jack Baird, currently VP in charge of network planning and customer services at Bell Labs, was elected by the AT&T board to succeed McKay.

Both Fisk and Baker joined Bell Labs in 1939. Fisk has been president since 1959, and he has served on a number of government commissions under Presidents Kennedy and Johnson. Baker assumed his present position in 1955.

Traffic Rules

It is legal on KAFB to make a right turn on a red traffic light after coming to a complete stop. Upon approach to the Base gates at night, signs instruct drivers to dim their lights. This does not mean low beam but, rather, to use parking lights until the post has been passed.

Promotions

- Ramon Armijo (7154) to Technician (Foundry)
- Estrella M. Lopez (8217) to Secretary
- Rickie D. Reese (8411) to Technician (Instrument Repair & Calibration)
- Theresa M. Smith (8177) to Division Secretary
- Linda J. Stobie (8183) to Division Secretary



JULIUS MOLNAR, Labs president from '58 to '60, is shown here (at right) in a photo from that time talking with Glenn Fowler (9000) and Tom Popejoy, who was president of UNM. At the time of his death, Jan. 11, he was executive VP-systems engineering and development at Bell Labs. The family has established the J.P. Molnar Scholarship Fund at Oberlin College to which Sandians may contribute through the LAB NEWS office or directly to the college, c/o David Clark, Administrator, Oberlin, Ohio, 44074.



The Sleeping Ute

Vista New Mexico

Folklore, Myths and A Few Tall Tales About New Mexico Landmarks

During a discussion of the Grants area of New Mexico, a reference to Mount Taylor as "Turquoise Mountain" led me to some interesting reading. One book led to another — or one mountain led to another — and I've recounted here some of the stories associated with New Mexico landmarks.

The Navajos believe that in the beginning the people lived in several nether worlds and ultimately emerged into a new universe above ground. The center of this new world was a great rock called the Encircled Mountain, and its outer fringes were marked by four holy mountains: the Mountain of the East, made of sand and white shell (variously identified as Mount Blanca in Colorado, Wheeler Peak above Taos, or Pelado Peak in the Jemez Range); the Mountain of the South, made of sand and blue-green turquoise — Mount Taylor — whose ceremonial name is *dzil dotlizi*, "Turquoise Mountain"; the Mountain of the West, made of yellow-red sand and abalzne — the San Francisco Peaks in Arizona; and the Mountain of the North, made of black sand and jet, probably one of the peaks in the La Plata or San Juan Ranges.

The old Spanish name for Mount Taylor was *Cebolleta* Mountain, "little onion." Anglo-Americans named the peak for Zachary Taylor, 12th president of the U.S.

Shiprock, a dramatic monolith in the northwest corner of the state, is also sacred to the Navajos. They call it *tse bida' hi*, "the winged rock." In the several myths associated with the rock is found the theme that the winged ship or bird sailed through the air with the people aboard, leaving enemies behind. When the ship settled on the open plain, it turned to rock to become a sentinel and a sacred mountain. When the dark red sandstone of Shiprock is viewed from the west the resemblance to the prow of a ship can be noted.



Shiprock

Tucumcari Mountain in the southern part of the state has a folk tale credited to Geronimo. An Apache maiden named Kari had a sweetheart named Tocom who was killed by a rival. Kari is said to have killed the rival and then taken her own life by jumping off the mountain. Her father, grief stricken, stabbed himself, crying "Tocom! Kari!"

And if that's a little much for you, consider Rabbit Ear Mountain, north of Clayton and named for a Comanche chief called *Orejas de Conejo*, "Rabbit Ears," because his ears had been frozen. He was killed in battle and buried on the mountainside.

Bible Top Hill just three miles west of Rabbit Ear Mtn., has a deep depression running east and west across the top, suggesting an open book. Indians used this hill as a lookout, and numerous flint arrow points have been found here.

San Miguel Mountain, west of Las Vegas, is commonly called Big Mike because of its profile of a human face. One tale associated with Big Mike says that he was 27 miles tall and that his mad money was the gold received in ransom by Cortez for the release of Montezuma. The Gallinas River is said to have originated as a teardrop from the "eye" in the rock face of Big Mike.

Sleeping Ute Mountain is a shrine of the Ute Indians in the northwest corner of the state. It resembles a giant Indian chief, in full headdress, in repose for eternity.

Early in the 19th century, the Sierra Madre Mountains (in Santa Fe, Colfax and Taos counties) became the Sangre de Cristo Mountains. The name change seems to be associated with the birth of the Penitente religious confraternity. One peak in this range, 10 miles northeast of Santa Fe is called Penitente Peak. This religious group, popularly known as Penitentes, has two official names — *Los Hermanos de la Luz*, "The Brothers of Light," and *Los Hermanos de Sangre de Cristo*, "The Brothers of the Blood of Christ."

Broom Mountain, near Acoma Pueblo, was called *Sierra La Escoba* by early Spanish settlers who cut the long grass growing on the mountain. Small bundles of the grass were tied together near the cut end. The long part was a broom and the short stiff end was a hair brush.

Taiyalone Mountain ("corn mountain"), three miles south of Zuni Pueblo, is used by the Zuni Indians during ceremonial rites. In tribal mythology this mountain is the House of the Gods who make rain, lightning and thunder; thus, the Anglo-American name of Thunder Mountain.

Rattlesnake Peak in Doña Ana county is the site of a large prehistoric Indian

campground. It was probably named after the many petroglyphs of snakes discovered on the rocky peak.

Tomé Hill near Belen was named for Tomé Dominguez de Mendoza who settled in the area before the Pueblo Rebellion of 1680.

Cabezón Peak about 40 miles northwest of Albuquerque is called by the Navajos, *tse najin*, "black rock," and is identified as the head of a giant killed by their Twin War Gods.

Capilla Peak (Spanish "hood, cap") at the top of the Manzano Mountains was probably named by early Spaniards at Quarai after its resemblance to a hood.

Ladron Mountains (Spanish "thief, robber") northwest of Socorro were a hideout for Navajo and Apache horse thieves and later for Anglo-American rustlers.

Some of these place names have no stories to accompany them, but let your imagination take over and wonder what prompted: Broke Off Mountain, Graveyard In The Sky, Jawbone Mountain, Jerky Mountains, Sardine Mountain, Tooth of Time Mountain, and the real winner — Bug Scuffle Canyon. All are in New Mexico. •nt

Take Note

The Adult Education Association has appointed Paul Robertson (3134) to serve as secretary of the Executive Committee on its Commission on Planning Adult Learning Systems, Facilities and Environments. AEA is a national group concerned with life-long learning processes — the education and training of people no longer involved in formal education.

