

# SANDIA LAB NEWS

published every other Friday for the employees of sandia corporation, contractor to the atomic energy commission

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April 19, 1957

## '57 Nuclear Tests To Start With Nearly 100 Sandians On Hand

About 100 Sandia Corporation employees will be present as members of the work party when the 1957 test series, Operation Plumbbob, begins at the Nevada Test Site in mid-May.

First in a series of experiments related to the safety of atomic weapons during handling and storage is scheduled to take place when weather conditions are favorable. This is not a nuclear detonation and no effects are expected to be observed outside the

immediate area of the detonation.

A newly activated firing site is being used for the safety experiment. An area 10 miles by 16 miles located entirely within the Las Vegas Bombing and Gunnery Range, a few miles north of the Nevada Test Site, has been made available for the tests.

Several additional safety tests will be conducted during the summer at times when the site is not being used for nuclear tests.

J. D. Shreve (5112) is director

of Test Group 57 in charge of the safety test. Radiation Safety Advisor is W. H. Kingsley (3161). Others from Sandia connected with the test are Maynard Cowan (5112), R. E. Butler (5524), H. V. Lewis (7231), and D. G. Palmer (5112).

A possible innovation of the 1957 nuclear tests is the use of captive balloons to lift nuclear devices into the air for firing. The balloons would be anchored by four strong steel cables and would be used from heights of several hundred feet to about 2,000 feet.

The use of balloons would reduce the amount of radiation fallout in the nearby Test Site vicinity and on site.

Nuclear tests previously conducted at the Nevada Test Site have been air drops, tower shots, and surface and underground detonations.

### Photo-Instrumentation Group Elects Lenz New President

Irvin W. Lenz (5221) was elected president of the Society of Photographic Instrumentation Engineers recently. Paul Travis (5221) was elected vice president and Kenneth Wright, Albuquerque, was named secretary treasurer. Hugh Odell (5216) is the new program chairman of the group.



### Summer Work Hours Begin Monday, Apr. 29

Sandia Corporation employees in Albuquerque will change to the regular summer work hours on Monday, April 29. The new schedule will be 7:30 a.m. to 4:30 p.m.



CLOSE TOLERANCES, one of the aspects of a statistical quality control course, are demonstrated with these blocks by instructor James Caton to F. E. Burley (2500), left, and John E. Biegel (2514).

### John E. Biegel To Teach Engineers Statistical Quality Control Course

Seventeen Sandia Corporation engineers recently completed a 21-hour statistical quality control course. The course, developed by Western Electric Company, was taught by James Caton of WE's Burlington Plant of the North Carolina Works.

"The information presented in the course is of extreme interest to Operations Engineering," F. E. Burley, 2500 Superintending, says, "and eventually all of our engineers will be given the opportunity to take the course."

John E. Biegel (2514) conferred with Mr. Caton prior to becoming the instructor of the course at

Sandia. Mr. Biegel was formerly an assistant professor of Industrial Engineering and taught statistical quality control at the University of Arkansas. He has been employed at Sandia since 1953 in Manufacturing Engineering. He recently transferred to the Industrial Engineering Department (2510) to establish a statistical quality control instruction and consulting program.

The statistical quality control course will be coordinated by the Staff Training and Education Division (3123). Anyone desiring to enroll in the course should contact Don Jenkins, ext. 51162.



NEVADA INNOVATION—Captive balloons may be used to support firing platforms for devices to be detonated during Operation Plumbbob. The Nevada tests get underway approximately May 15.

### Sandians Help Set Program To Open Civic Auditorium

When the doors of Albuquerque's long awaited million-dollar civic auditorium open officially next Friday it will also mark the start of a new cultural expansion for the city.

The opening performance will feature the 100-piece Albuquerque Civic Symphony, under the direction of Dr. Hans Lange, and the 100-voice Civic Chorus. There will be 4,000 comfortable seats for the "Pops" concert with tickets moderately priced at \$2 for first level and \$1 for the second level. Tickets are now available on Sandia Base from Mrs. Kimball Prince, ext. 29196, and Mrs. John H. Findlay, ext. 33287, and at all local music stores.

