

## Senator Dennis Chavez

1888-1962



The State of New Mexico and the Nation lost a great man when Senator Dennis Chavez died this week. Senator Chavez had been serving his state and the nation in the U. S. Senate since 1935. Though away from the state for long periods of time while serving in the Senate, he never lost touch with his state and his death leaves many thousands of personal friends in New Mexico who knew him, loved him, and followed his leadership.

Senator Chavez, fourth ranking senator in the chamber, held the chairmanships of the Committee on Public Works and Subcommittee on Defense Appropriations. Prior to his service in the Senate he was in the U. S. House of Representatives and the New Mexico State Legislature. He was an attorney and had been an engineer, newspaper editor, and deputy game warden.

Dennis Chavez, known throughout the nation as a "champion of the little man," had the reputation of being a "fighter" for that which he believed to be right. Along with these traits he was respected for his tolerance.

Tributes to this great New Mexican poured into the state this week from throughout the nation. In his 27 years in the Senate, Dennis Chavez made a multitude of friends and received not only their loyalty, but the most sincere respect of his political opponents as well.

Former President Harry S. Truman called Senator Chavez "a good public servant, and that's about the highest thing you can say about a man."

He served his state well. The people of his state will miss him.

### Sandia to Participate

## AEC Preparing Nevada Site For Seismic Research Test

The Atomic Energy Commission has received bids for underground work in connection with Project Shoal which will take place in Sand Springs Range, about 28 miles southeast of Fallon, Nev.

Project Shoal is a proposed underground nuclear detonation of approximately 10 kilotons at a depth from the surface of approximately 1200 ft. in the granite of the mountain range.

Sandia Corporation's technical participation in Project Shoal includes procuring, emplacing, and arming the device, and coordinating the timing and firing; providing instrumentation to measure both underground and surface earth motion; providing radiation safety monitors on site; and measuring yield of the proposed detonation.

Contractors will excavate a 1300-ft. vertical shaft, about 1360 ft. of drifts off the shaft, and will also drill various holes at the site. The shaft head will be on higher ground than the surface at the

proposed detonation point. At the bottom of the shaft, a drift will be driven about 1000 ft. in the direction of the emplacement point, with one or more bends in the drift to help seal underground the radioactive material created by the detonation.

A second drift for instrumentation will be dug in the opposite direction, starting at the shaft bottom and extending about 300 ft. Instrument holes will be drilled from short side drifts off the two principal drifts.

Construction of the emplacement and instrumentation sites by mining techniques rather than drilling is expected to be more economical, partly because such precise alignments would be required for drilled holes intended for instrument placement.

Project Shoal is a part of Vela Uniform, the nation's seismic research program. No detonation has yet been approved for the program.

## Sandia Scientists to Present New Psychology Technique THERP

A new technique in applied psychology will be presented by two Sandians during the annual meeting of the Human Factors Society Nov. 28-30 in New York City.

Called THERP (for Technique for Human Error Rate Prediction), the technique is a mathematical model based on human error quantification studies by the American Institute for Research, Pittsburgh, Pa., and Sandia Corporation.

L. W. Rook, Jr. (9100) will discuss the mathematical model in his talk, "A Method for Evaluating the Human Error Contribution to System Degradation," at a symposium entitled Error Quantification. Alan D. Swain (1443) will be chairman of this symposium and will also propose a program of research to further improve and broaden the application of THERP or similar models to predict human error rates.

"While THERP is still in its infancy," Mr. Swain noted, "it shows promise of enabling system plan-

ners to minimize human errors in any man-machine system, and to estimate in advance any decreases in system reliability which could be expected to result from human errors."

## Gamma Radiation Facility Planned To Use Spent Fuel from Sandia Reactor

A new gamma irradiation building to be connected to the Sandia Engineering Reactor is planned for Sandia Laboratory, according to an announcement by the AEC. Apparent low bidder for construction of the facility is Lemke Construction Company, Inc. The firm's bid was \$437,183.

The new building will house both a 50,000-Curie Cobalt 60 source and spent fuel elements from the Sandia Engineering Reactor Facility. These sources will be used in a 16-ft.-deep shielding



GNOME CAVITY, 1200 ft. underground, now has a general radiation level of 5-15 milliroentgens per hour. Shown here is the entrance of the cavity. The project

is in a standby condition although preliminary work for a heavy element production experiment (Project Coach) is currently underway at the Gnome site.

## Gnome Cavity -- 1200 Feet Down -- Has Current 5-15 mr Radiation Level



LOOKING UPWARD from the floor of the Gnome cavity, one sees stalactites. The cavity is larger in diameter than the base of the dome of the U. S. Capitol building. The cavity was created Dec. 10, 1961, by a three-kiloton nuclear detonation — the first experiment for peaceful purposes.

A huge cavity was created 1200 ft. underground in a salt bed 28 miles southeast of Carlsbad by the Gnome detonation Dec. 10, 1961. This was the first experiment in peaceful uses of nuclear explosives.

The roughly hemispheric cavity is 160-170 ft. in diameter (larger than the base of the dome of the U. S. Capitol building) and 60-80 ft. high (equivalent to a seven-or-eight-story building). It was formed by a nuclear detonation with a yield of about three kilotons (equal to 3000 tons of TNT).

Entry to the cavity has been made through an underground tunnel excavated parallel to the original one. With the ventilator going, temperatures up to 130°F. were recorded. Although some hot spots of radiation were found, the general level on May 17, 1962, was from 50-60 milliroentgens (mr) per hour. The current radiation level in the cavity is 5-15 mr per hour.

The cavity and the Gnome-related workings are in a standby condition. Preliminary work for Project Coach, a heavy-element production experiment, is underway at the site.

Sandia scientists and engineers were responsible for several portions of the program. They had responsibility for measuring particle motion, temperature, pressure of the blast, and electromagnetic radiation. Sandia accelerometers and velocity and displacement gauges measured earth motion near the detonation point and Sandia seismographs measured motion at other stations.

### Seek Blood Donors

Ted Trybul (7183) is seeking Sandia employees who will donate blood to replace a deficit at the Southwest Blood Bank, 318 Elm, S.E. Employees interested in making a donation are asked to credit the blood to T. S. Trybul and the Osteopathic Hospital.

pool or in either of two hot cells located over the pool at one end. THE RADIATION PHYSICS ORGANIZATION 5300 and other Sandia Corporation organizations will use the facility and its sources to irradiate components and materials.

Preliminary design of the facility was done by Plant Engineering Department 4540 and Reactor Facilities Operation Division 5331.

Construction will consist of an 8350-sq.-ft. concrete block struc-

ture with concrete floors, steel joists, and a built up roof deck. This project includes heating, ventilating, cooling, and utility system as well as exterior site work, grading, and connection to the existing utilities and power.

This facility will provide, in addition to source handling and storage, additional light laboratory and office space for Area V. Construction is to be completed within 180 days after the contractor receives notice to proceed from the AEC.

**Editorial Comment**

**What's Your First Aid Ability?**

Elsewhere in this issue of the **Lab News** appears an article dramatizing the value of knowing proper first aid procedures. Too frequently considered an elementary subject, first aid — its understanding and practice — is in fact of considerable importance to every family. Experts from the Red Cross and Office of Civil Defense say that a minimum requirement is for one person in every family to be familiar with first aid procedures.

If you think you are qualified to undertake first aid measures, ask yourself these questions:

Do you know how to stop severe bleeding?

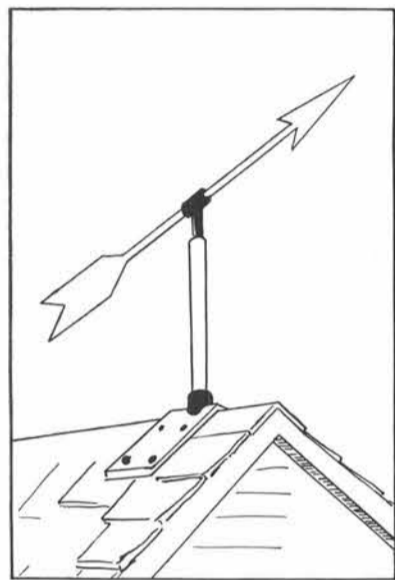
Have you ever practiced artificial respiration or rescue breathing?

Do you know what to do for different kinds of oral poisoning?