Paul is currently making preparations for a meeting of the Commission in Albuquerque in March. He is a member of the Board of Directors for the State chapter of AEA and has been with Sandia Labs since 1952.

There was not enough response from people living near Kathryn Street bus route to justify asking Transit Company to extend route onto Base morning and evening. Any others? Call LAB NEWS, ext. 7841.



Sanado Club Will Host Community Ball Feb. 14

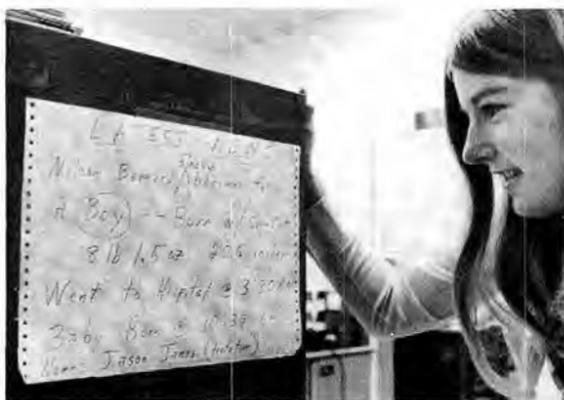
As a community service, Sanado Woman's Club has agreed to host a ball during a week of Fiesta here in Albuquerque when the International Hot Air Balloon races are held.

The Le Grand Bal International is set for Feb. 14 (Valentines Day), at the Convention Center. Sol Chavez and the Duke City Brass will play for dancing from a stage transformed into a hot air balloon complete with gondola. Balloons will float everywhere in the huge ballroom and flags of many nations will add a festive touch. Sanado invites all Sandia Labs people and their friends to participate in the gala event.

Tickets, \$10 per couple, are available now from Sanado women, or may be obtained at Dillard's, Rhodes, Reidlings, Alb. Natl. Bank, Kistler-Collister, Amer. Furniture and Redmond's.

T-VI Vote Feb. 6

On Tuesday, Feb. 6, citizens will vote upon continued support of the three mil property tax levy that is the major source of operating and construction funds for the Technical-Vocational Institute. The school opened its doors in 1965, and its enrollment since then has grown from 1900 to over 6200 students. T-VI offers full time instruction, both day and evening, in some 27 different areas. Sandians are urged to consider the issue and to cast their votes on Feb. 6.



LIKE BABIES, birth announcements come in all sizes and shapes. We thought this one sort of cute. Kathy Brady (1934) eyeballs the bulletin.



BOB TER MAAT (1933) spends an evening a week with his "little brother" Greg Tudor who offers some tough chess competition. Bob is an enthusiastic participant in the Big Brother program, urges other Sandians to volunteer.

Sandians Participate

More Big Brothers Needed

More than a hundred boys in Albuquerque between the ages of 8 and 17 need a big brother, a mature man to provide friendship and a role model. The youngsters are referred to the Child Guidance Center, 117 Montclair SE, by school counselors, churches, juvenile authorities and many times by their mothers. The Center administers Albuquerque's Big Brother program, part of a national effort which aims at providing the companionship of a man to a fatherless boy.

Four Sandians — John Johnson (9132), Robert Carter (4122), Don Gould (1915) and Bob TerMaat (1933) — agree that participation in the program is rewarding.

John Johnson has been an enthusiastic member of the Big Brother program for more than a year. He's accepted a boy with a problem at school and says it's a demanding effort but well worth it.

The program stresses a one-to-one relationship. Staff members from the Guidance Center provide professional counseling.

"Still, the volunteer Big Brother is the key to the program," John says. "If you can demonstrate a personal interest in the boy, and if he learns to trust you, then you are well on your way to success. Success is defined as your little brother achieving a normal adjustment in school and with his own family."

Robert Carter describes his eight-year-old friend as "very quiet." He lives with his mother, grandmother and two sisters. Robert sees the youngster about once a week. He's been enrolled in the program since last August. They go to a movie, bowling, out for a pizza, or roller skating, and a continuing project has been construction of a very complicated model of an old western stage coach.

"It's a real pleasure to work with the boy," Robert says. "He's losing a little shyness. He calls me now when he wants to talk."

Don Gould has fitted his 12-year-old friend into his family of two daughters and one son, age six. "He's like one of my own," Don says, "and we get together and do whatever the family is doing. Sometimes he helps me in the yard or wash the car and sometimes we bowl or play miniature golf. It's rewarding. I like him, he's a friend."

Bob TerMaat has become friends with a shy six-year-old, a first grader interested in outdoor sports. Bob has helped him with his homework but mostly talks and plays games. He's taken the youngster on camping trips in the mountains with a Boy Scout troop (Bob is advisor to Explorer Post 296) and on special occasions to the circus or to Coronado Club kid's parties. "You get involved," Bob says. "The relationship becomes important and it's challenging. You can see the youngster grow and expand his interests. Then you know you're helping."

Others can help. If you are interested, call Miriam Gingras, a psychiatric social worker at the Child Guidance Center who directs the Albuquerque Big Brother program. Miriam will send you an application and arrange an orientation. Your little brother will be matched to your interests and ideas. The number is 265-5939. • dg

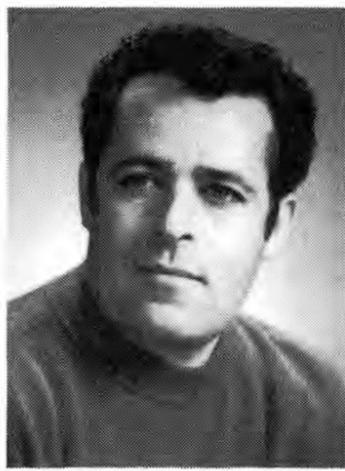


MEETING last week with President Sparks were, from left, Tom Robles, District Director, EEOC, and Lorenzo Ramirez, EEOC Regional Director from Dallas, Tex. Bob Garcia, head of Personnel Department 3230, is at right.



