



SANDIA LAB NEWS

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D. R. Cotter to Return as Director Of 1800 Organization

Donald R. Cotter is returning to Sandia July 15 as director of Exploratory Systems Studies 1800 after almost a two-year leave of absence to serve as Special Assistant for Southeast Asia Matters, Office of the Director of Defense, Research and Engineering in Washington, D.C.

At the time of his appointment to the Department of Defense position in August 1966, Mr. Cotter was director of Advanced Systems Research at Sandia.

His Washington assignment was to identify research and development requirements for the Department of Defense relative to the conflict in Southeast Asia. For a four-month period preceding the appointment, Mr. Cotter served as consultant to the Department of Defense and visited South Vietnam, Thailand and Malaysia for briefings by military organizations. He also was a member of a special survey team on problems of the Middle East.

Mr. Cotter joined Sandia in 1948. He became a division supervisor in 1950, manager of the Systems Engineering Department in 1957 and director of Advanced Systems Research in 1961.

Coronado Club Annual Meeting Set August 5

Annual meeting of the membership of the Coronado Club is scheduled at 8 p.m. Monday, Aug. 5, at the Club.

Primary business will be election of four new members for the Board of Directors. The nominating committee has proposed the following candidates for two year terms:

Robert H. Banks (5100), Max M. Newsom (5613), Howard R. Shelton (3134) and John K. Nakayama (1514).

Metal Droplet Combustion Paper Presented in France

Lloyd S. Nelson of Aerospace Sciences Division 5271 will present a technical paper at the 12th Symposium (International) on Combustion to be held July 14-20 at the University of Poitiers, France.

Entitled "Combustion of Zirconium Droplets in Oxygen/Rare Gas Mixtures—Kinetics and Mechanism," the paper is co-authored by H. S. Levine (also 5271), and Daniel E. Rosner and Shelby C. Kunsius, both of AeroChem Research Laboratories, Inc., Princeton, N.J. Mr. Nelson's presentation will be during the session on heterogeneous combustion of metals.

He and Mr. Levine have been working continuously in the field of metal combustion for the past five years (see LAB NEWS May 6, 1966). Last year they felt the experiments on zirconium were far enough along to attempt a theoretical treatment in collaboration with the AeroChem staff.

Mr. Nelson's unique approach uses a flash lamp or pulsed laser to form and ignite the metal droplets which are studied as they fall in an atmosphere free of contamination. The combustion occurs at about 4500°K, roughly 2000° above most high temperature reactions which can be performed under controlled conditions. At these temperatures, the droplets are brightly luminous thus the method is especially well suited for producing photographic images.

While in Europe, Mr. Nelson will visit the Philips Zentrallaboratorium in Aachen, Germany, and the Centre D'Etudes de Chimie Metallurgique in Vitry-sur-Seine, France, to discuss metal burning with other scientists who are working in this field of investigation.

New Agreement Signed



NEW THREE-YEAR AGREEMENT was signed July 3 between management and unions after ratification of terms of the contract by union memberships. Signing were (l to r) Jacob Young, Jr. (4253), president, Metal Trades Council; Byron L. Stewart (4233), president, Office and Professional Employees International Union, Local 251, and E. C. Peterson, manager, Labor Relations Department 3220.

'The Myth and Reality'

Mexican American, Indian Work Problems Discussed by Industry

The Southwest Employer Conference on Mexican American and Indian Employment Problems, underway in Albuquerque this week, is an example of affirmative action being taken by Sandia Laboratories and other companies to meet the challenge of providing jobs for those in minority groups.

Helping to organize the meeting, July 10-12, was J. Robert Garcia, who is on special assignment at Sandia to aid in the Equal Employment Opportunity (EEO) program. The conference was co-sponsored by Plans for Progress, the Inter-Agency Committee on Mexican American Affairs, and the National Citizens Committee for Community Relations (under the U.S. Department of Justice). Chairman of the conference was W. Paul Thayer, president, Ling-Temco-Vought Aerospace Corporation.

General session began Thursday with talks by Vicente T. Ximenes, EEO commissioner and chairman of the Inter-Agency Committee on Mexican American Affairs; the Rev. Henry J. Casso, Episcopal Vicar for Urban Affairs for San Antonio; and Wendell Chino, president, National Congress of American Indians.

Four panel discussions were held concurrently later in the morning on the subject, "Communicating with the Barrio and the Reservation: The Myth and Reality." Ray B. Powell, vice president 3000, was the industry representative on one of the panels. Each panel also included persons from the barrio and reservation to express their viewpoints. Other members on Mr. Powell's panel were Joseph Herrera, On-the-Job-Training director, SER-Jobs for Progress, Inc.; John Huerta, tri-regional EEO coordinator, Post Office Dept.; and Joe Fernandez, president, Armijo Community Assn., Albuquerque.

In reference to the discussion, Mr. Powell said:



R. B. POWELL (3000)

"We must explode the myths that create a barrier between people."

"If we are going to help the economically and socially disadvantaged in our society, we must first explode the myths that have been created about these people. There is, for example, the myth that 'these people' are satisfied with their existence and wouldn't leave their barrios (Spanish-speaking neighborhoods in a city, especially the Southwest) and reservations if given the opportunity for well-paying work elsewhere.

"This leads to the biggest myth of all that we entertain about other people—that somehow they are unchangeable. And yet,



D. S. TARBOX (3200)

"New goals will require cooperation between labor and industry."

the most obvious reality around us is that they, and we, are constantly changing—some of us feel even too fast. As the children of the barrio and reservation watch the world changing around them, it will be impossible for anyone to prevent their acquiring new desires and new needs.

"Once we have exploded myths like these and really get to communicating with one another, we must be sure that our communications are not limited to just words. We communicate a great deal more effectively with actions than we do with words.



M. A. McCUTCHAN (3112)

"It's time to design a training program around 'people needs'."

"The lot of the less fortunate in our society must be improved, and it is to the best interest of all citizens that this change be brought about as quickly as possible."

Later in the afternoon, during a general session, J. E. Twomey, manager, corporate EEO administrator, Western Electric Company, discussed WE's efforts to aid the hard-core unemployables.

This morning, concurrent panel discussions were held again. D. S. Tarbox, director of Security and Industrial Rela-

(Continued on Page Two)

Editorial Comment

Remember to Vote on July 15

On July 15, the citizens of Albuquerque will decide whether fluoride should be added to the city's water system.

The "pros and cons" on this issue have been widely discussed, and the reasons put forward by those "for" and those "against" have been published in the local papers. What remains, however, is possibly the most important issue: Will enough citizens exercise their right and their responsibility to ensure that the outcome will actually reflect the feelings of the majority?

Democracy was never designed to be a spectator sport. It is based on the idea that each citizen should form his own views and express them in the court of public opinion where America makes its decisions.

You and I can no longer ride this Freedom Train without paying a fare. We can't sit on our ruminations and expect that somehow "things will turn out right." It just doesn't work that way.

The poet Browning may have felt that "God's in His universe—all's well with the world"; but unfortunately, the United States has not been given a guarantee by Divine canon that it will continue as a republic. Twenty-three other republics have gone down the drain of history! Many of our country's critics, and even some of our most respected historians—Arnold Toynbee, for example—feel that the U.S. is well along the way on the downward trail.

Whether or not we survive as a republic may depend not so much on the major international issues but on how we face up to our "smaller" responsibilities—like registering our vote on July 15.

Cancer 1968: Room For Hope

Be sure to read the article on cancer in this issue of the LAB NEWS. You would be wise to discuss the contents with members of your family. Knowing the warning signals of this dread disease is of the utmost importance since early detection and treatment primarily determine whether a "cure" is possible.