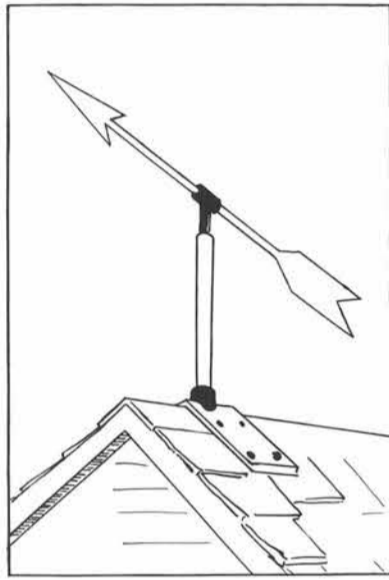
Do you know how to move a person who has a fracture? Who is unconscious? Who has unknown injuries?

If you have adequate training you are not stumped by these questions.

If you realize you are not adequately trained, now is the time to do something about it. Enroll in the First Aid course to be offered by the Training organization at Sandia Laboratory.



**Aerodynamically-operated troposphere air mass relative direction-indicating meteorological instrument configuration.**



**Weathervane.**

**On Speaking (And Writing) To Be Understood**

"Hello, Mr. Douglas?"  
"Yes."

"This is Walter Kante of Sonomagnetitronics. I thought you might want some clarification on the X-10 2 AB program report we recently sent you."

"Frankly, Mr. Kante, I haven't made any decisions for or against initiating reorientation of our commitments on X-10 2 AB yet."

"Well, when you implement the coordination, I would appreciate verbal notification."

"You may be assured that we will facilitate the activation of subject program in as expeditious a manner as practicable."

"Just so long as we are in consonance with subparagraph 3 of the aforementioned report."

"I anticipate that the order of magnitude will be within the present state-of-the-art?"

"That's called out in the initiating directive. It specifically mentions an integrated, time phased, coordinated, continuing program of reliability surveillance."

"This should optimize the effort."

"Definitely."

"Have you ascertained the non-availability aspects?"

"Yes, and we nonobject."

"What then shall we affect to attain maximum expedition?"

"If you effectuate the finalization before the renegotiated scheduled date, this office might initiate a requirement for modification."

"Procurement of maintainability personnel is still unresolved."

"So I understand. However, if the termination rate can be adjusted to the downward curve, utilization of the go-no-go should be sufficient verification."

"This is dependent on the

stability of system parameters."

"Agreed that said determinants are a coefficient but then so is the optimum interchangeability."

"Anything else?"

"Just wanted to make sure the coordination was maximized."

"I believe we are on the track, Mr. Kante."

"On what?"

"On track."

"Oh, you mean we may be able to put this thing to bed?"

"If we are sure to get the long tent pole."

"Well, we sometimes are in danger of inventing a cure for which there is no disease."

"A little team work will definitely initialize the X-10 2 AB problem areas."

"I agree and strongly recommend the procedure outlined above."

"Be assured it will receive our utmost consideration. You will receive notification in compliance with the subject report."

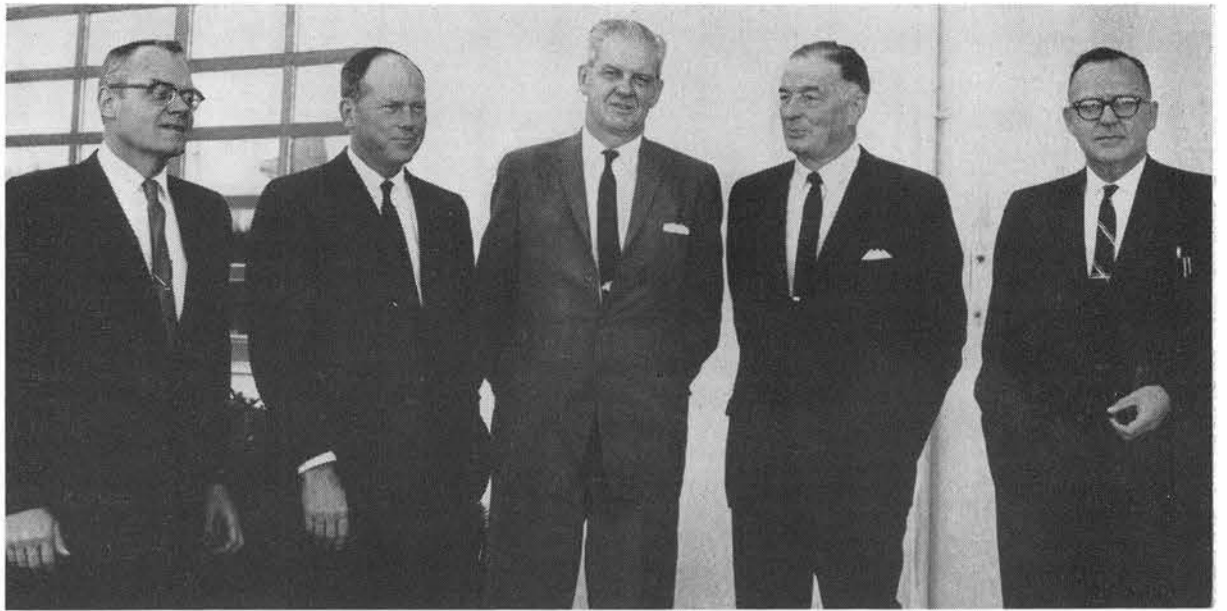
"Goodby."

"Goodby."

"Miss Watson, get me George Coppers on the phone, please."

(Time passes)

"Hello George? Say George, what is the X-10 2 AB program anyway?"



VISITING Sandia Laboratory for technical briefings recently was J. A. Bowman, General Manager of Defense Projects, Western Electric Company, New York, at center above. He was accompanied by (l to r) R. A. Bice,

Sandia's Vice President, Engineering for Manufacture; G. A. Fowler, Sandia's Vice President, Development; S. P. Schwartz, President of Sandia Corporation; and R. W. Henderson, Vice President, Weapon Programs.

**Albert Narath to Speak at Sandia Colloquium Nov. 28**

The forthcoming Colloquium will be the first in several years to feature an individual from Sandia speaking on an independent fundamental research program.

Albert Narath, supervisor of Solid State Physics Division 5151, will present a comprehensive review of theory, instrumental techniques, and experimental results and interpretations of his research program, "Nuclear Resonance in Magnetic Crystals."

Mr. Narath, who has been with Sandia since 1959, received his BS degree from the University of Cincinnati in 1955, and his PhD from the University of California, Berkeley, in 1959.

The Colloquium will be held Wednesday, Nov. 28, at 10 a.m. in Bldg. 815 (use visitors' entrance). No tickets are required.

**U. of Colorado Seeks Technical Papers for Packaging Symposium**

The University of Colorado has issued a call for technical papers for the Fourth Electronic Circuit Packaging Symposium to be held at Boulder, Colo., Aug. 14-16, 1963.

The papers may deal with packaging materials, packaging techniques, environmental packaging, interconnections in packaging, and packaging economics. Three copies of a 500-word outline should be submitted before Jan. 15, 1963, to Dr. Sherman B. Sheffield, Bureau of Continuation Education, Room 352, Chemistry Bldg., University of Colorado, Boulder, Colo.

The more than 500 participants in the third annual symposium included N. Arthur Cordova (4233-3) and Robert J. Luikens (7125) of Sandia Laboratory and E. E. Alford (8223) and Robert P. Noble (8122) of Livermore Laboratory.

**Seek Hunters' Help In Providing Hides For V. A. Hospital**

Sandia Laboratory deer hunters are being asked by the local Elks Lodge to contribute to the annual drive for deer hides.

These hides are exchanged for cow hides which are given free to the Veterans Hospital in Albuquerque and elsewhere in the nation for use in physical therapy leather work.

Local collection points for deer hides are: Fire Station, Sandia Base; Phillips "66" Station, 303 San Mateo NE; Canfield Chevron Station, 3025 Fourth NW; Everready Service Station, Harvard and East Central; V&M Bay Station, 800 Bridge Blvd. SW; O'Dell Chevron Station, 501 Central NW; Kronberger's Texaco Station, 2100 San Mateo, NE; Fire Station, Kirtland AFB; Quality Food Co., 523 Rio Grande Blvd. NW; R. L. Cox Hide Co., 422 First St. NW; and Elks parking lot, Fifth and Gold SW.



WINNING TEAM of the recent Sandia Lab Duplicate Bridge Tournament is shown above. From left are Jim Cocke (7125), Steve Neff (4214), Skip Mickey (7125), and Johnny Nakayama (8125), team captain. The men defeated 11 other teams in a playoff recently at the Coronado Club. Team member not in the photograph is Leon Keck (7113).