Dorothy Hoeke — 5600

15



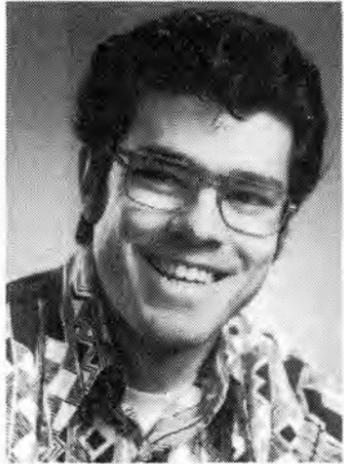
Dick Silva — 8257

10

MILEPOSTS

LAB NEWS

January 1973



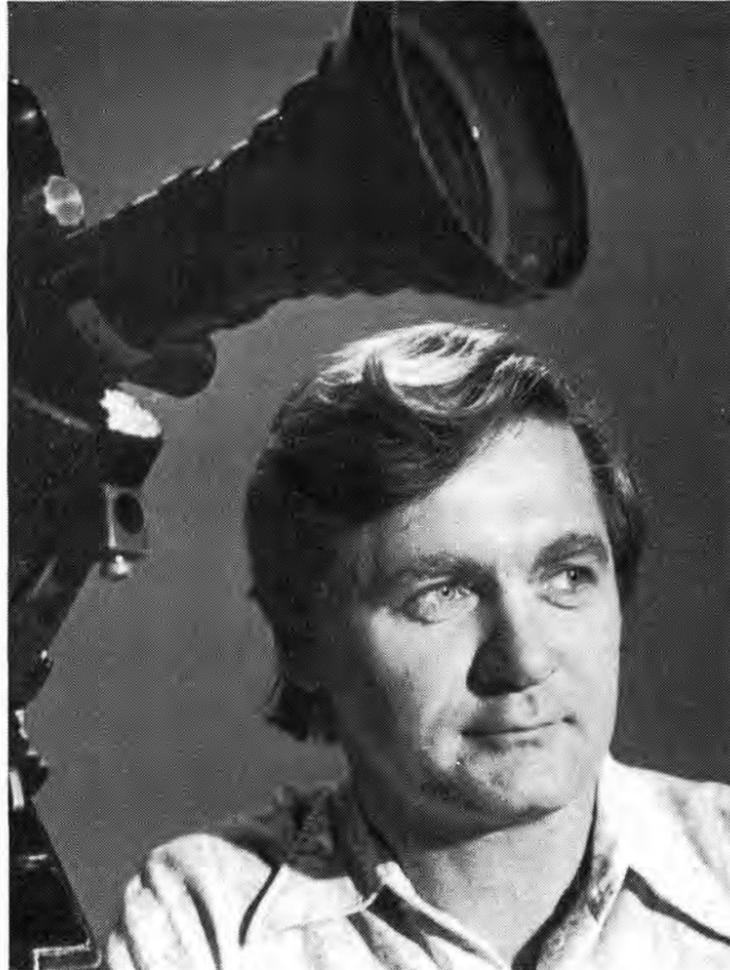
Bob Cozzo — 9132

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Theodore Ortega — 4513

15



Wayne Gravning — 7544

15



Robert Cranfill — 9484

15



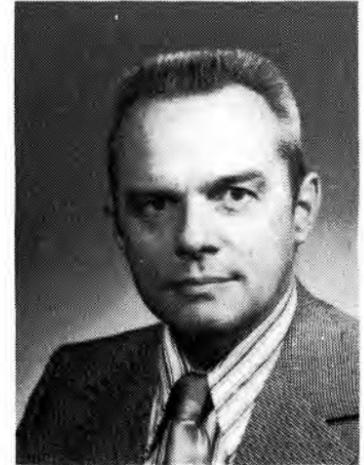
John Christopher — 3111

25



Edward Coca — 7134

15



Norris Harrell — 1831

15



Marion Burnett — 8411

10



Gerald McCoach — 1432

10



Raymond Clark — 5245

10



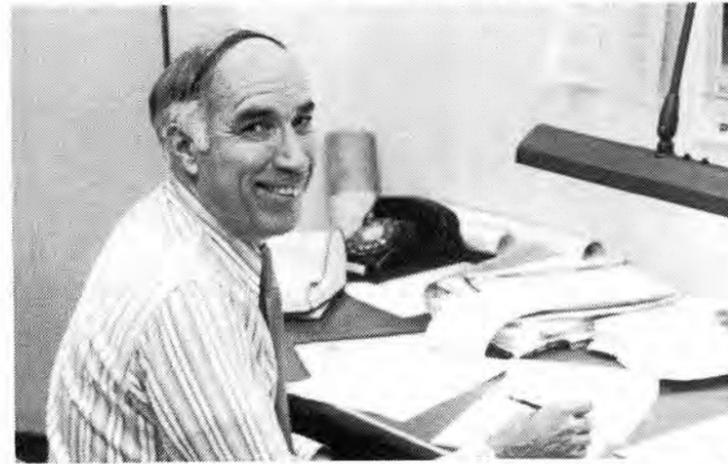
Gilbert Lovato — 7131

15



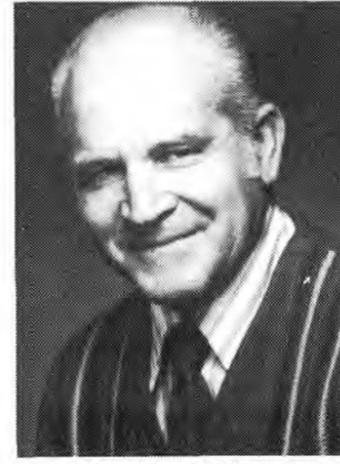
William Pepper — 5626

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Carlton Scott — 8353

20



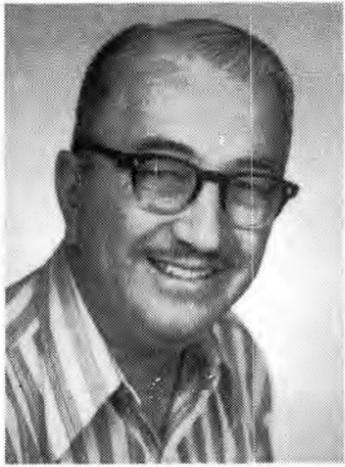
James Harrell — 9342

20



Dorothy Hummer — 4363

15



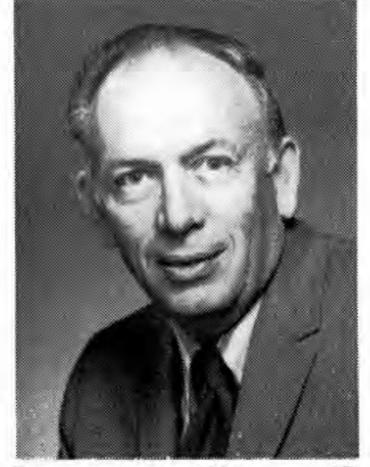
Jerry Ward — 8412 20



Charles Davis — 4512 20