Widespread knowledge of these signals is especially vital since the odds of avoiding cancer are definitely not favorable. Estimates released by the American Cancer Society in its 1968 facts booklet indicate that more than 50 million Americans now living will eventually develop cancer.

Yet there is cause for optimism. One of three cancer patients is now being cured because of early detection and improved techniques. The tragic note, however, is that medical authorities feel this figure presently could be one of two if treatment were started in time.

The article also notes the disturbing increase in cancer of the lung in both men and women. Of the 305,000 people expected to die of cancer in 1968, approximately 55,000—an all-time high—will die of cancer of the lung, the 1968 facts booklet states.

So ask yourself—is that cigarette worth that much? Most doctors feel that cigarette smoking is the primary cause of lung cancer.

If you need another reason to give up cigarettes, think about this. Studies show that in families where the parents smoke, the children also usually smoke. Conversely, when the parents do not smoke, the children usually do not smoke. Apparently, giving good example is still worth a thousand sermons.



LETTER DESCRIBING effectiveness of their training class for volunteer workers at the Suicide Prevention and Crisis Center is discussed by (l to r) Ralph Davies (4382), Bill Dehon (3131), C. R. Pritchett (4300) and Joe Danclovic (3131).

Need for Volunteers

Sandians Assist in Operating Suicide Prevention & Crisis Center

Four Sandians devoted a weekend to training volunteer workers; others are manning telephones and another is coordinating schedules for volunteer workers at the new Suicide Prevention and Crisis Center of Albuquerque. All of them are interested in helping persons who call the center during a period of stress. But more volunteers are needed.

"Persons thinking of taking their own lives now have a place they can call for a sympathetic listener," comments Robert A. Matthews (3464), president of the center (LAB NEWS of Dec. 1, 1967). The Center's telephone number is 247-2244.

The weekend before the Center opened, C. R. Pritchett, director of Purchasing and Traffic 4300; R. R. Davies, supervisor of Purchasing Development Division 4382; and J. Danclovic and W. N. Dehon of Division 3131's development staff conducted classes on "sensitivity training" as part of an overall training program for the volunteers.

"This letter from Bob Matthews is a tremendous reward for the work we did," Mr. Pritchett says.

The letter states in part, "Last night I was at the Center and observed a woman as she talked to a young lady with a problem. The volunteer handled the conversation with ease and confidence. When she finished I complimented her and she said 'All the time I was talking I was thinking of the group sessions we had last weekend.' She had been in your group."

Miss A. E. Padilla (7300) is one of three women volunteers who coordinate the scheduling of volunteer workers for the Center. "We need 84 volunteers to man the Center on an around-the-clock basis each week," she says. "Because we don't have that many trained volunteers, some persons are working more than one shift."

There are four, four-hour shifts and one from 11 p.m. to 7 a.m. every day of the



ANITA PADILLA (7300) schedules volunteer workers for the Center.

week. Persons interested in volunteering their services may call Rev. Rowland Adams at 268-1157 to request an application form. After the application is returned to the Center, training classes are arranged for the volunteer worker.

W. W. Smith (3412), J. G. Lareau (7125), Pearl B. Mellone (3126) and several wives of Sandias are volunteer workers at the Center. J. H. Gibson (3342) is a member of the board of trustees.

"Within about 50 minutes after the Center opened, we had received four telephone calls from different persons who were distressed," Bob Matthews says. "Fortunately the trained volunteers were able to help them."

Continued from Page One

Mexican American, Indian Work Problems

tions 3200, was moderator of a panel discussion on "Developing Union-Industry Cooperation on Minority Problems." Mr. Tarbox has participated in the management/union contract negotiations that have taken place at Sandia during the past nine years. He believes that the solution to the minority unemployment problem calls for cooperation between labor and industry, in addition to the ability and desire of industry to create meaningful work.

"Industry will have to set new goals," he says. "We must know where we're going and how we are going to get there. I feel keenly that meaningless work with pay, but without dignity, is not much better—if any better—than welfare."

The National Alliance of Businessmen, which participated in this meeting, has already indicated that industry as a whole has accepted its responsibility to provide additional jobs. "If you believe in the

American way of life, it's obvious that this effort must be made by industry rather than by the government," Mr. Tarbox adds.

"Industry feels strongly that it should create meaningful opportunities, but the individual must also do his part in preparing for and taking advantage of these opportunities," Mr. Tarbox says. "Finally, industry will have to work with the school systems to ensure that industry's needs are reflected in the curricula. Industry pays a fantastic amount of money in taxes and it has every right to expect that these monies be spent in a way that is better for both the student and industry. Unfortunately, too many of our graduating students are not prepared to meet the needs of industry."

M. A. McCutchan, supervisor of Position Evaluation and Classification Division 3112, was a member of a panel discussing

"Bringing Vocational Education into Line with Industry's Needs." He believes that it is time to design a training program around "people needs." "Until now," he says, "in our vocational programs, we have been training specifically for industry's needs. That program has been successful. But, an even greater challenge is to find jobs for those who are habitually unemployed. To solve this problem, we must find ways of motivating these people."

Mr. McCutchan is chairman of the State Manpower Commission, and is a member of the New Mexico Advisory Council for Vocational Education, and the Study Commission for the Technical Vocational Institute in Albuquerque. Last month he was appointed to the Albuquerque Research Council, an organization which aims to garner all forces in the community into an enthusiastic effort to attract business and industry.

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Sandians Assist in Computer Project For Use by Local Public Agencies

Can computers be used advantageously in the administration of local governments? This question has been under investigation in the Livermore-Amador Valley for some months by the EDP (Electronic Data Processing) Technical Panel for Community Service.

Serving on the EDP project are five employees from Sandia Laboratories Livermore, three from Lawrence Radiation Laboratory, and one from Chabot College.

A report covering the results of their findings was presented at a recent meeting of the joint city councils of the cities of Livermore and Pleasanton. Included in the report was a recommendation that a three-year plan be implemented for the establishment of an EDP system in the Valley.

At the meeting were representatives from city agencies and such other organizations as the Livermore Area Recreation and Park District, Livermore School District, and Valley Community Services District. "All attending indicated interest in adopting the Panel's recommendations. Now money for the plan must be worked into the upcoming budgets," says Harold Brint, one of the EDP Panel members and a programmer-systems analyst in Management Information Division 8323.

"However, as a city councilman pointed out at the meeting," commented Panel member Frank Cupps, a programmer in Numerical Applications Division 8321, "if for some reason cost or other factors cause complications, they can always change to a five-year plan."

The Panel advised the agencies they could benefit by applying EDP to their operations. It was pointed out, however, that although computers make information available faster, produce more accurate data, and in a wider variety of forms, no single local agency could, by itself, justify the cost of an EDP system at the present time.

Some of the operations the Panel found could be performed to much better advantage on a computer include water and sewer billing, preparation of police reports, financial and budget data, and school information.

The Panel's report noted that Berkeley and Hayward are already applying computers successfully to their operations; and eventually, as population continues to grow, the Livermore-Amador Valley agencies must commit themselves to EDP. The Panel felt the optimum time of commitment was now.

Because the successful application of EDP requires judgment based on experience, the Panel recommended that the agencies not commit funds for computer hardware immediately. Instead, they proposed a three-year plan which includes the following steps:

- Each agency would appoint a staff member responsible for data processing and train senior members of their staffs in the use of data processing.
- Planning, hiring and training of personnel in EDP operations, and analyzing of needs would take place the first year.

—Converting applications to the computer, performing work at a computer service bureau, testing, re-evaluation, and study of hardware would occur the second year.