Kimball Prince (6000) and A. M. Granum (2313), members of the Symphony Board of Directors, and Howard Stump (3152), chairman of the Board, have been active in making arrangements for the inaugural program. Charles Runyan (2120) is handling publicity and general news coverage for the opening night.

The auditorium is unique in that sound engineers claim the acoustical qualities are as near perfect as possible. No matter if the crowd is small or if the auditorium is packed to its 6,700 maximum capacity one person on the stage can be clearly heard without use of a public address

system (although one is available if desired).

The adaptability to different size audiences will make the structure versatile in scope of events.

### George P. Kraker Retires From AEC

Admiral George P. Kraker, Deputy Manager of AEC-ALO, retired this month after 41 years of government service.

Manager Kenner F. Hertford, in making the announcement, said,



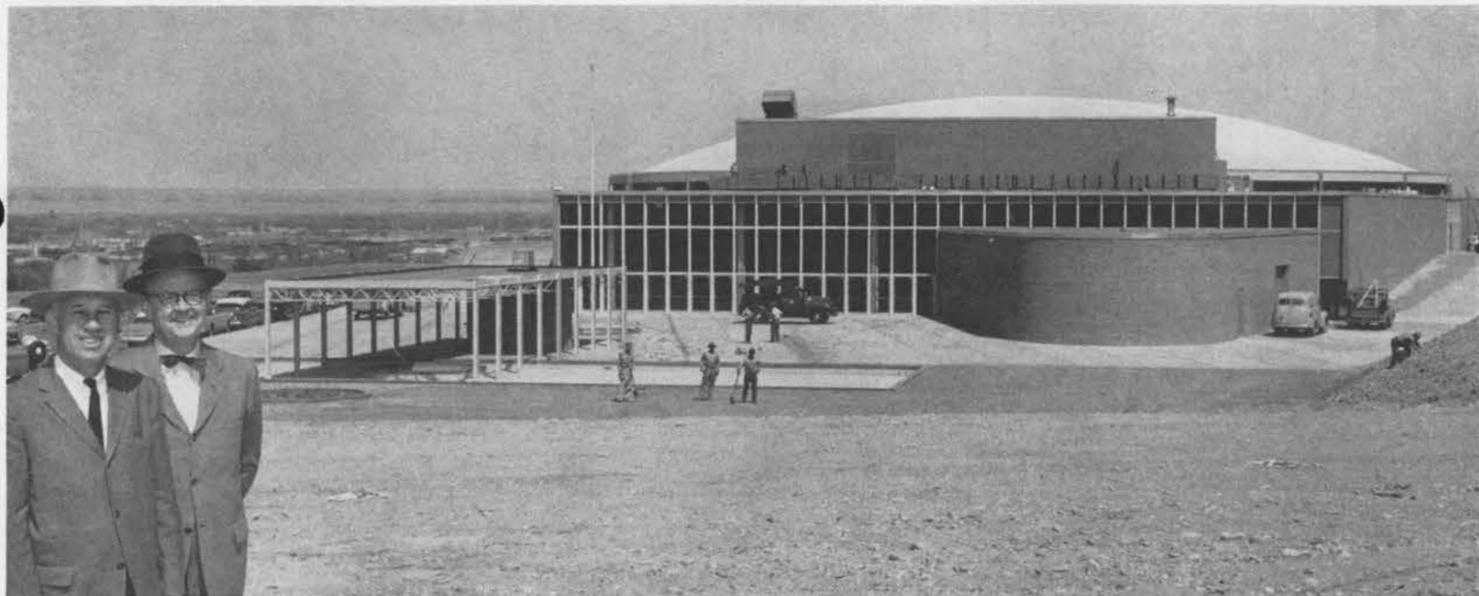
George P. Kraker  
—41 years service—

"He has been a strong force in building the Commission's weapons complex to its present level."