Florence Macpherson — 3144 15



Ernest Bolton — 4332 25



Hazel Bailey — 9353 20



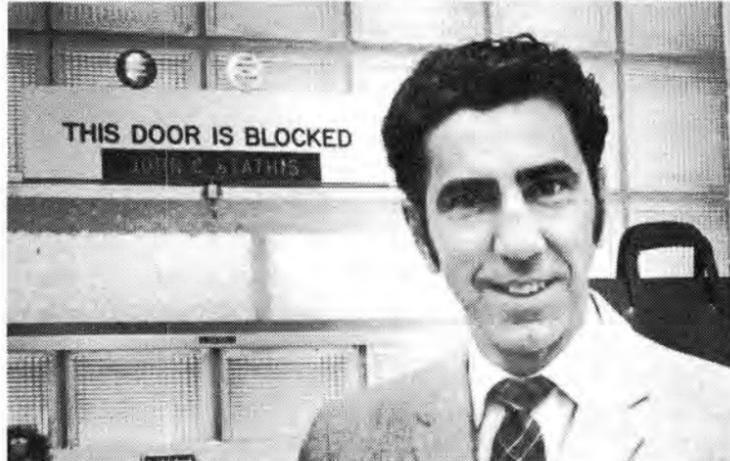
John Garcia — 4518 20



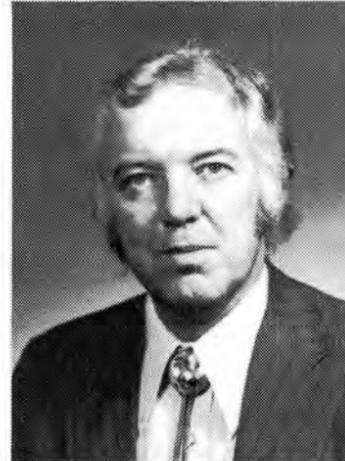
John Lowery — 4515 10



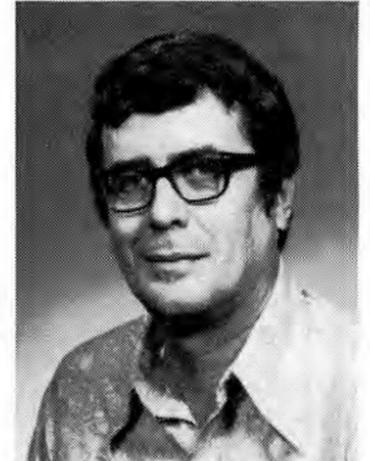
James Allen — 9472 25



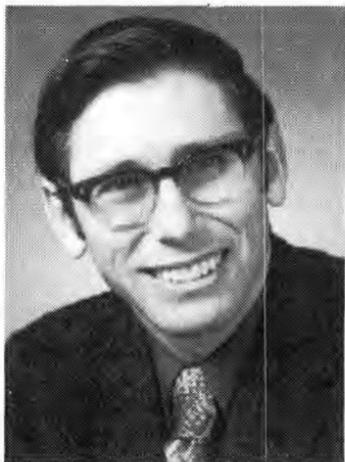
John Stathis — 3148 15



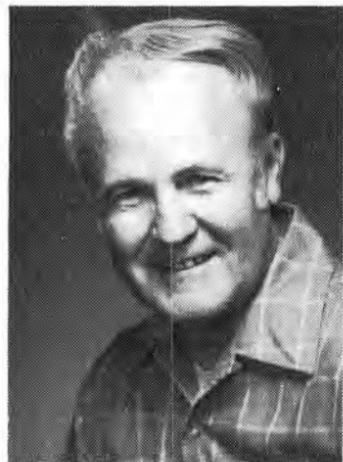
William Atkins — 1614 20



Robert Carleton — 7131 20



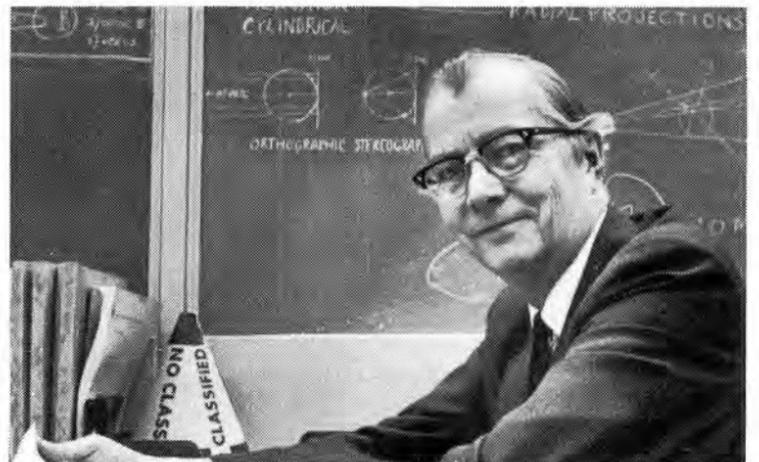
Steve Folkendt — 8136 10



Lawrence Myers — 9474 20



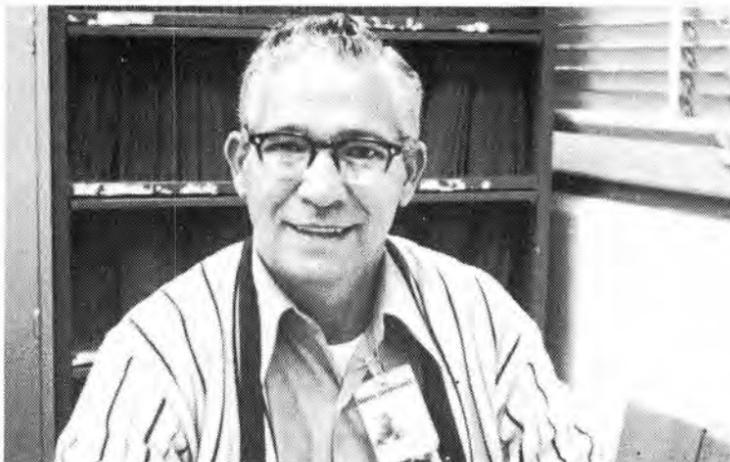
Mary Couch — 5411 20



Richard Richards — 7652 25



Owen Thomas — 8323 20



Bernardo Gallegos — 7111 25



Fred Shoemaker — 9132 20



George Austin — 4518 25

Speakers

P.E. Jockle (9323) and J.O. Davis (9334), "Design and Development of a Four-Foot by Six-Foot Explosion Proof Window," 14th Explosive Safety Seminar, Nov. 8-10 New Orleans, La.