—Analyzing and acquiring of hardware, and the beginning of routine operations will have been completed by the end of the third year.

—Succeeding years would be devoted to a continuing process of reevaluation and upgrading of the system.

Details of the three-year plan were summarized in a network diagram and submitted with the Panel's report. Elaine Brint, Harold's wife, a network analysis assistant in Product Control Division 8161, drew the diagram.

In making their study, the Panel members reviewed and evaluated data sheets submitted by the various local agencies. Although the Panel favored conversion of one application at a time to gain experience, the advantages of integrated systems were discussed.

The cost of alternative EDP systems and approaches was also investigated. The Panel concluded that if the trial period shows the acquisition of a computer to be desirable, a small expandable system would be best, since the cost is reasonable and future reprogramming problems would be greatly reduced. They noted, however, that EDP should not be expected to reduce costs of government or services—that gain is in efficiency and quality of service, not economy.

Various advantages and disadvantages of a common computer facility were also considered by the Panel. Other areas looked at included the individual computer applications for each of the agencies and EDP job descriptions. The Panel also summarized information on data processing education available from junior colleges, private business schools, and the computer manufacturers in the Bay Area.

Another Panel member, Bob Johnson, supervisor of Product Control Division 8161, says copies of the report have been forwarded to the League of California Cities and the International City Managers' Association, among others. "In a recent letter to W. H. Parness, City Manager of Livermore, the City Managers' Association writes that they found the report very interesting and plan to use it in future computer institutes sponsored by their organization. In particular, they were interested in the section entitled 'Unanswered Questions,' since it seemed to provide the agencies with a guide to the problems that could be expected."

Others who serve on the EDP Panel are George Anderson, manager of Design Analysis Department 8330; Burt Wood, systems specialist in Computer Division 8322; G. Earle Mahan, Jr., Administrative Data Processing Systems Analysis and Application Programming Manager, LRL; Robert I. Reid, Data Center Manager, LRL; Karl O. Malmquist, programmer, LRL; and Laura G. Stolowitz, Data Processing Manager, Chabot College.



SEVERAL OF THE SANDIANS who serve on the Electronic Data Processing Technical Panel for Community Service review the report recently submitted by the Panel to public agencies in the Livermore-Amador Valley (background). Shown (from left) are Harold Brint, programmer-systems analyst in Division 8323; Bob Johnson, supervisor of Product Control Division 8161; and Frank Cupps, programmer in Division 8321.

LIVERMORE NEWS

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M. J. Landry to Address SCLL Colloquium July 16

Murphy J. Landry of Advanced Instrumentation Division 7271 will speak at the Livermore Laboratory Colloquium on July 16 on "Lasers and Their Applications." His presentation will include a demonstration of holography.

Murphy joined Sandia in 1965. He was a summer employee in 1963 and 1964. His main efforts at Sandia have been in laser applications. He was involved in work in laser radar (LIDAR—light detecting and ranging), and later developed a method of making copies of holograms. He is currently working on determining angular noise on laser alignment systems.

He is the author of a number of papers. One, on LIDAR, "Laser Transceiver System," was presented at the First Laser International Application Meeting held July 1967 in Paris, and another, on "Laser Ranging," at a meeting of the Society of Photographic Instrumentation Engineering in October 1967 at El Paso, Texas.

He received his BS in physics from the University of Southwestern Louisiana in 1960, his MS in physics from New Mexico State University in 1963, and his PhD in physics with a specialty in quantum electronics, also from NMSU, in 1965.

Further information concerning the colloquium is posted on Laboratory bulletin boards. Tickets are required for admission. A. R. Willis (8313) is host for the colloquium.

Supervisory Appointments



JOHN L. WIRTH to manager of newly-created Exploratory Systems Department 8320, effective July 1.

Jack has been with Sandia Laboratories six years. As a staff member he conducted research in ionization effects on semiconductor devices. In August 1965 he was promoted to division supervisor and most recently has headed Transient Effects Division 5212.

He received his BS, MS and PhD degrees in electrical engineering from Michigan State University. After completing his Master's work, Jack taught one year at Michigan State.

He is a member of Sigma Xi honorary society.



GLEN E. BRANDVOLD to manager of newly-created Product Development Department 8170, effective July 1.

Glen joined Sandia Laboratories Livermore in June 1959. He worked in Preliminary Design Division, a Project Engineering Division, and Special Projects Division until his promotion in February 1966 to supervisor of Advanced Design Division, later renamed Project Engineering Division.

From 1950-55 he worked as an engineer for the U. S. Geological Survey, Boise, Idaho.

Glen received his BS and MS degrees in mechanical engineering from the University of Idaho in 1958 and 1959 respectively.

He is a member of Sigma Tau engineering honorary society and Sigma Xi professional scientific fraternity.

D. K. Dean Awarded MS Degree in Applied Science



David K. Dean received a Master of Science degree in applied science recently from the University of California at Davis/Livermore.

Dave is an engineer in Environmental Test Division II 8125. He joined Sandia Laboratories Livermore in July 1959, following his graduation from Washington State University where he received his BS degree in electrical engineering.

At Sandia, Dave has worked in preliminary and system design. For the past two years his responsibilities have been in electron beam testing.

All of his graduate work was completed under the SCLL Technical Development Program.



ALAN C. SKIROOD to supervisor of Project Engineering Division 8172, effective July 1.

Alan joined Sandia Laboratories Albuquerque in March 1956 and worked in instrumentation development in field test until his transfer to Sandia Laboratories Livermore in 1959. At Livermore he has been involved in advanced systems work and mechanical design in two project groups and in advanced component development.

He received his BS and MS degrees in mechanical engineering from Northwestern University in 1954 and 1956 respectively. In 1955, he participated in a research expedition sponsored by the Snow, Ice, and Permafrost Research Establishment for the Corps of Engineers in Greenland for six months.

Alan is a member of Tau Beta Pi, Sigma Xi, Pi Tau Sigma, and Pi Mu Epsilon honorary societies.

Welcome . . . Newcomers

June 18 - July 1

California	
**Charles W. Beadle, Davis	8121
**Robert L. Berger, Woodland	8174
Larry D. Brandt, Menlo Park	8331
Carolyn J. Casson, Livermore	8232
**Donald V. Edick, Castro Valley	8223
**Frank S. Felicione, Berkeley	8172
Patricia L. Gomes, Livermore	8175
Stanley F. Greenberg, Berkeley	8131
Larry G. Hoffa, San Leandro	8252
*Robert W. Jackson, Berkeley	8223
*Stephen C. Jardin, Mt. View	8114
**Hartley J. Jensen, Davis	8151
Robert N. King, Palo Alto	8141
Linda A. Knowles, Stockton	8242
**Richard F. Koehler, Jr., Mt. View	8182
Ronald L. Pastrone, San Leandro	8223
*Robert K. Pierce, San Lorenzo	8151
Thomas G. Peterson, Oakland	8174
Billy R. Sanders, Davis	8137
Michael J. Sisting, Stockton	8252
Michael A. Soderstrand, Davis	8151
*James P. Wurm, Oakland	8121
Illinois	
Henry M. Witek, Chicago	8182
Mississippi	
Steven W. Burge, State College	8133
S. Terrill Heidelberg, State College	8314
Missouri	
Daniel A. Tichenor, Columbia	8121
New York	
**Ira Lee Silver, Bronx	8141
Ohio	
Ronald C. Young, Rocky River	8314
Oregon	
Ronald J. Bremer, Klamath Falls	8127
Joseph E. Grant, Corvallis	8314
Utah	
**Ernest T. Bramwell, Provo	8314
Returned from Leave	
Herman Folkendt, San Antonio, Texas	8121

*Denotes Rehire
**Denotes Summer Hire

Congratulations

Mr. and Mrs. Al Wright (8124) a son, Curtis Lee, June 30.