Following graduation from the U. S. Naval Academy, Admiral Kraker served 29 years as a Naval officer. In 1948 he was appointed Manager of the AEC's Sandia Field Office in Albuquerque. In that position he directed the building of the physical plant, the selection of Sandia Corporation as operating contractor, and the establishment of programs for the Sandia Laboratory.

Admiral Kraker has been Deputy Manager since 1951 except for a temporary assignment as Assistant Manager for Inspection and Storage in ALO.

Last December he received the AEC's Outstanding Service Award for contributions to the development of the AEC ordnance engineering, production and storage functions which are assigned to Albuquerque Operations.



ALBUQUERQUE'S NEW CIVIC AUDITORIUM will officially open next Friday with a "Pops" concert by the Albuquerque Civic Symphony and the Civic Chorus. Symphony Board members A. M. Gra-

num (2313), left, and Howard Stump (3152) have assisted in making arrangements for the special program. Moderately priced tickets are now available at all music stores in the city of Albuquerque.



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### Engineers in Three Dimensions

Fred R. Kappel, president of the American Telephone and Telegraph Company, recently expressed the interesting thought that what business needs is "three dimensional" engineers.

Speaking before some members of the American Institute of Electrical Engineers, Mr. Kappel explained his idea, which may well be a formula for producing engineers most needed in America today.

The engineer, Mr. Kappel said, gets his first dimension in college — learning to move in a straight line in his particular field.

The second dimension is the broadening that comes through continued training and self study.

For third dimension is the "height" attained from mingling engineering and management ideas so that the engineer's understanding of the problems and requirements of his business make him more effective in that business.

Industry contributes much, he pointed out, to the second and third dimensions. Nothing is gained by putting engineers in compartments and shutting them off — this does not produce engineers industry is looking for to take on responsible management jobs.

"In this dynamic and expanding world," Mr. Kappel said, "the competent engineer has to lead a dynamic and expanding life . . . The engineer has to grow and change with the times and constantly equip himself to handle new problems. He has to nourish his mind and broaden his outlook to be sure that neither gets obsolete."

Mr. Kappel points out that as a result of outside study by their engineers the Bell Companies are getting a wonderful amount of fine engineering done that otherwise could never have been done so soon or so well. Sandia too will reap the benefits of having three dimensional engineers and as Mr. Kappel pointed out the engineers ". . . are profiting in prestige, promotion and salary rewards as a result."

### Weddings and Engagements

Announcement has been made of the marriage of June Tipton (2333-2) to Robert E. Pugh of Albuquerque on Sunday, April 7. The evening ceremony took place at the Kingdom Hall, Jehovah's Witnesses.

The couple took a honeymoon trip to Taos and is now at home at 3115 Burton Drive SE.

June has been with the Corporation since August, 1956.



Miss Schwid Mrs. Pugh

Elaine Schwid (3154) recently announced her engagement to Jacob W. Hughes of Baltimore, Md. Elaine has been working for the Corporation since September, 1954. Her fiancé is a student at New Mexico A&M.

The couple plans to marry in December when Elaine's parents return from Afghanistan, where her father is a college professor.

Two Sandia Corporation employees have recently announced their engagement. Helen Wickes (3162) and Bob Knudson (1832-1) have made plans to marry in the summer.

Helen has been with the Corp-

oration since last November when she moved to Albuquerque from Valparaiso, Ind.

Bob started with Sandia five years ago and headed the Health Services Division (3164) before transferring to the Livermore Branch the first of this year.

### Congratulations

Born to:

Mr. and Mrs. Rosalio Silva (2417) a son, Juan Maria, on March 30.

Mr. and Mrs. Bennie Lucero (1625-1) a son, Gregory Louis, on April 7.

Mr. and Mrs. Alfonso Trujillo (2351-2) a son on April 6.

Mr. and Mrs. Hal Baxter (2443) a daughter, Virginia Ann, on April 8.

Mr. and Mrs. W. H. Allen (2542-2) a son, Mark Steven, on April 11.

Mr. and Mrs. John Reilly (7411-1) a daughter, Ann Marie, on March 24.