W. Beezhold (5112), "The Many Uses of the Ion Accelerator," Physics Dept. Colloquium, Montana State Univ., Dec. 8, Bozeman.

D.J. Thompson, G.E. Tucker and B.R. Armijo (all 3113), "Characteristics of the Harshaw TLD Card — as Used at Sandia Labs," 7th Mid-Year Symposium of the Health Physics Society, Dec. 11-14, San Juan Puerto Rico.

S.T. Picraux (5111), "Increased Release of As During Annealing of Sb-Implanted GaAs"; G.W. Arnold (5112), "Nucleation and Crystallization in Ion Implanted Glass," and "Defect Aggregation in Ion Implanted GaAs"; C.B. Norris, C.E. Barnes and W. Beezhold (all 5112), "Depth Distributions of Optical Centers in Semiconductors from Cathodoluminescence Spectra"; C.E. Barnes and H.J. Stein (both 5112), "Photoluminescence and Optical Absorption in Low Temperature Ion Bombarded CdS"; S.M. Myers (5111), W. Beezhold (5112) and S.T. Picraux (5111), "Implantation and Diffusion of Cu in Be"; D.K. Brice (5111), "Ion Implantation Deposition of Energy into Electronic Processes in Silicon and Germanium Targets"; C.B. Norris (5112), K.L. Brower (5112) and F.L. Vook (5110), "Ionization Effects in Ion Implanted Silicon"; H.J. Stein (5112), "Calorimetric Determination of Ion Induced Absorption in GaAs at 1.06 μm "; E.P. EerNisse (5112), "Lateral Stress Measurements in Ion Implanted Metals and Insulators"; J.A. Borders (5111), "The Effect of Edge Dislocations on Channeling Yields in Silicon," III International Conference on Ion Implantation in Semiconductors and Other Materials, Dec. 11-14, Yorktown Heights, N.Y.

F. Biggs (5231), "Singular Value Decomposition in Data Analysis," UNM Numerical Analysis Seminar, Dec. 13.

D.H. Weingarten (1431), "The Future of Hybrids"; F.L. English (1433), "Beam Lead Interconnection Technology," Hybrid Microcircuit Technology Workshop, Nov. 12-14, Dallas, Texas.

L.F. Shampine (1722), "Numerical Experience With Gear's Adams Code," Numerical Analysis Special Interest Group Meeting, Nov. 13-15, LLL.

E.J. Graeber (5525), "X-Ray Crystallography," Sandia High School, Nov. 15.

H.S. Levine (5324), "Homogeneous Bubble Nucleation in Surface Active Systems," Conference on Vapor or Superheat Limit Explosions, Nov. 20-21, Univ. of Michigan.

N.J. Magnani (5531), "The Effect of Stress Intensity and Temperature on the Stress Corrosion Cracking Behavior of U-4 1/2 wt% Nb," Army Materials & Mechanics Research Center, Nov. 28.

W.J. Patterson (5627), "The Sandia Terradynamics Program Tests and Analysis," Fuze/Munitions Environment Characterization Symposium, Nov. 28-29, Picatinny Arsenal, Dover, N.J.

W.J. Brya and P.M. Richards (both 5132), "Frequency Moments of Magnetic Light Scattering in NiF_2 "; Richards and Brya, "Frequency Moment for Two-Magnon Light Scattering at 0°K "; L.C. Bartel (5151), "Model Calculations of the Paramagnetic Susceptibility for the Modified Zener Model of Ferromagnetism"; P. Richards (5132) and M.B. Salamon (Univ. of Ill.), "EPR in K_2MnF_4 : A Two-Dimensional Heisenberg Paramagnet," 18th Annual Conf. on Magnetism and Magnetic Materials, Nov. 28-Dec. 1, Denver.

J.W. Reed (5644), "A Climatology of Distant Airblast Propagations," Acoustical Society of America Meeting, Nov. 28-Dec. 1, Miami Beach, Fla.

R.L. Gerlach (5332) and A.R. DuCharme (5331), "L-Shell Ionization Cross Sections in Auger Electron Spectroscopy of Solid Surfaces"; J.M. Hoffman (5346), G.J. Lockwood (5224) and G.H. Miller (5224), "Emission Cross Sections for N^{+2} Ions Incident on an N_2 Gas Target," APS Meeting, Nov. 29-Dec. 1, Menlo Park, Calif.

R.D. Wehrle (1912), "Sandia Laboratories Power Source Goals and Requirements," Symposium on Battery R&D Goals and Requirements by User Organizations, Southern Calif.-Nev. Section of the Electrochemical Society, Dec. 1.

N.R. Armstrong (5154), "Voltammetry of Benzaldehyde and Substituted Benzaldehydes in Sulfolane," 1972 Southwest Regional Meeting of the ACS, Dec. 3-5, Baton Rouge, La.

C.J.M. Northrup, Jr. and R.C. Heckman (both 5322), "Thermodynamics of Selected Metal Hydrogen Systems"; R.C. Heckman, R.C. Lincoln and H.P. Stephens (all 5322), "High Temperature Calimetry of Liquid Metals and Related Problems of Thermometry," AEC In-House Conference on Thermodynamics, Dec. 4-5, Denver.



SURROUNDED BY THE CAVALRY saddles he's collected, John Kay holds a prized 1874 McClellan. His restorations are authentic; he uses only original equipment in replacing a missing cinch or strap. When the Cavalry was discontinued in 1941, saddles sold for \$15. It's different now.

History in Leather

When the U.S. Cavalry swoops over the hill to save the pioneers and climax the Western, John Kay (4551) stares at the saddles.

While the rest of the audience is frantically urging the Cavalry to get there in time to decimate the bad guys, John is frantically cataloging accoutrements — 1874 McClellan, same with scabbard, Whitman without skirts, McClellan artillery. . .

It isn't that John is disinterested in the plot. But his hobby is Cavalry saddles, bridles, bits, scabbards, saddle bags — the non-uniform gear of the U.S. Cavalryman.

The hobby has some very real rewards. One is the fun of searching out the stuff. John has acquired part of his six-saddle collection by answering ads and dickering by mail with saddle sellers. "It's more fun though to stop in a Western town, ask the service station man for a saddle shop, then convince the shop's proprietor that you're really serious about old saddles and other gear. He usually won't have any, but he just might. Or he might send you over to talk with a grizzled oldtimer who has one, or part of one — or who served with the Cavalry and wishes he'd kept his gear when he got out."