Tim Marino (8222) and Cindy Waters married, in Livermore June 22.

Sympathy

To Ruth Flanagan (8210) for the death of her husband in Livermore, June 25.

To Al Ford (8168) for the death of his mother in Williams, Ariz., June 25.

To Frank Moon (8230) for the death of his mother-in-law in Pleasanton, June 17.

To Bill Morehouse (8166) for the death of his father in Auburn, Calif., June 22.



THIS DINING ROOM TABLE and chairs are among the many pieces of furniture made by Mike Levesque (7226) during the past winter. His wife Florence is obviously pleased with the results.

Levesque Furniture Factory Thrives on Faith and Pride

When Mike Levesque (7226) talks about building furniture he doesn't mean just one or two pieces—he means a houseful.

The project more or less started when Mike's wife, Florence, decided she wanted more cabinets in the kitchen. Down came an existing wall, up went a wall of cabinets and cupboards and a new counter top. Both the new storage area and the older units were finished in antique green.

Since then, whenever the Levesques became discouraged while furniture shopping, Mike plugged in his trusty "Shop Smith" and started working away. At first it upset Florence. Mike would ask, "How big do you want the table?" Florence would estimate the size with her hands. From then on the outcome was a big mystery. At no time did Mike ever draw complete plans or a sketch of the finished item.

"Now and then I came across a tiny slip of paper with a particular detail sketched on it, but that's all," Florence says. It was an example of pure faith in Mike's ability. Fortunately, everything turned out great.

There were bunk beds constructed to accommodate innerspring mattresses, a pair of matching desks with clothes drawers on one side for the boys' room, a large, square coffee table which is "kid height" for the den. Mike explains, "The table started out a foot high, but the children thought it was uncomfortable, so I kept lowering it. It's now eight inches from the floor and the children love it. They lean against it while watching TV; they do their homework on it; they sit on it. For all I

know, they even jump on it."

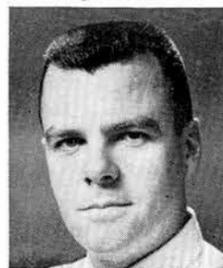
Last winter the Levesques decided their living room and dining room needed new furniture. They liked the dark-toned, Mediterranean-type carved furniture which is very popular right now. Off to the lumber yard went Mike. "I asked for pine boards with lots of knots because I wanted an interesting surface," he explains. He mixed his own dark stain from lamp black, raw umber and secret ingredients.

All in all, Mike made a large, dining-room table and eight chairs (plus one which served as a pattern); a long, low hi-fi enclosure; four coffee or end tables; and a liquor cabinet which stands out only bottle-deep from the wall. The most difficult item proved to be an octagon-shaped table.

Mike's advice to prospective furniture builders: do projects within your ability and have the necessary tools.

Mike's biggest satisfaction: when his children bring their friends into the house and proudly point to the furniture saying, "See what my Dad did."

Supervisory Appointment



ARTHUR J. ARNHOLTZ to supervisor of Administrative Systems Division I 9423, effective June 1.

Art joined Sandia Laboratories in January 1961 in radiography in the Materials organization. He earned his BBA

degree in business administration, accounting, with honors at the University of New Mexico in June 1964 under Sandia's Educational Aids Program.

He transferred to a computing organization and performed engineering data processing in Division 9413. For the past two years, he has been a systems programmer in Division 9421.

Before joining Sandia, Art worked five years in radiography at ACF Industries, Inc., in Albuquerque. He came to Albuquerque during his service in the Army, working as a hospital corpsman at Sandia Base hospital.

He is a member of Phi Kappa Phi.

L. V. Rigby and A. D. Swain (both 1642), "Effects of Assembly Error on Product Acceptance and Reliability"; J. J. Deely and W. J. Zimmer (both 5263), "Some Comparisons of Bayesian and Classical Confidence Intervals in the Exponential Case," Seventh Reliability and Maintainability Conference, July 14-18, San Francisco.

John Shunny (3411), "Classification Management Training Programs for Technical Personnel," National Classification Management Seminar, July 16-18, San Francisco.

C. E. Barnes (5112), "Reordering of Low Temperature Neutron Induced Damage in p-Type Silicon"; J. L. Wirth (8320), "The Transient Response of P-N Junction Detectors"; H. J. Stein (5111), "Electrical Studies of Neutron Irradiated p-Type Silicon: Defect Structure and Annealing"; C. J. MacCallum (5231), "Internal Generation of Charges and Currents by Photoelectric and Compton Effects"; IEEE Conference on Nuclear and Space Radiation Effects, July 15-18, Missoula, Mont.

Albert Goodman (5637), "Physics is Easy," Support Optimist Club, June 26.

H. H. Patterson (9230), "The Challenge of Vietnam," Sunrise Optimist Club, July 16.

R. M. Jefferson (9141), "Nuclear Energy and Its Uses," Sunrise Optimist Club, July 23, and Sandia Optimist Club, July 25.

R. E. Day (3132), "Role of Electronics Technicians and Draftsmen at Sandia

Cause for Optimism Regarding Cancer

S. P. Bliss M.D.
Sandia Medical Director

The American Cancer Society recently issued a bulletin on "Cancer Facts and Figures" which highlighted some hopeful—and some gloomy—facts. Cancer, as most people now realize, is one of the leading causes of death in the United States, second only to diseases of the cardio-vascular system. Yet, there is cause for optimism. In the early 1900's few cancer patients had any hope of cure. In the late 1930's fewer than one-in-five patients were being "cured" (that is, alive five years after first being treated). Ten years later one-in-four cancer patients was being saved. Today the ratio is one-in-three.

That's the optimistic side of the coin. The reverse side indicates that, of every four patients currently dying of cancer, one might have been saved had proper treatment been received in time. That means that of the total of 600,000 Americans who develop cancers this year, 100,000 more could be saved by early diagnosis and treatment—above and beyond the 200,000 presently cured. Another set of gloomy statistics is that cancer is the leading cause of death among women aged 30 to 54 and that more school children will die of cancer (about 50 percent due to leukemia) than from any other disease.

What can we do about all this? The American Cancer Society recommends three ways for individuals to protect themselves against cancer:

1. Have a medical checkup annually, no matter how well you feel.
2. Avoid heavy cigarette smoking, over-exposure to sunlight and other known causes of cancer.
3. Learn cancer's warning signals and go to your doctor immediately if one of them lasts longer than two weeks.

The warning signals are:

- A. Unusual bleeding or discharge
- B. A lump or thickening in the breast or elsewhere
- C. A sore that does not heal
- D. Change in bowel or bladder habits
- E. Hoarseness or cough
- F. Unusual indigestion or difficulty in swallowing
- G. Change in size or color of a mole

Do the figures indicate that the current publicity regarding cancer is having any effect? Let's take a look. Since 1936, the cancer death rate has fallen slowly but steadily in women, a drop of 13 percent. During that same interval, however, the cancer death rate has increased in men about 37 percent. The most encouraging story is that for cancer of the cervix of the uterus. The number of deaths from this form of cancer has declined about 50 percent in one generation. The number of detected cases of this cancer has risen thanks to the wider use of the Pap test

which uncovers cervical cancer earlier, before it has begun to spread. Most of these have been early cases and thus completely curable. Thus we're seeing more such cancers (by better means of detection) and curing more.