Mr. and Mrs. T. J. Williams (1451) a daughter, Karen Anita, on March 29.

Mr. and Mrs. Mel Otero (2521-1) a son, Anthony Francis, on April 4.

Mr. and Mrs. Don Williams, Jr. (1611) a son, Alan Neal, on April 11.

### Sandianotes

## Allen F. Hurford Elected President Sandia Base PTA

#### Committee Appointment

Jack Wiesen (5125) has been appointed to Sub-Committee No. 5 of the Institute of Mathematical Statistics Committee on Mathematical Tables. The sub-committee deals with hypergeometric distribution.

#### Head Livermore PTA

Three Sandians at the Livermore Branch are newly-elected officers of the new East Avenue Parent Teachers Association.

Art Grover (1811-2) is president and Howard Reed (1822-1) is treasurer. Chuck Peterson (1831-3) is the Institutional Representative for Boy Scouts and Dotty Sladky, wife of J. F. Sladky (1812-2) is the PTA Chairman at Large.

Gordon Miller (1812-2) and Chuck Peterson were members of the nominating committee.

The Sandia Base School Parent Teachers Association last week elected Allen F. Hurford (1451-1) as its new president. "Al" has been active in the group for three years.

The main activity of this unit of PTA is the Fall Carnival at which money is raised for a scholarship fund, a clothing bank and to purchase equipment for the school.

Last winter, under the leadership of Lt. Comdr. George Eddy, Jr. (AFSWP), the PTA purchased science equipment, a record collection for use throughout the school, and rental of instructional film. The science aids included seven microscopes, rock testing equipment, manuals and samples, and a telescope, delivered only this week.

The monthly meetings usually feature guest speakers or programs by the children. Some 400 parents were present at the recent election meeting.



DEPARTMENT 5210 recently honored its star Lab News reporter, Georgia Howard (7225-6) who is transferring to a temporary assignment at a site. Since Georgia's hobby is collecting Oriental "objects d'art" co-workers thought it would be appropriate to have a cake decorated with a pagoda and give her an Oriental cigarette urn and ash tray set. Norman Richardson (5213) took the photo.

#### Sick Report

Organization 2711 welcomes back to work after recent illnesses: James Holliday, Henry Cole, Alfonso Lujan, Elbert Mathias, Lillian Sandin and Charles Hapler.

A speedy recovery is also extend to Elmer Roisum by 2711.

#### Attend Wedding

W. B. Eskridge (2234) and his daughter, Corliss Fenimore (2344), are in Evansville, Ind., to attend the wedding of a second daughter. Corliss will be matron of honor for her sister.



IT WORKED! This giant "money tree" get-well card delivered to Beverly Strauch during her recent illness was prepared by her many friends and co-workers in Drafting Division A (7411).

#### Tour Nuclear Sub

Twenty Livermore Branch engineers from Departments 1810 and 1820 attended a recent San Francisco Section ASME meeting which was held at Mare Island Naval Shipyard.

A tour of the new nuclear submarines USS Sargo and USS Halibut and the non-nuclear submarine USS Graybar was followed by a lecture on nuclear power plants.

#### Sandialiers Plan Minstrel Show

The Sandialiers, male vocal group, is now rehearsing for a Minstrel Show to be presented May 25 at the Coronado Club, Rex Elder, 5531, director, reports. The show will feature comedy, skits, songs and the dixieland music of Bud Fischer's orchestra.

#### Wedding Anniversary

L. E. "Roy" Cole (7211) and his wife will celebrate their 15th wedding anniversary next Thursday.

#### Banquet Entertainment

The annual father-son banquet of the Temple Albert Men's Club featured several Sandians. Max Weber (5120) emceed the program which included a rope twirling act by John Cunningham (1442) and magic tricks by Stoughton Bell (5122).

### Sympathy

To John M. Gustafson (2711) for the death of his mother in Oak Lawn, Ill., on April 2.

To Samuel Lopez (2351-2) and Tony Lopez (2461-5) for the death of their sister on April 5.