Another reward is that saddles are a kind of tangible history. There's a mystique about

them. They're all that remains now of a horse/rider/gear unit that played a vital role in the history of the West. John, like other artifact collectors, has become something of a history buff. Although no saddle has markings that permit precise association with a given fort or battle or expedition, the saddles do provide clues that lead collectors into some fascinating detective work.

Some clues are simple enough — McClellan saddles (designed by the famous Civil War general) were most common: there's a Civil War model, an Indian Wars model, an 1886 model, a 1904, and a 1928. Cavalry Headquarters in Washington often saw a need for improvements to existing models and sent out change orders for field retrofit; each model thus has several variations. Then too, some local saddlemakers followed Washington's instructions to the letter; others were rather more cavalier. The clues are there.

The U.S. Cavalry was not noted for patience with its foes. Our theory has always been that riding all day on a saddle split down the middle would make anyone ill-tempered. But John assures us that they were quite comfortable, that the center split allowed ventilation for horse and rider.

And there goes another theory. •bh

Authors

R.M. Bowen (Rice Univ.) and P.J. Chen (1721), "Acceleration Waves in Anisotropic Thermoelastic Materials With Internal State Variables," Vol. 15, Nos. 1-2, ACTA MECHANICA.

J.W. Nunziato (5161) and W. Herrmann (5160), "The General Theory of Shock Waves in Elastic Non-conductors," Vol. 47, No. 4, ARCHIVE FOR RATIONAL MECHANICS AND ANALYSIS.

N.J. DeLollis (5332), "The Use of RF Activated Gas Treatment to Improve Bondability," Vol. 8, No. 6, JOURNAL OF THE ADHESION SOCIETY OF JAPAN.

R.J. Baughman and R.K. Quinn (both 5154), "Preparation, Single Crystal Growth, and Characterization of PtSi and PtGe," Vol. 7, No. 10, MATERIALS RESEARCH BULLETIN.

F.J. Conrad, R.G. Dosch, R.M. Merrill (all 5521), and D.E. Wanner (5525), "The Chemical Characterization of Silicon Germanium Thermoelectric Alloys," Vol. 61, No. 3, ANALYTICA CHIMICA ACTA.

M.J. Forrestal and H.C. Walling (both 9324), "Axisymmetric Plastic Response of Rings to Short Duration Pressure Pulses," Vol. 10, No. 10, AIAA JOURNAL.

M.J. Sagartz and M.J. Forrestal (both 9324), "Bending Stresses Propagating From the Clamped Support of an Impulsively Loaded Beam," Vol. 10, No. 10, AIAA JOURNAL.

R.T. Meyer (5324), "Nitrogen Thermochemistry During the Combustion of Zirconium Droplets in N₂/O₂ Mixtures," Vol. 4, No. 4, HIGH TEMPERATURE SCIENCE.

P.J. Roache (5643), "On Artificial Viscosity," Vol. 10, No. 2, JOURNAL OF COMPUTATIONAL PHYSICS.

P.H. Adams (9331), "Strain Measurements on Carbon-Carbon Cylinders," Vol. 11, No. 3, ISA TRANSACTIONS.

F.W. Bingham and J.K. Rice (both 5246), "Inner-Shell Excitations in Close-Encounter O⁺-Ne Collisions at 50-200 keV," Vol. 6, No. 5, PHYSICAL REVIEW A.

D.K. Brice (5111), "Three-Parameter Formula for the Electronic Stopping Cross Section at Nonrelativistic Velocities," Vol. 6, No. 5, PHYSICAL REVIEW A.

R.L. Gerlach (5332) and A.R. DuCharme (5331), "Backscattering Cross Sections for Ionization of

Surface-Atom K Shells by Electron Impact," Vol. 6, No. 5, PHYSICAL REVIEW A.

R.A. Langley (5111), "Range-Energy Relations for N, Na, and Ar Ions (0.3-2.0 MeV) in Ar, N₂, O₂, and Air," Vol. 6, No. 5, PHYSICAL REVIEW A.

L.M. Barker and R.E. Hollenbach (both 5163), "Laser Interferometer for Measuring High Velocities of Any Reflecting Surface," Vol. 43, No. 11, JOURNAL OF APPLIED PHYSICS.

J.E. Schirber (5150), "Fermi Surface of Mg Under Hydrostatic Pressure," Vol. 6, No. 10, PHYSICAL REVIEW B.

L.P. Mix (5243), "Nonlinear Coupling of Ion-Acoustic Waves in a Collisionless Plasma," Vol. 15, No. 11, THE PHYSICS OF FLUIDS.

J.T. Grisson (1412) and A. Slade (U. of Miss.), "Premature Release: Cause and Cure," Feb. 1973 issue, BOW & ARROW magazine.

L.P. Bradley and G.W. Kuswa (both 5242), "Neutron Production and Collective Ion Acceleration in a High-Current Diode," Vol. 29, No. 21, PHYSICAL REVIEW LETTERS.

J.N. Johnson (5133), "An Analysis of Thermally-Induced Plane Waves in Elastic-Plastic Single Crystals," Vol. 20, No. 6, JOURNAL OF THE MECHANICS AND PHYSICS OF SOLIDS.

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7. Include name and organization
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MISCELLANEOUS FOR SALE

SEARS chain saw, lightweight, direct-drive Sportster, 17" bar, \$125. Hunt, 299-2967.

DRAFTING INST., top of the line K-E (Paragon; LeRoy lettering set, complete.) Perryman, 247-8485.

SEWING MACHINE, Kenmore, zig-zag, button holer, decorative stitches, all metal cabinet included; Cosco high chair, \$6. Seamons, 298-5683.

WASHING MACHINE, RCA Whirlpool, working condition, \$20. Caskey, 294-3218.

8' CABOVER CAMPER, 1960 model, old but well equipped, complete w/jacks, 5-gal. gas tank, \$400. Frasier, 299-6933.

TO GIVE AWAY: Reg. German short-haired puppy to good home, 6 mos. old. Peters, 266-0017, 8-5.

JACUZZI irrigation pump, 1 hp, 1 1/2" inlet and outlet, \$75, 3 yrs. old. Martin, 869-2049.

SKI BOOTS, size 11A, Grenoble, Fit Sport, \$15. Coleman, 299-8321 after 5:30.

LHASO APSO dog stud, proven, 2 yrs. old, AKC reg., extensive championship background. White, 299-6411.

GARRARD SL55B turntable w/M93E Shure cartridge, base & dust cover, \$65. Chavez, 265-4784.

AQUARIUM stand, 30" tall, \$12. Weingarten, 266-3549 after 5:30.