**200 Employees Take Part in Sandia Lab Bridge Tournament**

The team of Johnny Nakayama (7125), Jim Cocke (7125), Steve Neff (4214), Skip Mickey (7125), and Leon Keck (7113), recently won first place in the annual Sandia Laboratory Duplicate Bridge Tournament. Some 200 employees participated, according to tournament director George Arnot (1422).

Second place team members were Bill Law (5131), Lee Heames (5133), George Steck (5425), Dave Hanson (5425), and Bill Brooks (5133).

Tournament play took place during noon hours within Sandia Lab buildings. Champion teams from building tournaments moved on to a qualifying round held in the evening at Coronado Club Oct. 29. Eleven teams entered the playoffs Nov. 5.

Director Arnot is hoping for even more participation in the 1963 tournament which will again be conducted during noon hours in preliminary stages. Play is scheduled to begin in January.



Rae Sprague (4135)

**Take a Memo, Please**

Disregard of safety rules all too often results in mishaps. Know the rules for your own protection and welfare.

**No job is so important and no service is so urgent that we cannot take time to perform our work safely.**

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**lab news**  
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# Tonopah Range Field Test Photographer Exposes 50,000 Feet Color Film Monthly

Color film at Tonopah Test Range is consumed at an average rate of 50,000 ft. per month. Five ME-16 tracking telescopes and eight Contraves theodolites with accompanying high-speed cameras photograph the trajectories of test units dropped from fast-flying military jets from Kirtland Air Force Base.

Along with the electronic data from the MIDOT (Multiple Interferometer Determination Of Trajectories) stations on the range, the film is important to Sandia design and development groups concerned with the ballistic behavior of test units.

Responsibility for film handling and film exposure at Tonopah Test Range belongs to Harley Moody (7246), a Field Test photographer since 1951.

Harley has photographed hundreds of drops. He started at Salton Sea Test Base using Mitchell cameras and the old M-45 tracking telescope. Harley was the first operator of the ME-16 tracking telescope while it was under development by Sandia Laboratory.

"This is an excellent tracking system," Harley says. "It's hard to miss with the ME-16. Its rapid, responsive controls keep you right on target. The telescope lens gives you a bright, sharp, full-frame image."

During a drop test, Harley usually mans the "bandstand," the closest camera station to the target area. Some 30 ft. "off the

deck" of the dry-lake target area, the bandstand commands the entire flight line and target area. These pictures give the design engineers the best optical record of the drops.

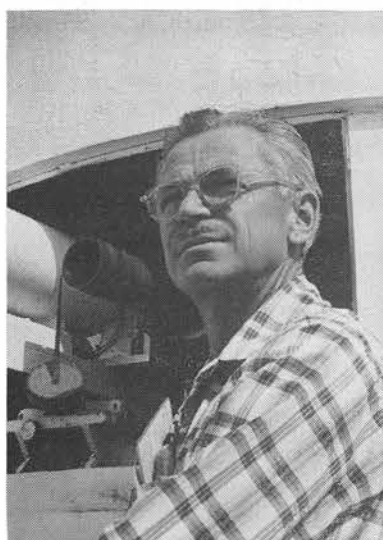
About half an hour before a scheduled drop, Harley takes an incident light reading from the target area. He computes the exposure for every camera operating for the test and calls the information to the various stations.

From "Radar Hill" the giant AN-MPS-25 radar picks up the approaching aircraft. This information is relayed to the camera operators, and the telescopes move into position. Once spotted, the skill of the operator keeps the telescope 'on target'. After the test unit separates from the plane, the operator tracks it to impact.

One of the most spectacular tests ever photographed by Harley was a flight of a Regulus missile. As it came over the target area, it malfunctioned and exploded. At 96 frames per second, the explosion was recorded in brilliant slow-motion detail.

Another series of exciting tests was filmed by Harley from a boat at Salton Sea. He recorded 52 drops of the Mercury space capsule while the parachute system was undergoing development. He had to keep the capsule centered in the frame while the parachute floated down and the boat raced at full speed toward it.

In addition to photographing



FIELD TEST PHOTOGRAPHER Harley Moody has responsibility for all film handling and film exposure at Tonopah Test Range.

drop tests, Harley also shoots documentary color still pictures of rocket assemblies and impacted test units. His pictures of Tonopah Test Range activities have also appeared in the Lab News.

## Supervisory Appointments

EDMUND G. FRANZAK to supervisor of Tube Development Division 1413, Electronic Devices Department.



Ed has been with Sandia Laboratory about four and a half years in addition to summer employment here in 1958 and 1960. Last June he was promoted to supervisor of Applied Solid State Section 7223-2. His previous Sandia work had been mainly for Physical Sciences Research Department 5150 in solid state theoretical physics and research in electron-phonon interactions.

He has a BS degree in electrical engineering from Fournier Institute, Lemont, Ill., a MS in electrical engineering from the University of New Mexico, and a MS degree in physics and PhD in theoretical physics from Northwestern University.

In addition, he taught theoretical physics at the University of Missouri for a year and a half.

Ed is a member of the American Physical Society and the following honorary societies: Sigma Xi, Phi Kappa Phi, and Kappa Mu Epsilon.

JOHN M. BIERLY to supervisor of Organic Materials Section 8115-2, Materials Application Division, Livermore Laboratory.



Jack has been engaged in work on organic materials since he joined Sandia at Livermore in December 1959.

Before coming to Sandia, he taught for six years at McNeese State College, Lake Charles, La., where he was professor of chemistry. In addition, he taught chemistry two years at Southeast Missouri State College, Cape Girardeau, Mo.

In June 1953, Jack received his PhD in chemistry from Iowa State University. He was awarded his MS degree in chemistry from the University of Iowa in 1948, and received his BS degree from Cornell College, Mt. Vernon, Ia., in 1947.

During World War II, Jack served two and a half years in the Marine Corps.

He is a member of Sigma Xi and Lambda Upsilon, honorary societies.

# 'Man in Space' Subject and Speaker H. D. Sivinski Have Wide Audience

"People want to know about this country's space efforts," H. D. "Jack" Sivinski says, "so I tell them in a way they can understand."

The supervisor of Facility Planning Section 7311-1 has presented many talks on "Man in Space" to civic, church, professional, business, student, and technical groups throughout New Mexico and several western states for the past two years. His reputation as a speaker has spread until he has to turn down several requests each month due to lack of time.

Tailoring his talks to the specific audience, Jack concentrates on the environmental aspects of space journeys. He discusses the problems of blastoff, re-entry, weightlessness, noise, vibration, silence, radiation, meteorites, and the physical conditions of living in a space vehicle.

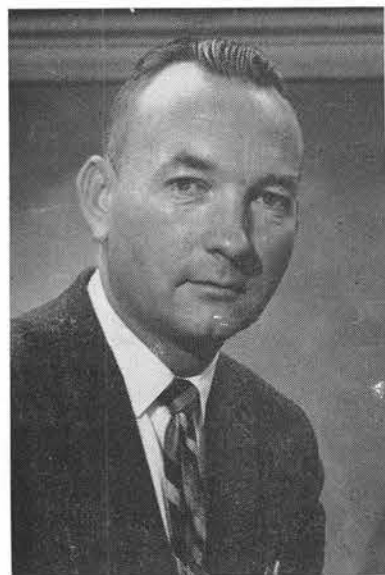
"The spaceman will have to be a part of a completely self-contained and self-regenerating environment system," Jack says. "If man goes to the moon for any length of time, he will have to produce food to sustain himself while there. Breakfast might be something like a handful of dried algae, a half dozen peanuts, some drink made from yesterday's wash water and worse, sweetened with sugars made by chemically breaking down carbohydrates. Good, eh?"

### Much Appreciated

To his audience, the discussion of highly-technical subjects in layman terms is a much-appreciated service. Jack has been named "Speaker of the Year" by one Kiwanis group and the Santa Fe Kiwanis Club invited him back a second time for another talk on the same subject. Rotary clubs, science clubs, education groups, and businessmen's associations have expressed their thanks. Question and answer sessions after his talks frequently run for an hour or more.

Last year, a last-minute cancellation of a major speaker left a hole in a program for special high school science students at Oklahoma State University. Even though it was his birthday, Jack volunteered to take on the speaking assignment. With little special preparation, Jack lectured to the group for three hours. A letter from a University official described the talk this way:

"You will understand how good a job Mr. Sivinski did when I tell you that he lectured and answered questions from 1:30 to 4:30. At that time I told the students they were free to go. Not one left. At 5:00 I closed the session. Five of the boys followed us over to the Union



JACK SIVINSKI has earned a reputation as a dynamic speaker, much in demand by civic, professional, and student groups. His talk describes in laymen terms environmental aspects of space journeys.