To E. S. Phinney (7131) for the death of his father in Warwick, N.Y., on April 1.

To James Grier (2221-1) for the loss of his son Michael.

## Speaking of Reporters

This is another article in a series telling of the volunteer reporters who contribute to the Sandia Lab News.



Beverly Klink (2551) interviews H. T. Cushman.

Stuffed owls, adopted German children, homing pigeons, and barbershop quartets are all subjects of Lab News stories that Beverly Klink has uncovered during her year of reporting for organizations 2450 and 2550.

Beverly hails from Massachusetts and she gets lots of help on basketball and softball stories from H. T. Cushman (2551), who is a Bostonian.

She came to Albuquerque a year and one-half ago when her husband was transferred to Kirtland AFB. They both like it here but their future home depends on the Air Force.

The Klinks both love ballroom dancing and Beverly has also recently developed an interest in golf. Their main interest, however, is in their two-year-old daughter.

Thought for Food

# J. W. McRae Main Speaker at Dinnerless Dinner Meeting

Sky Blazer Returns

The homecoming of Air Force Lt. Jim Foster and his wife, Evelyn, next month will be a red letter day for two Sandia families.

Evelyn is the daughter of Clyde Northrup (5213) and Jim is the son of LeRoy (2543-1) and Ellen (2461) Foster. He also has brothers and a sister working at Sandia—Martha (2461), Joel (2461) and John (7122).

Jim has been stationed in France for two and one-half years as a member of the four-man Air Force Sky Blazer Team. The precision flying group has flown in demonstration all over Europe and recently defeated a top Russian team in show competition. The Sky Blazers used F-86's until a recent change to F-100's.

The Northrups and the Fosters were neighbors on Sandia Base when Jim left for overseas, then a year ago in February Evelyn went to France to marry Jim. Now they are returning with an infant daughter—the first grandchild for the Northrups. Jim will be stationed in Clovis, N. M., after his leave in Albuquerque.

Best Score Yet?

A Sandia bowler has rolled what is believed to be the highest game scored in league play in Albuquerque. Charlie Mills (2211) chalked up a total of 288 during a recent game in the Sandia Base Major League.

He rolled 10 straight strikes, knocked down eight pins with the 11th ball and then spared it.

Charlie has been bowling about 20 years and said he once before came that close to a perfect 300 "but that was a long time ago." He has played once a week with the league since it started about eight years ago.

Join "600" Club

Sandia has many women employees bowling in the various Albuquerque Women's Leagues and is represented by many exceptionally fine bowlers. Two of these have added their names to the "600" Club. Gertrude Byrne (7225-3) scored a 631 series in the Monday Night Ladies Scratch League and Rose Hainlen (4152-1) rolled 601 in the Tuesday Night Star-Lite League.

New Home

Just in time to enjoy Spring yard work are J. T. Gammon (2221-3) and Tony Gammon (7225-5), who have moved into a new home at 1713 Georgia NE.

Mountain Club Meets

The New Mexico Mountain Club will meet Tuesday, April 23, at the Radiation Therapy Lab of Loveland Clinic at 8 p.m., Dick Martindell (1422) reports. Constitution and by-laws of the club will be discussed during the general meeting as well as plans for summer outings. On Sunday, April 28, the club plans its annual "conditioner" hike up La Luz Trail.

Mystify Crippled Children

Three Sandians, magicians by hobby, participated in shows last weekend for Albuquerque Boy Scouts and crippled children. The Jaycee Wives and the New Mexico Society for Crippled Children and Adults sponsored one of the programs.

The Boy Scout evening, arranged by Scoutmaster Robert Charlton (1461), had as guests youngsters from St. Anthony's Orphanage, cerebral palsy victims, and underprivileged children from the Barelax Center.

The magicians—Willard Scranton (1411), Fred Daraugh (1461) and Bryant Hamlett (2331)—were also elected to the top offices of the recently organized Atomic City Mystics (affiliated with the Society of American Magicians).