Cancer of the lung is the most discouraging. In men it has increased more than 15 times in the past 35 years and it is also going up in women. In between these two extremes are cancer of the breast (mortality unchanged for many years), cancer of the colon (continued improvement), cancer of the rectum (slight improvement), cancer of the larynx (continued improvement); and cancer of the prostate, bladder, lip-tongue-mouth, kidney, thyroid and brain (plateau for last 10 years or so).

Cancers of six sites—breast, colon, lung, oral cavity, skin, uterus—offer the greatest opportunity for saving lives, either by prevention or through early diagnosis and treatment. They add up to about 60 percent of all cancer cases and about 48 percent of deaths. The American Cancer Society is about to launch an intensive education program to save thousands of lives by concentrating especially on these areas. Their recommendations are:

1. Breast—Monthly self-examination as a regular female practice
2. Colon and Rectum — Proctoscopic examination as routine in cancer check-ups for those over 40
3. Lung—Reduction and ultimate elimination of cigarette smoking; abstinence by non-smokers
4. Oral—Wider practice of early detection measures
5. Skin—Avoidance of excessive sun
6. Uterus—Pap tests for women over 21

Cancer is far from being defeated. There are, after all, still 300,000 people who get cancer each year which cannot be controlled by currently available medical means, but the present goal of curing 300,000 makes for an overall cure rate of 50 percent which, considering the bad history cancer has had, will be just short of miraculous.

Deaths



P. H. Kolb



J. A. Thomas



J. D. Smith

Paul H. Kolb, a retired Sandia employee, died June 28 after a long illness in Albuquerque. He was 65.

He had worked as a technical staff assistant since January 1949 in component development organizations. He retired in October 1967 from Electromechanical Division II, 1325.

He is survived by his widow, a daughter and two grandchildren.

Joseph A. Thomas, a retired Sandia employee, died June 6 in Lafayette, Ind. He was 75.

He worked in the Development Shop's foundry at Sandia from March 1951 until April 1958 when he retired.

He is survived by his widow.

James D. Smith, a staff associate responsible for camera repair and special photography for Range Staff/Rockets and Ordnance Division 7233 at Tonopah Test Range, died in an automobile accident June 28 in Tonopah. He was 49.

He had worked at Sandia since January 1967 and previously from 1951 to 1966. Survivors include his widow and a son.

Speakers

Corporation," Northern Arizona University electronic and draftsmen educators, June 7, Flagstaff.

L. V. Faltz (9323), "Very High Speed Sleds," AIAA Inland Missile Range Section, May 28, Las Cruces.

G. A. Samara (5132), "Effects of Pressure on the Magnetic and Electrical Properties of Magnetite and Hematite"; R. A. Graham (5132), "Shock Demagnetization"; O. E. Jones (5130), "Strain-Rate Effects in Iron"; 1968 Gordon Research Conference on High Pressure, June 17-21, Meriden, N.H.

F. R. Sweet (9133), "The Technician in an R&D Laboratory," American Society for Engineering Education annual meeting, June 17-20, Los Angeles.

R. L. Park (5273), "LEED Studies of Surface Imperfections," Structure and Chemistry of Solid Surfaces meetings, June 19-21, Berkeley; "Antiphase Domains in Simply Related Surface Structures," LEED Theory Seminar, July 1-2, Ithaca, N. Y.

F. G. Blottner (9341), "Prediction of the Electron Number Density Distribution in the Laminar Air Boundary Layer on Sharp and Blunt Bodies"; D. F. McVey (9328), "Test Plan Optimization for Reentry Vehicle Nose-Tip Evaluation"; P. J. Roache (9325), "Numerical Solutions of Compressible and Incompressible Laminar Separated Flows," AIAA Fluid and Plasma Dynamics Conference, June 24-26, Los Angeles.

K. L. Shipley (9341), "Surface Ionization of Argon Observed in Plasmajet Tests," American Physical Society, June 19, Los Alamos.

Service Awards 20 Years



Eugene Dirnberger
7217



J. L. Hickey
4516



W. E. Johnston
9124



M. A. Lovato
8222



C. A. Lowry, Jr.
7452



Rafael Montoya
4614



C. O. Padilla
7625



Jerry Pierce
4335



J. R. Piper
1224



A. W. Porter
3310



Tom Silva, Jr.
4511



R. C. Spence
7221



R. C. Williams
3462

10 Years

July 12-25

G. J. Simmons 1830, M. R. Gutierrez 5434, L. F. Avila 3242, F. L. Gillespie 3242, H. R. Koski 3242, C. W. Dunn 4623, T. D. Brumleve 8310, R. L. Wilde 1213, L. A. Peterson 8128, R. A. Leri 8233.

Grace L. Matuska 8252, D. G. Beatson 9216, L. L. Sandlin 9226, P. T. Mathews 7611, J. E. Marion 8133, D. A. Murphy 1524, G. R. Forsythe 2452, A. E. Sanchez 4222, E. B. Noel 3242, A. B. Lovato 4212.

Gloria R. Toland 4623, Hesa Yano 8252, P. C. Jesse 4211, J. E. Van Meter 5241, R. G. Oliveira 9121, J. L. Daniel 8233, Celso Vazquez 8245, George Baca 4574, J. B. James, Jr. 2313, and C. H. Deeds 4114.



W. F. Jemison
9414



Raye Knoff
7631



P. R. Lerma
4518



Gloria Maginnis
4364



C. H. Mauney
1548



E. G. McGarvie
7217



W. H. Myers
4122



L. B. Smith
5235



J. E. Stang
1613



C. B. Stillwell
8159



Adam Trujillo
2554



D. M. Webb
1548

15 Years



J. T. Carrell
8154



Ernest Gurule
7332



G. W. Hughes
7224

Authors

J. R. Colp (9327), W. B. Pepper (9325), P. R. Wilkes (9327) and H. E. Widdows (9325), "Trailing Camera," May issue, AIAA JOURNAL OF SPACECRAFT AND ROCKETS.

K. L. Goin (9322) and W. R. Lawrence (AEDC), "Subsonic Drag of Spheres at Reynolds Numbers from 200 to 10,000," May issue, AIAA JOURNAL.

T. R. Fewell (9121), "An Evaluation of the Alpha Counting Technique for Determining 14-MeV Neutron Yields," April 15 issue, NUCLEAR INSTRUMENTS AND METHODS (a Swedish publication).

R. M. Bleakney (2451), "A Fluid Pulse Counter," May issue, HYDRAULICS AND PNEUMATICS.

R. R. Bcade (5133), "Shock Compression of Foamed Graphite," February issue, JOURNAL OF APPLIED PHYSICS.

R. J. Baughman and R. A. Lefever (both 5154), "Czochralski Growth of Lithium Metagallate," June issue, MATERIALS RESEARCH BULLETIN.

P. B. Bailey (5261) and L. F. Shampine, University of New Mexico, "On Shooting Methods for Two Point Boundary Value Problems," July issue, JOURNAL OF MATHEMATICAL ANALYSIS AND APPLICATIONS.

G. W. Arnold and D. K. Brice (both 5111), "Near Band Edge Luminescence in GaAs:Zn," July 15 issue, APPLIED PHYSICS LETTERS.

R. D. Driver (5262), "On Rjabov's Asymptotic Characterization of the Solution of Quasi-Linear Differential Equations with Small Delays," July issue, SIAM REVIEW.

R. D. Bland (5432), "A Parametric Study of Ion-Plated Aluminum Coatings

on Uranium," July-August issue, ELECTRO-CHEMICAL TECHNOLOGY.