Club still plying Jack with questions. It was one of the outstanding sessions of the entire program."

### Visiting Scientist Program

Jack's "speaking career" began about two years ago when he was recommended for the Visiting Scientist Program, an activity of the New Mexico Academy of Science that provided scientists from industry, education, and government agencies to talk with high school science students.

Jack is still on call from this organization, but most of his requests to speak now come directly to Sandia Laboratory's Public Relations Department 3430.

Jack discussed plans for the next 10 years of the National Aeronautics and Space Administration and adds that each flight of the Mercury space capsules costs every United States citizen about \$2.25.

"This is expensive," Jack says, "but taxes are not burdens; they are the price of liberty, the assurance of freedom of religion, the protection of our homes, the education of our children, the right to vote, and the guarantee that we may speak from our hearts without fear. Taxes are a small down payment on life's most priceless commodities—faith, hope, and the opportunity to know God better through exploration and knowledge of the wonderful universe He created."

## Sandia, Livermore Hams Invited to Take Part in Amateur Radio Contest

Radio hams at both Sandia and Livermore Laboratories are invited to participate in the Third Annual CQ-Western Electric Radio Amateur contest to be held three week-ends in January.

Scoring will be on the basis of two points for each confirmed contact, times the sum of all the different U.S. call-letter districts

and foreign prefixes. The same station cannot be counted more than once per week-end. Logs will show GMT time, the station call, location of the station worked, and the Western Electric unit to which the operator belongs (Sandia Corporation).

The timetable for Phone AM/SSB work: Jan. 12, 2300 GMT; Jan. 13, 0400, 1400, and 1800 GMT. Each operation period is for one hour at 7.255 and/or 14.275 frequency.

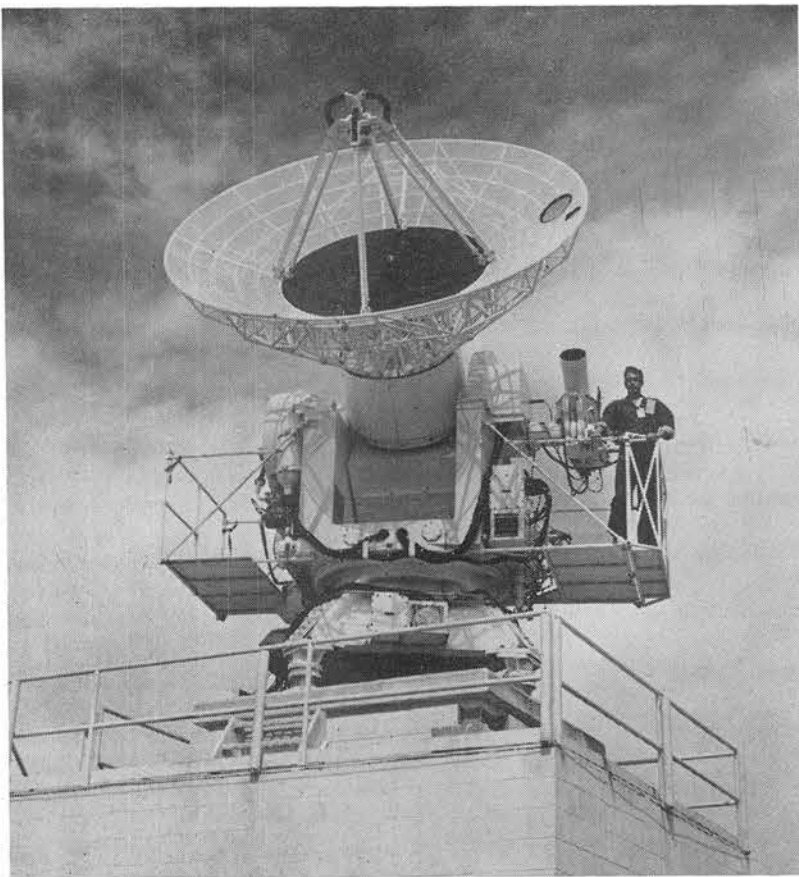
CW contacts at 7.095 and/or 14.060 frequency are scheduled for Jan. 19 at 2300 GMT, and Jan. 20 at 0400, 1400, and 1800 GMT.

The final session from 1400-1800 GMT on Jan. 27 is for 7.040 RTTY (teletype) work, Novice Bands, and Technician Bands.

Operators should work near the stated frequencies, but not necessarily on them, to lessen possibility of jamming.

Logs must reach the contest coordinator by March 1, 1963. He is Harry Voorhees (W4CPI), Department 7665, Reynolda Road, North Carolina Works, Winston-Salem, N. C.

Awards will include the rotating Works Trophy, an individual high scoring award (a mounted 212D vacuum tube), and a certificate for each operator submitting a log.



GIANT RADAR at Tonopah Test Range has 500 mile range. This 10-ton instrument provides information for aircraft guidance and control during test operations at Tonopah. At right is Robert Germain.

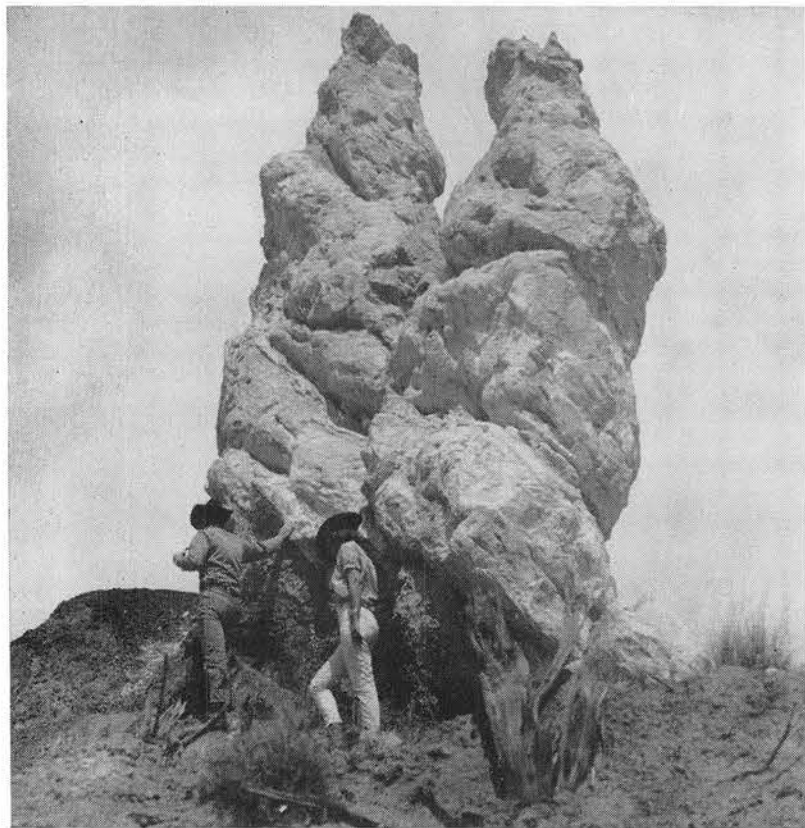


INSIDE RADAR TRAILER, Robert Germain tunes in television which is focused with a telescope lens at object radar antenna is tracking.

## Welcome Newcomers

Oct. 22-Nov. 16

Albuquerque	
Pauline Aragon	3126
Lamberto Baca	4574
Sallie A. Bailey	3421
Charles L. Barr	3446
Mary F. Beary	3126
Patricia A. Childers	3446
Lois R. Class	3154
Donovan Dawson	4253
Robert C. Dosch	1122
Jane B. Everett	3126
Kermit K. Frye	3441
Jose C. Garcia	4511
Robert C. Garcia	4574
Ted R. Garcia	3444
Dolores G. Graving	3126
Mary Ray Houston	4413
Monte P. McDonald	4332
Judy G. Mershon	3126
Orville A. Moore, Jr.	3444
Jeanette K. O'Meara	3451
Marceline D. Pannell	4613
Barbara T. Reis	4411
Ina Alice Tipton	3452
Lucia C. Vigil	4321
Basileo Villescas	4574
Idaho	
Thomas A. Linn, Jr., Idaho Falls	3311
Pennsylvania	
William W. Allison, Pittsburgh	3211
Texas	
John M. J. Warren, Austin	5421
* Denotes rehired	
Returned from Leave	
Josephine Canady	4411
M. Joyce Hansen	4212
M. Rita Sanchez	3126



STRANGE FORMATIONS found in the San Ysidro area are explored here by members of the John Southwick family. This is only one of the interesting spots in New Mexico that can be explored on weekends.