WINCHESTER, Model 62-A rifle, 22 L.R.; Philco antique table model radio, sell or trade for Indian items. Smitha, 266-9977.

BELL & HOWELL 35mm slide projector, headliner 303, w/tray, \$35. Cano, 296-6955.

BABY CRIB & mattress, \$15; amateur radio station, Viking II transmitter, HQ-140-X receiver plus misc. Jones, 298-8492.

MANDOLIN, \$30; 3-light wrought iron fixture w/blue glass, \$12;

wide gold framed mirror, \$10; 360-day German clock, \$8. Burns, 242-2407.

SKIS, 190cm, metal w/bindings, \$30. Basham, 268-7968 after 6.

WESTINGHOUSE auto. washer, used, 10 yrs. old, in working order. Peabody, 296-6239.

70 BEEHIVES w/bees, most hives 2 stories, some extra med.-depth supers, on reg. location or to be moved, all heavy w/honey. Mills, 869-2045.

MARTIN 000-28, 1948, w/hard shell case, \$500; Les Paul custom w/hard shell case, \$450; Gibson super 400, 1936, w/hardshell case, \$1500; Snyder, 264-7181.

SEARS vinyl cartop luggage carrier, 42"x60", \$15; 2 exterior doors for house, 36"x-78", \$10 ea. Graving, 299-0117.

DOG HOUSE, Sears, used 2 months, \$15; 12 ga. shotshell reloader, Martin, 299-6768.

STEREO, Marantz 2245 receiver, Marantz IMP VII speakers, dual 1218 turntable w/base & dust cover; Shure M91ED cartridge. Mortensen, 298-5348 after 5.

LUDWIG drum set, 4 pieces, \$500 worth for \$250. Stueber, 299-2414.

WESTERN pleasure saddle, 15" tree, \$40. Roth, 877-4997.

GERMAN shorthaired pointer, 2-yr.-old male, 80 lbs., liver & white, AKC, reasonable to good home. Baughman, 299-3785.

GO CART, needs work, \$50. Lewis, 294-1692.

POWDER (warm-up) ski pants, by Obermeyer, floral pattern, men or women, medium, pant-leg protectors, boot clips, \$15. Keeling, 268-2275.

WHITE vinyl couch and chair matching end tables & coffee table, \$100. Greenwood, 298-5268.

ROTISSERIE Carousel, \$10; floor fan, \$10; elec. knife, \$5; blender, 2-spdl., \$5. Miyoshi, 298-0666.

GE Mobile Maid dishwasher, \$60; brown early American recliner, \$35; avocado bean bag chair, \$12.50. Stein, 299-8875.

FORD BUCKET SEATS, 2, make offer. Hindi, 299-8996.

ELECTROLUX VAC., \$7.50; Hoover upright, \$18; rabbit hutch, \$5. Johnson, 255-5427.

GARAGE SALE, Sat. 27th, 9 am to 5 pm; books, household

items, hardware, electrical, toys, trains, etc., 2808 Mesilla NE. Schuch.

SAINT BERNARD PUPPIES, no offer over \$175 refused. Keiner, 299-7311.

2-BDR. 12x52 '69 Brookwood mobile home, furnished, w/washer & dryer, at Leisure Mt. Park in Tijeras, \$4000 or will consider lease. Moore, 298-9280.

LOWREY, large theatre organ H25R, note pedal, presets, percussion, piano, etc., reverberation, Leslie, recently reworked, \$700 under book. Jones, 255-5622.

GAS RANGE, \$20; elec. clothes dryer, \$40; refrig-freezer, \$35; lg. window swamp cooler, \$30. Barton, 299-7912.

3-CHANNEL HEATHKIT CB radio & antenna, \$35; dinette set, \$15; overcoat, 42R, \$30; new 6:70x15 tires, \$10 ea. Lassiter, 298-2461.

PORT. TYPEWRITER, Underwood Olivetti, w/case, recent model, \$65; 8mm movie camera, Kodak Brownie II, \$8. Fuller, 299-4785.

GONSET G50 six meter AM XCVR w/3 el. beam, SWR bridge, outboard BFO, xtals, manual, \$100. Woods, 296-4741.

MEXICAN FURNITURE, new, dining set, bar, roman coffee tables, buffets & more, all hand carved. Butler, 296-8095.

TIRES: 4 Uniroyal glas-belted, white sidewall, J78x15 tires, more than 1/3-tread left, all for \$24. Snelling, 268-5895.

HOTPOINT refrig., 18 cu. ft., lg. frozen food section, brown color, \$100; infanseat baby carrier, \$7. Beard, 298-9441.

DISHWASHER, Whirlpool port., coppertone, \$110; tan short shag rug, 9x12, \$20. Reed, 299-7425.

TRANSPORTATION

SHARE IN MOONEY, fast, economical plane, 40 hrs. SCMOH, new radios, instruments, Xpandr, paint, interior, ELT. Total IFR. Elliott, 256-7909.

'63 VW, recent overhaul, painted, \$395. Mason, 299-2836.

26" BICYCLE, J.C. Higgins, coaster brake, \$15. Willey, 255-1469.

'71 TRIUMPH Bonneville, 650 CC's w/4500 miles, \$900, recent tune-up. Seller, 299-4017 after 5.

'69 PONTIAC GTO, PS, P disc B,

AT, Michelin tires, Monroe HD shocks. Young, 294-1884.

'72 FORD Maverick, 2-dr., 6-cyl., std., 7000 miles, has warranty, 32 mpg, extras, \$1850. Schneider, 299-3769.

'67 MERCEDES-BENZ, 200D (diesel), 4-dr., new engine, 45 gal. aux. gas tank, \$1700. Drozdick, 1-864-7687 or 298-9244.

YAMAHA engine & frame, rebuilt, \$350 or best offer. Robert, 299-3848 after 4.

'66 SUZUKI S32 150cc twin, 9000 miles, w/baggage carrier, service manual, tool kit, etc. \$300. Carlson, 299-6610.

'71 COMET, V8, 4-dr., 13,000 miles, PS, AC, AT, tinted glass, radio, Polyglas tires, one owner, \$2500. Guttman, 299-7031.

ENGINE, 318 cu. in. Dodge truck, complete, \$150. Flowers, 281-3458.

'64 CHEV. Impala 2-dr., V8, PS, AT, R&H, \$550. Faucett, 255-0320.

'56 CJ5 4x4 WILLYS JEEP w/tow bar. Silva, 299-6641.

'62 RAMBLER stn. wgn., AT, worn, needs battery, starter repair, or use of parts, tow away, make offer. Moss, 298-2643.