J. P. Brannen (1741), "On Logarithmic Extrapolation of Microbial Survivor Curves for Planetary Quarantine Requirements," Vol. 1, 1968, pp 151-2, SPACE LIFE SCIENCES; "A Rational Model for Thermal Sterilization of Microorganisms, Vol. 2, 1968, pp 165-79, MATHEMATICAL BIOSCIENCES.

Take Note

The Enchanters, a 20-voice choral group, will present a concert from 7 to 8 p.m. on the mall at Coronado Center Wednesday, July 17. Clint Purdue (2442) is director of the group.

* * *

Have you considered donating your body to medical science or willing your eyes to an Eye Bank? Employee Benefits Division 3122, Bldg., 802, Rm. 130, has folders describing how these actions can be accomplished. One folder gives details of the Eye Bank program which is sponsored by the New Mexico Lions Sight Conservation Foundation, Inc. The other booklet provides information and procedures for donating your body for educational and research purposes through the University of New Mexico School of Medicine.

Events Calendar

July 12-14, 19-21—Brendan Behan's "The Hostage," Corrales Adobe Theatre, tel. 898-2932.

July 12—"Madame Butterfly"; July 13 and 17, "La Traviata"; July 19 and 24, "The Elixir of Love"; and July 20, "The Magic Flute," Santa Fe Opera.

July 12-14—Three Cervantes comedies, "El Viejo Celoso," "La Cueva de Salamanca," and "El Retable de las Maravillas," Old Town Studio, tel 242-4602.

July 12-14—Annual rodeo in Santa Fe.

July 12-13—Moliere's "The Imaginary Invalid" and July 16-27, Harold Pinter's "The Birthday Party," Santa Fe Theatre Co., Greer Garson Theatre.

July 14—Corn Dance at Cochiti Pueblo.

July 14—N. M. Mountain Club, North Peak of the Sandias from the Crest. Leader Mary Martinez, tel. 268-5420.

July 19-21—Rio Grande Horse Show, Fairgrounds.

July 21—N. M. Mountain Club, Santa Fe ski basin to Lake Peak and return. Leader Ed Clark, tel. 296-4541.

July 25-26—Corn dances and trade fair, Taos Pueblo.

Congratulations

Mr. and Mrs. J. L. Chamberlin (7451), a son, John Christopher, June 28.

SHOPPING CENTER

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

RULES

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 Corporation 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.

FOR SALE

REAL ESTATE

LARGE ADOBE, Corrales, Sandoval County, 4-horse stable, one full acre, 2 fireplaces, 2 3/4 baths, drapes, AC. Haley, 898-3041.

3-BDR. ASHCRAFT, 1 3/4 bath, 5/4% FHA loan, carpeting, h/w floors, drapes, landscaped, patio, dbl. garage, KitchenAid dishwasher, \$17,900, \$2563 equity. Huff, 256-9426.

5-ROOM MODERN LOG CABIN, electricity, water, fully furnished, carpeted concrete floors, fireplace, east of Taos, cash or terms. Crawford, 299-0260.

LOT in Glenwood Hills, 80x140, selling for \$3250, terms. Fox, 299-9031.

5.8 ACRES (Cedar Crest), view, spartan mobil home w/additional room, fireplace, garage, carport, sun deck, excellent well. Aaron, 282-3803.

LARGE R-1 LOT near Western Skies, 98-170 ft., view, terms, will show it at your convenience. Summers, 299-4674.

ADOBE in Sandians, lg. living area, fireplace, 3-bdr., 1 3/4 baths, plus guest house, 1 acre, Sandia Park. McMillin, 282-3226 or 282-3395.

SHADY BACKYARD w/mt. view, landscaped, 3-bdr., utility rm., pantry, den, lg. covered patio, dbl. garage, fireplace, 4 3/4%. Spray, 299-0412.

MOSSMAN 3-bdr., pullman baths, separate DR., LR w/fp, paneled den, carpeting, AC, drapes, sprinklers, in cul de sac, FHA appraisal \$24,000. Cowham 298-4249.

3-BDR., 1 3/4 bath, lg. utility rm., single garage, sprinklers front & back, AC, new roof, \$12,500, \$86/mo. Snidow 298-6163.

MISCELLANEOUS

METAL 2-wheel Sear's language trailer w/600-16 tires, \$50; Realist 400 slide projector, semi-auto., \$20. Houston, 299-4118.

SAM SNEAD autograph golf clubs, 2 woods & 5 irons, bag, cart, balls, other misc. items. Ryerson, 296-4479.

21" STROMBERG-CARLSON B&W TV, \$15; 19" Slimline Silvertone B&W TV, \$5. McCoach, 298-5960.

BREV ITALIAN GUITAR, 6-string w/case, \$45. Reed, 298-2470.

CHAIN SAW, Remington SL-9, new in factory box, cost \$159, sell for \$130; bar-b-q grill w/rotisserie, \$5. Krenz, 298-0619.

CAMPING EQUIPMENT: used twice, half price, tent 9x18, 2-burner Coleman stove & lantern, plus several other items. White, 298-3630.

DISHWASHER, Kenmore portable, \$75; GE electric range, \$50; Minor, 1-636-2194 after 5:30.

NEW MEXICO Military Institute uniforms. Phelps, 344-0441.

CAMERA, Zeiss Ikon "Contessa", 50mm, F/2.8 lens, built-in r/f, \$40; lens, 50mm f/1.4 super-takumar, fully auto., new in case, \$55. Browning, 299-6384.

MACGREGOR GOLF CLUBS 2-9 irons, putter, 1-3-4 woods, new, \$60; bag, \$8, 15 golf balls, \$12. Eaves, 299-7728.

STORKLINE CRIB, 6-yr. w/Kantwet mattress which raises, \$20. Johnson, 298-0296.

AKC Pembroke Welsh Corgi puppies, 8 wks old, champion bloodlines, smart, small, sturdy dogs. Richardson, 299-3673.

COSCO High Chair, folding, \$9; Encyclopedia Americana, '53 edition, 30 volumes, \$40 or best offer; garage sale Sunday p.m. & Monday, July 14 & 15. Champion, 299-5821.

1966 HONDA Super 90. New tires. \$175.00. Barber, 255-8023, eve. only.

MOBILE HOME, '67, 12'x60' 3-bdr., 1 1/2 bath, dishwasher, built-ins, small down payment, Craven, 268-7915 after 6.

SEAR'S rotary lawn mower, 20", wind up starter, \$25; GE auto. washer, \$25. Zucukie, 268-3105.

21" blond TV console, \$60; blond lamp table, \$4; swivel wrought iron TV stand, \$6. Chaves, 255-6155.

ADMIRAL duplex refrigerator, 23 cu. ft., turquoise, '66 model. Pitts, 299-0271.

GUNS: Higgins 12 gauge pump, Mod. 20 ribbed-barrel, checked stock & poly-choke; Remington Sportsmaster, .22 rifle w/3 power Texas scope. Morrison, 855-6244.

MOTORCYCLE, TR6C Triumph 650 scrambler, 470 miles, cost \$1350, make offer. Armijo, 345-0137.

MALE TOY Manchester, black & tan, puppies, AKC reg., 4-5 lb. adult weight, available after Aug. 24, \$100 ea. Morgan, 299-2850.

SEWING MACHINE; 8' pool table. Ross, 295-5720.

COLD SPOT refrigerated air conditioner, 11,000 B.T.U., 120 volt window model, used 2 summers, \$150, cost over \$300. Merrill, 298-7371.

RCA entertainment center: B&W TV, phono, AM/FM & FM stereo, 4 yrs. old. Miller, 268-5992.