## Expert Weekend Vacationers Like to Explore the Unique

If one enjoys week-end travel to unique and unusual places, John Southwick (2444) is the man to ask for information.

John, his wife, and 15-year-old son, Robert, love to explore and travel. They built their home with these interests in mind—they have an extra large garage to accommodate their camping trailer, and a yard requiring little or no care.

Among the local spots of particular interest have been:

Ruins of Ojo Caliente—an old fort southwest of Magdalena. The Apache chief Geronimo was tricked into capture at the fort by a young Indian agent. The nearby hot springs made this one of Geronimo's favorite camping spots.

Canyon del Triego—on the west side of the Manzano Mountains, reached by a dirt road off Highway 60. The trail zigzags up the steep canyon, crossing a mountain stream 47 times before joining the crest trail. "The sheer cliffs, waterfalls and pools in the stream, even a cave, made this one of the most beautiful and interesting hikes we've taken," John said.

In the same area is Bosque

Peak where the Southwicks discovered a home which could be reached only by burro trail. The owner had raised a large family there and had even taken a piano apart and transported it piece by piece up to the mountain-top homestead.

San Ysidro—about 40 miles northwest of Albuquerque. "In Peralta Canyon, on the west side of the Jemez Mountains," John said, "we found a crevice several stories high and barely wide enough to walk in. The sandstone had been scoured out by flood waters." The fantastic shapes of the rocks in that area lend themselves to interesting photographs. Since John has more than 1700 color slides, he should know.

During a one-day hike along the Rio Puerco Valley, about 20 miles west of Albuquerque, John made a seven-minute movie starring the family dog, Nix. The film also contains shots of numerous Indian ruins and fossil beds in that area.

Other one-day trips from Albuquerque include the ghost towns of Hagan, Cabezon, or Kelly; the Wildfowl Refuge south of Socorro; a picnic in Cochiti Canyon; and fall aspencades in the Sandias or above Santa Fe.

All of these places are accessible by passenger car. "We've pulled the trailer to a great many of them," John said. "However, I must confess that not everyone would think some of the roads were fit for passenger cars."

## Service Awards 15 Year Pins



Claudine H. Sproul  
3444  
Nov. 24, 1947

Eugene O. Rudat  
4253  
Nov. 28, 1947



Mabelle I. Weaver  
7242  
Dec. 1, 1947

Jefferson Blaylock  
4537  
Dec. 5, 1947

## 10 Year Pins

Nov. 24-Dec. 7

Loran G. Anderson 2531, Kenneth R. Edwards 7321, Joseph R. Garcia 3133, Elmer G. Goeppfert 4211, Russell L. Maxwell 1332, Merle W. Alexander 4224, Hildegard E. Fink 3446, Edith A. Worley 3462, Jacob E. Aragon 3444, Seyfred R. Toledo 3122, Eugene Chavez 7321, Pearl M. Kelley 4213, Robert S. Neiman, Jr. 5311, Winton B. Pafford 8124, Henry J. Schroer 4232, Marian A. Tillman 4233, Joe M. Costales 4153, Alice M. Oberle 3462, Donnie M. Papineau 4335, Edwin C. Wittwer 7214, Floyd M. McIver, Jr. 5311, Allen L. Thornton 2532, Dennis A. Doherty 4518, Joe Die Fulmer 4513, Hunter W. Lewis 7522, Frank W. Millikin 7125, and Violet L. Federaro 3111.

## Member of AFSWC Research Directorate Speaks to IRE Groups

Two Professional Groups of the Institute of Radio Engineers will meet Monday, Dec. 3 to hear a discussion of electro-optical generation of electromagnetic radiation. William R. Graham of the Research Directorate, Air Force Special Weapons Command, will be the speaker.

Members of the Professional Group on Microwave Theory and Techniques and the Professional Group on Electron Devices will meet at 8 p.m. in the dining room of the Coronado Club.

The speaker holds an MS degree in engineering science and PhD degree in electrical engineering from Stanford University. He was on the research staff of Hughes Aircraft Research Laboratories working in the areas of microwave circuits, semiconductor devices, and lasers prior to his present position.

For reservations or further information contact R. J. Gossett (7223), ext. 28169.

# At That Crucial Moment Will You Respond to Their Agonies?

Ahead, the highway is clear; the afternoon sun is warm; it's a nice day for pleasure driving. But on this day, your pleasure is destined to turn to horror.

You sweep around a curve . . . in time to see a sedan ahead of you complete a snap roll off the roadway, skid onto a field, and come to rest on its top, its wheels spinning with idiotic persistence. As you approach, one thought rings through your mind: First Aid.

You're first on the scene; it's up to you to provide the victims of the wreck with help during the first, vital minutes after the acci-



dent. As you run up, you notice smoke rising from the wreckage and you catch the smell of gasoline.

The car's only occupant lies sprawled near an upturned door. Oddly, his eyeglasses lie near his face as if ready to be worn. His face is composed, almost serene. As you hurry up, his eyes turn to watch you.

You waste no time. Your appraisal of the situation is hurried but logical: you've noticed the smoke and the gasoline, and you can almost feel the impending explosion. The injured man must be moved from the wreckage, out of the danger area. No time to lift him. You put both arms around his torso and pull.

His scream shatters the silence like smashed glass. You move him to safety, finally, but he dies in your arms as the ambulance arrives, his lungs pierced by the broken ribs you failed to take into account.

\* \* \*

The afternoon sun is warm; the book in your hand is a good one; it's a great day to spend relaxing. But the fates have something else in mind.

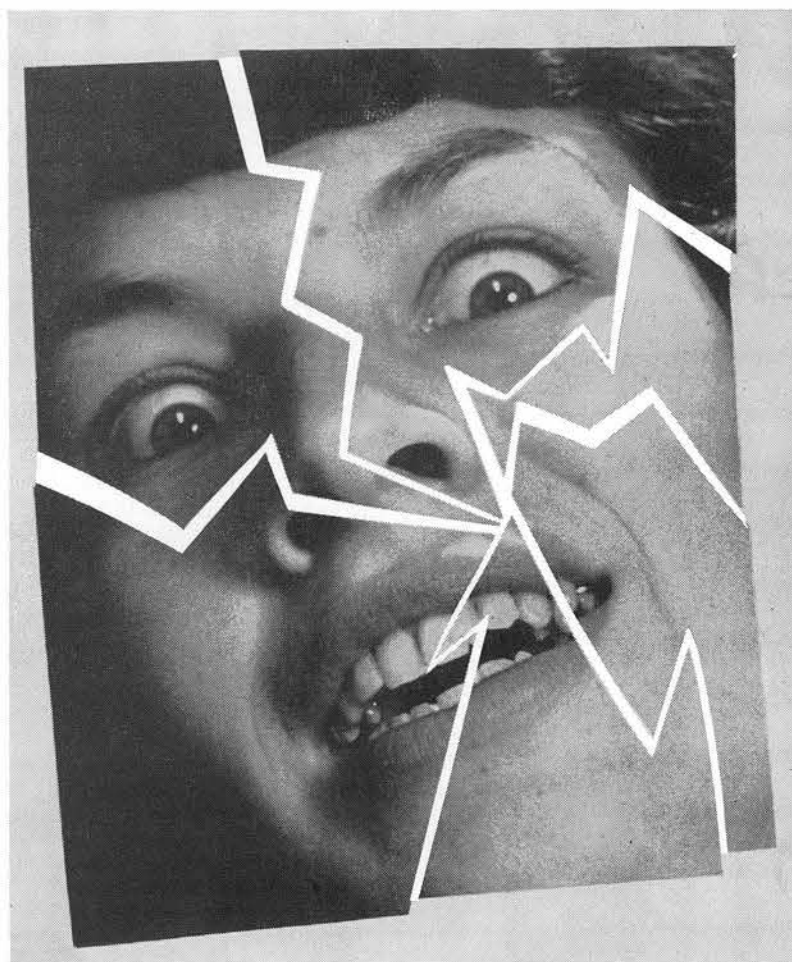
## First Aid Training

Evening courses in Red Cross Standard First Aid will be offered Sandia Laboratory employees and their dependents starting the week of Dec. 3. For further information and enrollment in the course, please call Jean Miller (3132), ext. 48138.

The doorbell rings; you pull back the curtain and notice your neighbor standing on the porch, a blanket-wrapped bundle in her arms. She punches the bell again and again. You need no second glance to sense her panic.

As you open the door, she begins a tragic little litany: ". . . poison . . . he ate some drain cleaner . . . can you do something . . . he was on the floor . . . I . . ." She thrusts the child into your arms; you are surprised at the warmth of the blanket she has wrapped around it.