'70 VW BUG, AM/FM radio, \$1100. Fenimore, 298-8052.

'64 MALIBU, 4-dr., V8, AT, new ww tires & battery, \$550. Delnick, 298-5276.

'67 SKIDOO snowmobile, 16hp, w/one-unit trailer. Smith, 299-7506.

'68 BUICK Skylark Custom, 350V8, PS, AC, AT, PB, new steel belted tires, vinyl top. Salazar, 296-2352.

'69 LTD FORD, 2-dr., 351 engine, AC, pwr everything, new brakes & tune up, \$2100. 40,000 miles. Lannon, 255-8959.

'66 CHEV Belair, 4-dr., AC, PB, PS, AT, any reasonable offer accepted. Stoeber, 296-3717.

'68 VW stn. wgn. (Microbus), low mileage, radio, trailer hitch. Kaiser, 296-5215.

'62 RAMBLER 4-dr. stn. wgn., V8, AT, PS, PB, \$150. Stevens, 299-6086.

'62 GMC 3/4-ton pickup, V6, 4-spdl., rebuilt engine, Michelin radial tires. Constant, 281-5670.

'69 VW bug, \$850. Hill, 255-6538.

WANTED

NEED RIDE to Area I from Quemado NE — Bear Canyon Village. Neiswander, 294-1312.

GAS RANGE, apt. size, 30" wide or less, clean & good working order. Butler, 242-5398.

BASEBALL SHOES, blk., size 9 1/2 or 10. Lujan, 299-4820.

TRADE 1969 90cc Kawasaki for Honda dirt bike, 90cc or larger, year not important, have extra sprockets. Frasier, 299-6933.

BRICK, Roman style cap, yellow or ivory, size 11 1/4x4 3/4x1 1/4, need a few, no longer available new. Weems, 268-1702.

LONG HAIR, male, red Dachshund puppy. Browne, 345-3910.

UNICYCLE for beginner. Trump, 299-5162.

BOAT, tri-hull open bow, 16-18', 2-4 yrs. old, inboard/outboard preferred, water skis, ski belts, etc. Chandler, 296-3323.

TO RENT motor boat over Easter vacation, experienced, careful skipper, prefer 16-19' size w/50 hp or more. Rose, 298-4849.

FOR RENT

2-BDR. furnished house, available Feb. 17 through July 17, married couple or w/one child only. Falacy, 344-9548.

ROOM for rent: lg. bdr. w/private bath, share kitchen & laundry facilities, woman only, \$80. Joyce George, 299-9101.

NEW, furnished 1-bdr. apt., deluxe features, shag carpeting, dishwasher, laundry, \$145/mo, 217 Pennsylvania NE. 266-3955.

UNFURN., 2-bdr. apt., fully carpeted, enclosed yard, security gate, heated pool, rec. area, children, small pets, NE. Pike, 296-0025.

TWO trailer spaces, located in Bernalillo. Gregory, 867-2432.

REAL ESTATE

3-BDR. HOUSE, hw/floors, big back yard, 927 Jefferson NE. Hollowa, 255-6938.

LOST AND FOUND

LOST — White metal earring for pierced ears, VW & house keys in black leather container, man's black overcoat, 6 keys on ring w/tag, gold dangle earring, gold circle earring for pierced ears. LOST AND FOUND, tel. 264-2757, Bldg. 832.

FOUND — 1 key, shell earring, woman's brown leather glove, white metal earring, clip on sunglasses. LOST AND FOUND, tel. 264-2757, Bldg. 832.

Outasight!

CORONADO CLUB ACTIVITIES

HAPPY HOURS for the next couple of weeks ought to please about everyone. Tonight, for instance, fried shrimp is the buffet feature and the Prisoners will be loose on the bandstand. Yolanda Adent and piano will entertain in the main lounge. Next Friday, Feb. 2, Frank Chewiwie will make the happy music while Rio Grande style Mexican food is spread for the buffet. Denny Gallegos and guitar will entertain in the main lounge. On Friday, Feb. 9, veal cutlets will top the buffet while Lou Spring and the Countrymen play for dancing.

Happy Hours start right after work on Friday evenings and run with special prices (cheap) until 10 p.m. The buffet is served from 6 to 8 p.m. and the band plays for dancing from 7 to 10 p.m. The main lounge entertainment starts at 9 p.m. and continues until midnight.

THE CINEMA CLASSICS program got off to a great start last month and the one set for Wednesday, Feb. 14, should be another winner. In the first place, another Betty Boop cartoon will be shown. Betty Boop cartoons were produced before the Hayes office went into operation. Then Robert Benchley will explain "The Sex Life of a Polyp." Robert Benchley was an essayist, humorist, screenwriter, and Great American during the 30's and early 40's. Now, (are you ready for this?) Mae West and Cary Grant will star in the feature attraction: "I'm No Angel." The program starts at 7:30 p.m. Admission is free to members.

FAMILY VAUDEVILLE NIGHT scheduled Saturday, Feb. 3, will feature a tremendous stage show by a group of talented youngsters called Gymnastics Unlimited. They will leap around a lot, work on the parallel bars and generally make you feel old and out-of-shape. The movie comedy might help: It's called "No Time for Sergeants" and stars Andy Griffith. Admission is free to members and families. Super sandwiches will be available and Happy Hour prices will be in effect starting at 6 p.m.



DONNA REEL

Miss New Mexico—Universe

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MARK YOUR CALENDAR now for the Kids Carnival scheduled Saturday, Feb. 17, from 11 a.m. until 3 p.m. Ten tickets to the games on the midway will sell for 35 cents and there will be prizes, prizes, prizes. Hot dogs and other goodies will be available and clowns will entertain, etc. The kids should love it. It's just for them.

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TRAVEL NEWS — Signup for the Malaga, Spain, trip is going very well, according to Bud Wheeler (3251), Club travel director. The trip is set May 17-25 and costs \$354. Package includes all transportation, accommodations at the deluxe Holiday Inn on the beach at Malaga and choice of lunch or dinner there each day. A \$100 deposit for this trip is due at the Club office by Feb. 15.

Other trips in the planning stage include a tour of Italy, a transportation only trip to Europe and a return to Mazatlan, Mexico, in November. If you are interested in any of these trips, give Bud a call — ext. 5656.

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TEENAGERS can do their thing Saturday, Feb. 10, when a group called "Fat Chance" will be wired into the bandstand from 7:30 to 10:30. Dan Lincoln of KQEO will keep things moving as master of ceremonies. Member parents should pick up tickets for their youngsters at the Club office.

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