CONN ORGAN, T-600, \$200 cash or will trade for '63 Volkswagen. Tucker, 282-3204 after 6.

PORTABLE Dishwasher, Kenmore, \$50. Dumistra, 299-9278.

TV, 23" Zenith B&W w/space command remote control, maple cabinet, \$125. Millcr, 255-1324.

AUTOMOBILE evaporative cooler, window-mounting, used one season, \$5. Guttman, 299-7031.

SWING SET, 2 swings & glider, \$10. Randall, 299-3935.

COCKER SPANIEL, AKC reg., 2 yrs. old in Sept. Pass, 256-9663.

GERMAN SHEPHERD PUPPIES, 6 wks. old; ping pong table; cement mixer; 2 wheel trailer; cabin, 12'x28". Villella, 298-7955.

CAMPER-TRAILER for El Camino, fits other pickups, pull as trailer, Arvin, 242-0154 before 2 p.m. weekdays.

25" POWER MOWER, \$15; auto. washer, \$30; 3-gal. sprayer, \$3. Klett, 298-7892.

PORTABLE TOILET "Traveling John" No. 661, never used, half price \$3; Polar Aire No. PA10, car window cooler, \$3. Lyles, 268-0144.

POWER MOWER, 3 1/2 hp, 22", needs work, \$9. McIntire 298-6145.

HAM GEAR: vertical trapped antenna 14AVQ, \$17; SSB exciter-trans. CE-20A, \$80; Globe King 500B, 500 watts CW or 720 watts SSB, \$110. Lennox, 298-6105.

GIRL'S BICYCLE, 26", \$10. Schneider, 299-6243.

STEREO, portable, Symphonic twin speakers, auto. changer, \$30. Thayer, 299-3127.

CAMERA, 35mm, single lens reflex, w/normal & long focal lenses, extension barrel & other accessories. Waldorf, 242-8303.

21" DAVIS ultravac lawnmower, used 1 season, \$35; Contax III A f/2.0 Carl Zeiss (Jena), meter, make offer. Karncs, 299-9033.

SILVER OAK BDRM. SET, triple dresser, dbl. bed w/bookcase headboard, \$50; twin mattress & springs w/frame, \$25. Allen, 256-3234.

TURNTABLE, Garrard manual 3-spnd. w/new empire diamond stereo cartridge, \$30. Caskey, 296-2237.

BED, walnut, full size, w/Sealy innerspring mattress & matching box springs, guest room use only, \$50 or make offer. Collis, 420 Carlisle SE, 255-0470.

CARS & TRUCKS

'62 CHEV. IMP., HT, PS, PB, new engine, 3 on the floor, 4T tape deck, new tires, extra gauges, \$1075. Barry, 242-7545.

'67 DODGE DART, blue, take over payments. Johnson, 344-7170.

MODEL A 1929 FORD sport coupe, \$650. Romero, 344-0302.

'52 CHEVROLET & '56 Chrysler, \$100 each. Kelly, 345-1214.

'65 TOYOTA Land Cruiser, 4 wd, HT, 25,000 miles, \$1600. Brin, 282-3834.

'52 SINGER sports car roadster, 2 new tires, 4 cyl., O.H. cam, spare engine & parts, 1405 Arizona NE. Weems, 255-9555.

'64 AMERICAN sta. wmn., 6-cyl., stand. trans., \$750. Brown, 299-0315.

VOLKSWAGEN, 24,000 miles, radial tires, radio. Schafer, 299-4634 after 5.

'57 FORD sedan, 4-dr., V8, AT needs work, \$100. Hanchey, 299-8723.

'62 COMET 2-dr. sedan, AT, R&H, bucket seat, new tires, 6-cyl. engine, \$495 or best offer. Cronk, 299-6401.

'65 CHEVY II wagon, V8, AT; '58 VW sed'n. Aden, 299-4023.

'66 VOLVO, model 122S, white, 4-dr. sedan \$1800. Magliuti, 268-7601.

'63 ENGLISH FORD station wagon, 4-spd., 25mpg, 39,000 miles. Cover, 268-0921.

'53 CAD '60 Special', PS, PW, air, motor recently overhauled, best offer. Fossum, 255-0535.

'66 CORVETTE Stingray, 427 cu. in., take over payments. Gross, 3203 Solano Dr. NE.

WANTED

BABYSITTING in my home, beginning Aug. 1, \$15/week for child of ages 1 to 3, Sandia reference given. Armijo, 344-7021.

CHILD CARE in my home. James, 298-6324.

OWNERS manual for 1963 Triumph TR-4. White, 268-9447.

RIDE 8-5 to Sandia from vicinity 9113 4th NW. Vargas, 898-3364.

RIDE from Adams NE & Candelaria to Gate 7 or 8. Saiz, 264-7640.

ROOM MATE to share furnished 3-bdr. house near Winrock, \$80/mo. For rent, 299-0355.

FOR RENT

NEW TENT TRAILER w/add-a-room, sleeps 4 to 6, easy to haul, \$25/wk. Harris, 299-6664.

LOST AND FOUND

LOST—Man's wedding band, glasses in dark blue case, pocket knife. LOST AND FOUND, tel. 264-2757, Bldg. 610.

FOUND—Wrist watch, necklace, compass. LOST AND FOUND, tel. 264-2757, Bldg. 610.

Coronado Club Activities

Swinging Social Hours Set

Three swinging social hours will be shaking things up at the Coronado Club for the July Friday nights. Tonight Phil Graham and the group will be on the bandstand making happy music left and right. The Club's culinary artists in the back room will wheel out the chicken buffet, fried to perfection, and selling for \$1.25 for adults, \$1 for kids.

The party starts at 5 p.m. with special prices in the ballroom and main lounge until 8 p.m. The buffet is served from 6 to 8 p.m. Dancing from 6 to 9.

Pat Reich will be in the main lounge singing the old songs with much help from the old crowd.

Next Friday, July 19, the Club will bring forth the specialty of the house - - chuckwagon roast beef with all the goodies. The Aristocrats will be on the bandstand and Pat Reich in the main lounge. The buffet costs \$1.75 for adults and \$1.50 for kids.

On Friday, July 26, it's seafood time. Rex Elder will be on the bandstand with appropriate nautical songs while Pat Reich and piano entertain in the main lounge. The buffet costs \$1.25 for members, \$1 for children.

* * *

Teenage Go-Go

Teenage sons and daughters of Club members will swing (boog-a-loo?) on Thursday evening, July 18. Karl Bell of KQEO will be the ringmaster while the Circuits will be plugged into the bandstand with amplified sparks. The bash is scheduled from 7:30 until 10:30, and member parents should pick up tickets by 5 p.m. July 18.

* * *

Bridge

The duplicate bridge group meets Mondays at 7 p.m. Ladies bridge meets Thursday, July 18, at 1:15 p.m.

* * *

Buccaneers Night July 27

Mark your calendar now, for this event is the highlight of the summer. There will be clam chowder and lobster tails on the menu, dancing in the ballroom and patio, swimming in the twin pools, and costumes—the more bizarre the better. Tickets (\$3.50 for members, \$4 for guests) must be picked up by 9 p.m. July 26. Tommy Kelly will make you waltz the plank.

Sandia Safety Signals

Car Loading

When you overload your car you have a lot of problems: The acceleration is slower, stopping distance longer, sway on curves greater. Consequently, you must allow plenty of room for passing and stopping.