Speed is essential, but what to do? Most drain-cleaning compounds are strongly caustic; they produce burns. You remove the blanket from the child's face. The mouth is ringed with blisters and the lips are swollen. You wonder abstractedly, how



can a child with such burns cry so loudly?

You instruct the mother to call a doctor; meanwhile, you tell her, you will try to dilute the poison with water. In the kitchen, you pour cup after cup of water into the child's mouth. Perhaps the burns aren't as bad as you thought; he drinks greedily.

When the mother returns, you tell her that the child should vomit if possible to get rid of the poison, and that you're going to induce him to do so. But with your first efforts, you realize with growing fear that you've done the wrong thing. The child's vomitus, loaded with the caustic cleaner, only aggravates the burns in his throat and mouth, and in the midst of his cries, he begins to choke . . .



The afternoon sun is warm; you've finished baking a cake, and now you're watching TV. But you won't be there long.

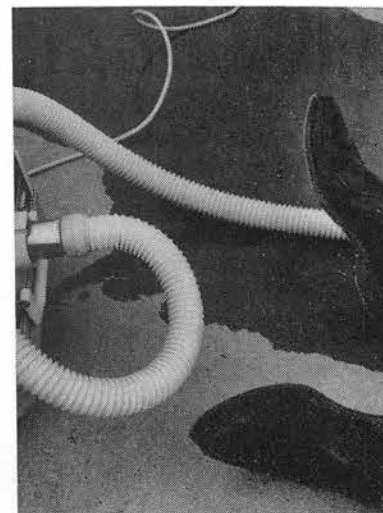
Outside, your husband has washed the car, and is preparing to clean it out. He's borrowed your vacuum cleaner again, and you're annoyed by its noise, which cuts across the voice of the announcer you're watching.

You're prepared for the interruption, at least until he's through using the attachments on the floor mats. But the noise goes on, and on. You wait. He should be finished; if so, he should turn off the cleaner. You move to the door.

The cleaner, now humming steadily, sits in a pool on the wet concrete drive. Your husband lies near it, twisted unnaturally. You run to him.

There's a funny, electric smell in the air and you remember its name: ozone, produced by ionizing air with a strong electric current.

He doesn't move. You reach down to touch him, to pull him away from contact, out of the clutch of the current. As you do so, you sense, too late, something fatal in the air, something you shouldn't have done . . .



The nightmare is recurrent, and it's meant to be. In each of the episodes, intentions were good, even if the results were horrible. Too many times, when a person is singled out to use first aid to save a life, he does something, to be sure, but he does it wrong. And all too often, there's no time to correct such mistakes.

To be really competent, we need the training that an organized class in first aid can give to us. By applying the principles properly, we can be of truly inestimable service to those we try to help. By mis-applying the principles, we stand a chance of turning our patients into our victims, and of doing inestimable harm. We owe it to each other to be well trained.

## Alcoholism Workshop To Be Presented by Albuquerque Council

Two Sandians will participate in a workshop on "Alcoholism, Community Crisis" to be held Nov. 24 at the Cole Hotel. The meeting will be co-sponsored by the Albuquerque Area Council on Alcoholism and the New Mexico Commission on Alcoholism.

J. H. Gibson, supervisor of Clinical Psychology Division 3342, will be moderator of a panel which will discuss "Alcoholism in Albuquerque, Its Nature and Extent." The panelist representing Industry will be S. P. Bliss, M.D., Sandia's Medical Director.



**HORSESHOE CHAMPS** — L. A. Eversgerd (4614), left, and Fonzo B. Cossell (4512), doubles champs of Sandia Lab, pose with trophies recently won when they emerged victors of round robin final matches. Participating were 12 teams, winners of organizational tournaments.

### Albuquerqueans to Help Raise Funds For Cultural Center

Albuquerque will be one of 60 communities across the country to participate in a closed-circuit telecast on Nov. 29, part of the fund-raising drive for the National Cultural Center in Washington, D.C.

The two-hour show, which will feature outstanding artists, starts at 7:30 p.m. in the Civic Auditorium. Half of the proceeds will go towards construction of the cultural center; the balance will be shared by the Albuquerque Civic Symphony and the Pilot Club for local cultural purposes.

Mrs. George Dennis is in charge of ticket sales for Sandia Base. Sanado Club members who are assisting her include Mrs. F. C. Cheston, Jr., Mrs. James Fesler, and Mrs. Jack Colquitt. The tickets are priced at \$3, \$5, and \$10.

Congress has already designated a 13-acre site near the Lincoln Memorial for the center; however, the \$30 million required for construction of the building will be met by contributions from the American people. The structure will include an opera house, concert hall, theater and roof garden. It will be for the use of professional and non-professional talents of the 50 states and for visiting artists from other countries.

### Meet your reporter . . .

## Ethel Lonner Has Reported News of Environmental Testing for 4 Years

Ethel Lonner (7312) has been a volunteer Lab News reporter four of her five years at Sandia. She has worked the entire time in the Environmental Testing organization.

Ethel followed her daughter, Dottie Blaylock (3423), to both Albuquerque and employment at Sandia. The two women live 10 blocks apart, "which means I frequently baby-sit with my granddaughter," Ethel explains.

For many years Ethel traveled with her husband, who was in the steel construction business. "It meant living in hotels and apartments. It seemed that pavements and sidewalks were all I saw," she said. After his death, when she moved to New Mexico, Ethel bought a small house—but she's seldom indoors. An enthusiastic gardener, she spends long hours planting and caring for her flowers. During the winter she has



time for two tiered carts loaded with African violets in many colors and variations.

## Sandia Speakers

Following is a list of speakers, titles, and places of presentation for recent talks presented by members of Sandia Corporation.

J. R. Banister (5153), E. H. Beckner (5153), and R. D. Jones (7223-2), "Assembly of an Argon Plasma in a Magnetic Mirror Geometry," American Physical Society, Atlantic City, N.J., Nov. 28-Dec. 1. Mr. Banister will make the presentation.

E. H. Beckner (5153) and J. R. Banister (5153), "Assembly of an Argon Plasma in a Magnetic Cusp Geometry," American Physical Society, Atlantic City, N.J., Nov. 28-Dec. 1. Mr. Beckner will make the presentation.

R. J. Blount (4170), "Sandia's Budgeting and Reporting System," National Association of Accountants, Albuquerque chapter, Nov. 15.

H. J. Stein (5311), "Fast Neutron Irradiation of InSb," American Physical Society, Cleveland, O., Nov. 23-24.

R. H. Braasch (2421-1), W. K. Paulus (2421-1), and A. C. Wilken (2421-2) all participated in a discussion on "General Magnetics" at Yale University, New Haven, Conn., Nov. 9.

## Witness Wanted

Isabelle Silva (3421) is seeking any fellow bus rider who saw her fall as she boarded a city bus at Hermosa and East Central on Oct. 12. The accident occurred at about 6:30 a.m. while she was en route to work. Mrs. Silva's home telephone is 256-3739.

## Congratulations

**Born to:**  
Mr. and Mrs. C. E. Robertson (7244) a daughter, Melissa Ann, on Nov. 5.  
Mr. and Mrs. Joseph Crompton (2531) a son, Joseph IV, on Mar. 17.  
Mr. and Mrs. R. R. Neel (7118-1) a daughter, Deanna Lee, on Nov. 12.

# coronado club

**Nov. 23 - Dec. 8**

					FRIDAY	SATURDAY
					23	24
					Social Hour	1094th Party Ski Club Party
SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	30	1
Family Night Abbott-Costello Movies	Bridge Master Point 7:00 p.m.	Sanado Bridge 1:00 p.m.	Ladies' Bridge 1:15 p.m. ACF Bridge 7:00 p.m.	Bridge 7:30 p.m.	FCMC Party	Parties: 1300 3240 7110
2	3	4	5	6	7	8
Sanado Christmas Party 12:30 p.m.	Ski Club Meeting 7:30 p.m.	Sanado Bridge and Style Show 1:00 p.m.	Game Night 8:00 p.m.	Master Point Bridge 7:30 p.m.	Parties: 4600 5300	Parties: 3440-3460 4540 Base Supply

## EVENTS

## SHOPPING CENTER ● SHOPPING CENTER ● SHOPPING CENTER ● SHOPPING CENTER ● SHOPPING CENTER

**CLASSIFIED ADVERTISING**  
Deadline: Friday noon prior to week of publication unless changed by holiday.

**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

**FOR SALE**  
PIANO ACCORDIAN, large junior size, w/carrying case, best offer over \$75. Laursen, AX 9-1656.  
NORMAN 80,000 forced-air furnace, \$35; cartridge board, \$65; old cast iron bank; trade for old Indian items. Smitha, AX 9-1096.  
'55 PACKARD Clipper Deluxe w/'56 motor, radio, new tires, \$325 cash. Fisher, 247-3165.  
15" SPEAKER ENCLOSURE, unfinished, \$15; Horner 48 base accordion, \$30. Arthur, AX 9-7044.  
HIGH CHAIR w/tray, \$5; baby bottle sterilizer w/8 complete bottles, never used, \$3. Halliday, AL 6-6685.  
GIRL'S large bicycle, lightweight, \$20. Mancuso, AX 9-4279.  
8MM CAMERA w/case and projector. Apodaca, 877-3148.  
MAGIC CHEF gas range and oven, \$25. Kotoski, AX 8-1732.

CAR SEAT, \$1; sleeper-walker-stroller, \$5; Cosco jumper, \$4; Seibert buggy, \$15; size 4 Navy snowsuit, \$5. Snyder, 336 General Somervell NE, AX 9-7845.  
HOFFMAN BRICK 3-bdr, 1 3/4 baths, carpeting, drapes, garage, below FHA, \$500 down to qualified buyer. Garst, 299-5870.  
ELECTRIC RANGE, Frigidaire Deluxe w/deep-well; dinette set, 5-piece, black w/red and white chairs. French, 255-7676.  
FOUR GOOD TIRES, \$100, will throw in 4-speed 1/2 ton 1952 Stude pickup. Wilson, BU 2-3225.  
'49 STUDE, 3 tires, \$35. Prakash, 10304 Chapala Dr., NE, AX 8-1195.  
26" GIRL'S bicycle, 3-speed shift, front and rear brakes, chrome fenders, heavy-duty tire tubes, \$42. Stoever, AL 6-2439.  
MANKIN 3-BDR, completely furnished if desired, sprinklers, wire fence, lawn, 13301 Chico NE, possession 30 days. Swartz, 298-3359.  
BATTLE CREEK exerciser bicycle w/adjustable tension, speedometer and mileage indicator, \$35 or best offer. Jackson, AL 6-1672.  
'55 BUICK 4-dr. hardtop Special, \$400; Keystone 8 mm turret movie camera, wide angle, telephoto, normal lenses, \$40. Neel, AX 9-9309.  
'53 FORD, 8 cylinder, recent overhaul, new head gaskets, battery, and voltage regulator, \$200. Kent, AL 6-1221.  
ELECTRIC ORGAN w/matching bench, 60 chords, used 6 months, cost \$250, sell \$135. Haycraft, AX 9-3220.  
FREE BEAGLE PUPPY, good pet, may make good hunting dog; new 2-burner Coleman camp stove, \$9.25. Shock, TR 7-3728.

**NEXT DEADLINE**  
**FOR SHOPPING CENTER ADS**  
**Friday Noon, Nov. 30**

'60 VOLKSWAGEN, one owner, \$1400; Italian Electra 120 base accordion, \$150. Young, 255-9341.  
BATHINETTE; bassinet; auto. sterilizer; jumper chair. Sullivan, AX 9-1348.  
PHILCO REFRIGERATOR, \$25. Cowham, 298-4249 after 6 p.m.  
JEEP, 4-wheel drive station wagon. Stopp-kotte, AX 9-4760 evenings.  
36" WHITE gas range, '56 model, \$20. Smith, AX 8-0767.  
GIRL'S kitchen cupboard, \$15; Sunbeam French fryer, \$10; Lionel 'O' gauge track, 10 cents each; automatic gate-man, \$3; inspection car, \$2.50; track-cleaning car, \$5. Rayner, AM 8-1705.  
'59 TR3, cloth top and tonneau cover, w/w, wire wheels, new tires, \$1295. Davis, AX 9-4971.  
POCKET WATCH, Hampden movement, \$50; ping-pong table complete w/set, \$25. McNeely, AL 6-2553.  
SKIN DIVER'S OUTFIT, new regulator valve; '57 Chevy Bell housing, trans., drive shaft, and rear end. Windsor, 344-8356 after 5 p.m.  
FOUR VOLUME COURSE in import-export business w/supply sources, samples, \$50 or will trade. Massey, 298-4650.  
RUGER Single Six .22 caliber revolver w/holster, \$33 or trade for Winchester Model 94 .30-30. Taylor, AL 6-3774.  
STEREOPHONIC preamplifier, new. Eico Model HF-85 in metal case, never used. Kasperek, 299-0506 after 5:30 p.m.

CAMPER, 8' aluminum, blue, sink, table, water tank, cupboards, wired for 12 volt, \$425. McKelvey, AL 6-9787.  
GE TV, blond console model, 1956, new picture tube, \$65. Gasser, AL 5-3604.  
MODEL 12, 3" mag. Winchester; new AYA double; selective trigger; 30-06 Mauser with custom stock; Mauser auto. handgun. Martinez, AL 5-6785 evenings.  
HEAVY-DUTY pickup bumper; single pot oil heaters; heavy winch and cable, fits International, sell or trade for AC generator. Penn, BU 2-3997.  
BEAM ANTENNA, Gonset 20 meter 2el beam with rotator and indicator, 10' mast included, \$30. Welker, AX 9-1179.  
LIONEL TRAIN SET, 8 cars, engine, many accessories, 50' track, 2 switches, \$35. Baker, AX 9-9392.  
WRINGER WASHER, Kenmore, deluxe model. Himes, AX 9-7828.  
'55 OLDS 98, red and white, \$375. Ramirez, 2621 Indiana NE, 255-2144.  
BRAUN F-60 electronic flash recharger, carrying case, flash cord, \$15. Simpson, AX 9-2266.  
ADMIRAL portable radio, battery and plug-in, turquoise and silver, \$20. Mitcham, AX 9-8425.  
WALL HUNG BASIN, fixtures, and pop-up waste, \$17.50. Hill, AL 5-6538.  
'59 SIMCA, 4-dr., 20,000 miles, \$650. Lopez, AL 6-1203.  
TWO girl's bicycles, 24" and 26". Cummings, 298-5173 after 5 p.m.  
ALUMINUM FRAME picture window w/two casements, fits opening 50x85, glazed and screened, \$20. Allen, DI 4-7540.  
LIMED OAK BED and chest, \$30; rattan love seat and table, \$17.50; chairs, lamps; misc. Wing, AL 6-9575.

TRADE for land or late model car, or sell 3-bdr., Mankin, large garage, sprinklers, landscaped. Rose, DI 4-8592.  
CORNER LOT, R-1, 60'x150', all paving paid, Columbia and Thaxton SE. Burns, CH 2-2407 after 5:30 p.m. or weekends.  
COSCO YOUTH CHAIR, \$5; turn-top TV table, \$5; piano bench, \$5; rocking chair, \$3. Campbell, AL 6-1015 after 5:30 or weekends.  
BRASS STAND on wheels for portable TV set, adjustable to fit any size, \$5. May, 7312 Gladden Ave., NE, AX 9-2624.  
'47 CHEVROLET PANEL, front end re-worked, \$125. Cole, AL 6-3016.  
MOTORCYCLE, '61 Matchless 650cc Twin, \$750. Overton, 298-3017.  
RUG, Gulistan, all wool pile, grey/beige 8 1/2 x 11' w/foam rubber pad, \$45. Connelly, 299-6795.  
'53 DODGE V8, gyro-torque, 4-dr., R&H, a/c, red and white, new battery, seat covers, tires, \$250. Hurley, AX 8-5250.

**WANTED**  
SERVICE MANUAL for 1949 Studebaker Commander. Brion, AX 8-1761.  
BABY SITTING in my home, near the University. Barrett, 242-6422.  
YOUNG MOTHER wishes to care for child in her home, near base, 300 block Gen. Arnold, NE. Bishop, 299-8782.  
STATIONARY HEALTH BIKE. Skelton, 299-3190 after 5:30 p.m.  
TRAILER HITCH of an equalizer type for 17' trailer and '59 Chevrolet, or a small dolly wheel hitch. Brathodia, AM 5-0783.  
BABY SITTING near Sandia Base for working mother. Nevada, AL 6-1064.

## Unconscious Person Needs Very Special Type of First Aid Help

by S. P. Bliss, M.D.  
Sandia Corporation  
Medical Director

Hardly does a day go by in a busy community the size of Albuquerque when a person isn't discovered unconscious. There are many causes of unconsciousness, which may vary all the way from simple fainting, concussion, stroke, cardiac and other circulatory disease, to alcoholism, diabetes, epilepsy, hemorrhage, poisoning by barbiturates or other drugs, gas asphyxia, electric shock, or drowning.