Reaction Time

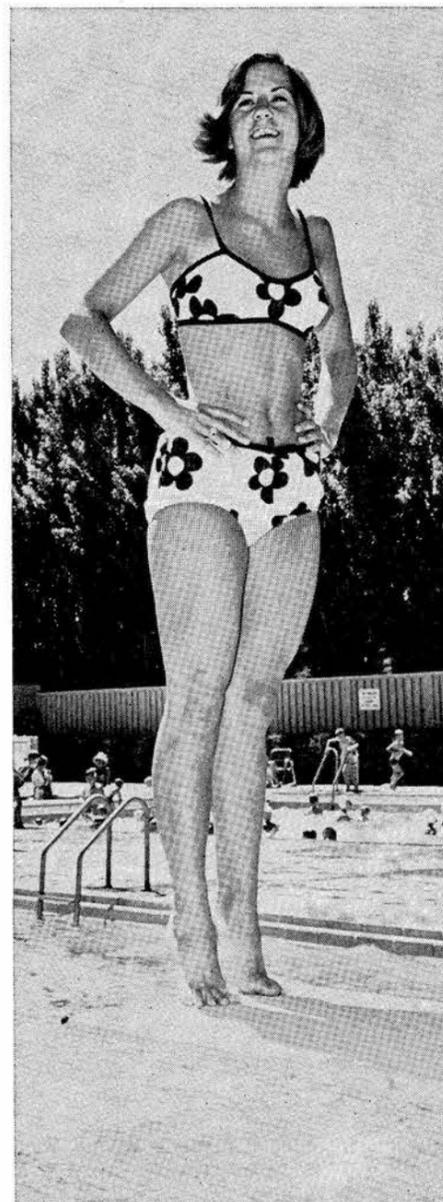
Sudden changes in barometric pressure can reduce a driver's efficiency by lowering his power of concentration and lengthening his reaction time, according to weather experts of the World Meteorological organization in Geneva, Switzerland. Their studies indicate that during a period of decreased atmospheric pressure—a thunderstorm, for example—human reaction is about six percent slower than normal.

Tuesday Night Socials

The Tuesday night social is a new event adopted by the Club's Board of Directors recently. Special prices (same as Friday night social hour) will be available in the main lounge every Tuesday from 5 to 8 p.m. Entertainment will be scheduled periodically.



GIANT WISHBONE serves as a symbol of the Coronado Club's giant fried chicken buffet to be served from 6 to 8 p.m. tonight at social hour. Cecilia Coons (3126) hopes to see you there.



DOROTHY GENE SNOW is one of the Coronado Club's staff of 11 qualified swimming instructors. More than 900 youngsters will complete classes at the Club before the end of the season. Next swimming instruction session starts July 22.



TOURING SANDIA LABORATORIES, participants in a recent Plans for Progress sponsored Vocational Guidance Institute at UNM visit the Electronic Apprentice Section. From left are J. J. Reck, 4233-2 supervisor; Frieda Salazar (3251), a participant in the Institute; Earl Denton, counselor at Estancia High School; and Jack Quinn and Margie Heinsohn, counselors at Monroe Junior High School.

Sandia Participates in Plans For Progress Vocational Institute

Frieda Salazar, employment representative in Employment Division 3251, recently attended a three-week Vocational Guidance Institute at the University of New Mexico. The Institute was sponsored by the Plans for Progress organization and participating local firms, including Sandia Laboratories, which are members of the Albuquerque Human Resources Council.

The Institute was concerned with the problems of poverty, of economically and socially disadvantaged youth, of school dropouts, and with ways in which to channel the youngsters into positive participation in society and into productive employment in industry.

Attending the Institute were junior-high

and high-school counselors from local schools and surrounding communities.

The Institute was unique in approaching the problem of understanding the disadvantaged environment—participants stayed in homes of welfare recipients during one session of the Institute or, in the case of several of the men, were assigned to "scrounge" for a living for two days with only 20 cents in their pocket.

Other Institute sessions included tours by participants of local industry. Frieda arranged a tour of Sandia Laboratories which included visiting the Sphere of Science, Development Shops, computer facilities, keypunch operations and the Personnel organization. During the tour, she discussed Sandia requirements for entry-level positions, particularly the qualifications needed by applicants for apprenticeship programs and for graded positions.

William G. Funk, manager of Employment Department 3250, opened the third session which outlined industry participation in youth motivation activities. Bill was chairman of the steering committee of the Institute and serves as chairman of the Albuquerque Human Resources Council, an organization of Plans for Progress firms.

Bill pointed out that the Institute was initiated three years ago by Sandia Laboratories and Mountain States Telephone as one of the affirmative action programs that were pledged under the Plans for Progress effort. The Institute has been conducted annually since that time.

Ultimate purpose of the national Plans for Progress organization is to provide more jobs for members of minority groups and to raise economic and cultural standards of minority groups and the underprivileged in this country.

"We consider the youth motivation program one of the most important activities for a Plans for Progress company," Bill said. "This is affirmative action with long-range benefits to individuals, to industry and to society. Somehow we have to break the pattern of poverty that has been continued from generation to generation."

The Institute generated deep awareness of the complexities of the problems, according to Frieda. "It was gratifying to see the eagerness shown by the counselors in learning industry's needs and the ways in which they could help place students in jobs," she said.

"One requirement placed on the participants," Frieda said, "was to write a paper recommending ways in which the problems of disadvantaged youth might be solved. Many of the suggestions were considered good enough to be put into effect by school officials almost immediately."

"The important achievement of the Institute seems to me to be that Plans for Progress firms demonstrated their full commitment to help solve the problems. This is a new force against poverty, and a powerful one. It is no longer solely the government's problem or society's problem or a welfare agency's problem but to a large extent it has become industry's problem. And it seems to me that the full support of American industry can do more to solve the problem of poverty than perhaps any other effort. I was proud to be a representative of Sandia. Our company is a leader in the local effort."

Anthracene Research Discussed in Holland

Two Sandia papers dealing with properties of anthracene, a model molecular crystal, were presented this week in Enschede, Holland, at the Fourth Molecular Crystal Symposium.

The invited paper by R. G. Kepler, supervisor of Physics of Organic Solids Division 5113, was entitled "Photoconductivity in Anthracene." G. C. Smith (also 5113) presented "Magnetic Field and Radiation Damage Effects on Triplet Exciton Interactions in Anthracene."

The meeting, July 9-12, was co-sponsored by Shell Research Laboratory in Amsterdam, Holland; Philips Research Laboratory in Eindhoven, Holland; the science committee of NATO, Brussels, Belgium; and two Enschede universities.

Previous symposiums on the same topic were held at Duke University in 1960, Ottawa, Canada in 1962, and at the University of Chicago in 1965. Mr. Kepler served on the organizing committee of the Chicago meeting.

Other invited speakers at the meeting came from Massachusetts Institute of Technology, University of Chicago, Tel Aviv University, Hebrew University, and University of Stuttgart, Germany.

The two Sandians are studying different aspects of anthracene. Little is known about the properties of this class of material and whatever knowledge is gained can be applied to the larger technologically important class of materials, polymers.

900 Youngsters Will Complete Swim Classes At Coronado Club

More than 900 youngsters will complete sessions on swimming instruction at the Coronado Club by the end of summer, according to Durwood Stell, pool manager.

The classes, ranging from pre-beginner for four-year-olds to advanced life-saving for adults, are conducted by the Club's staff of 11 Red Cross qualified instructors. The 40-minute classes are held six days a week for two weeks and are conducted from 8:20 until 11 a.m., when the twin pools open for recreational swimming.

Next session of class instruction begins July 22. Limited openings are available in the diving, intermediate and advanced swimming classes. A few openings are available for the beginners session scheduled in late August.

For additional information, or to enroll in one of the classes, call the pool office, 264-5287.