Unfortunately, bystanders sometimes shake the victim, shout at him, throw water on him, administer smelling salts, or pour water or alcoholic liquids into his mouth to arouse him. If he is indoors, however cold the weather, someone will open the windows. If an accident is the cause, a checkup for associated injuries is often overlooked before transportation, because the victim makes no complaints.

The unconscious person needs quiet.

### What to Do

1. Control any hemorrhage quickly. Give artificial respiration if breathing stops — this is true in only a small share of unconsciousness cases.
2. Lay the victim flat if the face is pale; if it is flushed, raise the head and shoulders upon pillows.
3. If diabetes is a possibility, the victim may carry a direction card. If it is found, follow the stated advice.
4. It is usually best to summon medical help, or at least to secure medical advice by telephone before attempting other measures. If the cause was an accident, and transportation is necessary, always check first for all injuries and give proper first aid. Gentle, not hasty, transporta-

tion is indicated. Even though recovery soon occurs spontaneously, a follow-up study is worthwhile, unless the case is clearly one of simple fainting.

## Warren Miller Adds Another Chess Trophy To His Collection

Warren Miller, a math analyst in Test Services Division 7241, won the New Mexico State Chess Tournament held Nov. 10 and 11 in Los Alamos.

Warren started his chess career 10 years ago at the age of 14. Six weeks after learning to play, he won the New Mexico State Junior title. At age 16, he won the Panhandle Open in Amarillo, Tex. During the past 10 years, he has acquired a total of 15 trophies and has never lost a match to any individuals.

He has had several games published in "Chess Life," a national chess magazine, and at present is rated nationally as an expert player.

At Sandia Lab, Warren has played a few of his co-workers while blindfolded (he instructed a third party what moves he wanted to make, not knowing what moves his partner was making) and has won quite easily.

## Sandia Authors

"The Weather Forecaster," an article by T. J. Raftery (7243), will appear in the December issue of the *Bulletin of the American Meteorological Society*.

G. C. McDonald (2530), "Shot from Guns," November issue, *Mechanical Engineering*.

## Arabian Named Habu Ziyade Is Pride, Joy of John Morrison

John H. Morrison (2563) is just now realizing a dream held since boyhood — he is the owner and breeder of fine horses. Last summer, he moved his family onto a 27-acre farm near Belen and constructed a corral for his prize Arabian stallion, Habu Ziyade.

"This is just a beginning," John says. "One of these days, we'll have some going stables."

Last month, Raindrop, a three-quarter Arabian colt, was born. Already the frisky colt is charging around the corral developing his "dwell," a characteristic Arabian extended trot. With head and tail up and body level, the colt seems to float as he rapidly moves across the pasture.

John has leveled the farm, added a concrete irrigation ditch, partially renovated the old house, and raised a crop of alfalfa. In addition he has rebuilt a truck and tractor.

"The hay crop came in handy," John says. "I traded it for stallion training."

The training has paid off in more ribbons for the dark, gray-dappled horse. Last month, "Zid," as the stallion is nicknamed, placed in the performance class at a regional horse show in El Paso. "It was the first time I had been the rider for a show," John says, "and the first time Zid had been entered in the performance class. I was very pleased with the award."

In the past, Zid has earned other honors in the halter class, judged on appearance and bearing. Zid has won six blue ribbons, four seconds and a number of thirds at the New Mexico State Fair and in various horse shows in the state. In 1961 Zid was named Halter Champion by the New Mexico Horsemen Association.

Back in West Virginia as a boy, John loved horses. He still does

and his plans call for acquiring several Arabian mares and breeding pure stock.

"In the meantime," he says, "taking care of Zid and the new colt keeps us busy." In addition to these animals and a mare, John has several white-face cows and a barnyard full of chickens.

"Although we've roughed it while getting the place in shape," John says, "it's been fun. The two boys, John and Mark, love it here and even my daughter Anita likes farm life. My wife would be happier if the house was finished, but she's been a good sport about it. She even helps pitch hay."



HABU ZIYADE, prize Arabian stallion, gets a workout from owner John Morrison (2563). John recently moved to a 27-acre farm near Belen.



AEC SHIPMENT SECURITY SECTION displays a plaque awarded recently by the National Safety Council for compiling the best fleet operation safety record in the nation. The 75 AEC couriers operated 20 vehicles that

traveled 1,225,967 accident-free miles during the year ending June 30, 1962. In front, from left, are L. R. Hammonds, rail security coordinator; R. P. Sharp, vehicle and air coordinator; and Terry M. Cowles, Chief.

### 12-Month Record

## AEC Shipment Security Couriers Pile Up More Than Million Accident Free Miles

The National Safety Council has presented its first place award in the 1961-62 National Fleet Safety Contest to the Shipment Security Section of the U. S. Atomic Energy Commission's Albuquerque Operations. The AEC organization operated 20 vehicles that traveled 1,225,967 accident-free miles throughout the United States during the year ending June 30, 1962.

Terry M. Cowles of Albuquerque, chief of the shipment security organization, was presented the first place award plaque during a formal ceremony in the La Salle Hotel, Chicago. The award was made in the Government Truck Division, Intercity Group, of the annual competition.

An organization staffed with some 75 couriers, the award-winning group provides escort and transportation support for the Commission's Albuquerque Operations (ALO).

### Couriers Get Pin

This is the first year the organization has participated in the National Safety Council's Fleet Safety Contest. Each of the AEC couriers who has had at least one year's experience in the shipment security section received a National Safety Council certificate and a lapel pin indicative of the safe-driver's award.

The Albuquerque-based unit operates 18 carry-all type vehicles and two three-ton trucks on trips throughout the country and under all weather and road conditions.

The vehicles sometimes carry radioactive materials or high explosives, or escort truck shipments of these materials. An average of three trained AEC couriers, equipped with radiation-detecting instruments and other safety devices, travel in each vehicle while it is on the road.

From February 1951 through June 1962, vehicles operated by the AEC-ALO organization traveled 5,727,609 miles. During that time, a number of the couriers received AEC commendations for heroism demonstrated during truck fires and other non-traffic accidents involving vehicles they were escorting.

The shipment security section carries out a continuous safe-driving program for all vehicle operators, using periodic driver instruction, films, booklets, and classroom lecture discussions. Courteous, defensive driving is emphasized. All of the organization's vehicles are equipped with seat belts. The vehicles are maintained

at the highest possible level of mechanical operation.

### Safe-Driver Instructors

"Every man who rides in one of our vehicles is considered to be a safe-driver instructor," Mr. Cowles said. "If he sees the driver making an error, he is expected to correct him. As a safety measure, we encourage back-seat driving."

In addition to the use of motor vehicles, the Commission's Albuquerque Operations also ships weapon components and materials by rail and air. To minimize any exposure in the event of an accident involving radioactive materials at a facility or during shipment, the Commission has specially-trained and equipped teams to decontaminate the area at the immediate scene if radiation has been accidentally released or nuclear material has been scattered by fire or explosion. The teams are prepared to go immediately to the scene. Past experience has shown that clean-up procedures are very effective.

## Radar Traffic Control Will Return to Sandia Base Streets

It is the responsibility of the Sandia Base Commander to maintain safety on the base, and traffic control is part of discharging this responsibility.

Under orders from the Base Commander, the Military Police have recently conducted an analysis of motor vehicle accidents occurring on Sandia Base. The accidents, which are on the increase, are being caused in many cases by

excessive speed in violation of posted speed limits.

A three-day radar check of traffic on Sandia Base revealed 6666 speeding violations (see accompanying table) and as a result the Base Commanding Officer has announced that the Military Police again will use radar in an attempt to reduce accidents and encourage voluntary compliance with posted speed regulations.

### SANDIA BASE RADAR TRAFFIC SURVEY

LOCATION	No. of Days	No. of Hours	Speed Limit	No. of Speeders	Top Speed Recorded
Main St. at 30th Place	3	33	25 MPH	2,722	48 MPH
Penn. Ave. at 47th St.	3	29	20 MPH	432	49 MPH
"E" St. at Zia School	3	33	35 MPH	1,685	62 MPH
Penn. Ave. at "F" St.	3	28	35 MPH	1,123	53 MPH
Manzano Road	3	33	50 MPH	704	81 MPH
6,666					

## Sandia's Safety Record

**Sandia Laboratory HAS WORKED 1,830,000 MAN HOURS OR 51 DAYS WITHOUT A DISABLING INJURY**

**Livermore Laboratory HAS WORKED 423,500 MAN HOURS OR 81 DAYS WITHOUT A DISABLING INJURY**