Arriving late for a speech at a banquet meeting of educators on the New Mexico Western College campus recently, Sandia's President J. W. McRae found that he and Mrs. McRae were the only ones who had eaten, although the dinner hour was long past. Bad weather had kept their Carco airplane in Albuquerque so late that they finally grabbed a lunch before taking off, only to find upon arrival at Silver City that the 300 banquet guests without food. The caterer's truck enroute from El Paso had broken down. While awaiting the delayed food which never arrived, the guests listened hungrily to the delayed speaker, and then rushed out to compete for the hamburger supply in local diners. NMWC President Miller, swamped with letters of sympathy from people who read about the incident, said sadly, "never has so much been written about so little."

Get Well Wishes

Wishes for a quick recovery are extended to Ruth McAdams (7225-5), who is convalescing following major surgery.

Livermore Career Day

Sandia Corporation's Livermore Branch was represented in the recent Career Day activities of Livermore High School.

Robert A. Knudson (1832-1) appeared on a panel discussion of employment opportunities in Livermore Valley with representatives of other local industries. He later counseled students on future opportunities with Sandia Corporation.

Read Technical Papers

Technical papers by four Sandia Corporation men will be read before the symposium on Acceptance of Risks in Weapon Delivery at the U. S. Naval Air Development Center, Johnsville, Pa., on April 24 and 25.

Lynn M. Barker (1261) will read his paper on Bombing Safety, Nuclear.

Purdy F. Meigs (1291) will read his summary report on the Study of Freight Train Accident Experience of Class I Railroads.

George P. Steck (5125) will read his paper on Analysis of Aircraft Accident Statistics. A technical paper by Michael J. Norris (5121) on the Cost of Safety in Effectiveness will be printed in the symposium proceedings.

Wanted: One Overcoat!

A warm spring day is an odd time to talk about overcoats, but Bill Hoagland (1224) is a man with foresight—he's thinking about cold winter evenings. Furthermore, he wants his overcoat back.

Seems that about two months ago his overcoat disappeared one evening at the Coronado Club. Bill is a man to reckon with as he's 6'3" and weighs 195 pounds.

Since the overcoat was size 42, extra long, maybe a troupe of midgets spotted it and decided there was enough material to clothe each of them.

## NSPE Meets April 29 At Kirtland AFB

New Mexico Society of Professional Engineers plans a dinner meeting Monday, Apr. 29, at the Kirtland Officer's Club, Bill Keebler (1282), program committee, reports.

Speaker will be George Hawthorne, first vice president of the New Mexico Society of Professional Engineers and president of the Santa Fe Chapter of NSPE. He will discuss "Organization and Objectives for the National Society of Professional Engineers."

Members will meet for a social hour at 6 p.m. Dinner is at 7. For reservations contact Marion Cottrell, Alb. 4-2157, after 5 p.m.



SURE SIGN OF EASTER is a rabbit, a fancy Spring hat and two cute youngsters. Debra Bolton, daughter of E. L. Bolton (2111-4), and Steve Peterson, son of E. C. Peterson (3221), are making sure the rabbit doesn't hop away before Sunday which is Easter.

## Abran Arellano to Retire This Month

When Abran Arellano retires from Sandia Corporation the end of April he is not going to abandon his enthusiasm for doing things.



Mr. Arellano

"Shorty" has been a janitor in 1918 since Feb., 1952, but most of his life he has been a cowboy.

His father homesteaded in the Red River country back in 1890 and in later years Shorty worked on some of the largest ranches in New Mexico including the Red River Ranch and the Circle Dot. He even rode as a jockey in quarterhorse races in Pueblo and Raton.

During World War I he saw action in France and after the Armistice served a short time in the occupation army in Germany.

A bachelor, Shorty plans to move to his home, northeast of Springer, which is set on eight lots. The land and the nearby irrigation ditch will give him a chance to try growing flowers.

In the fall he plans to travel to Mexico City for the first time and spend the winter there.

## William Weaver To Retire May 1

William "Hank" Weaver will retire May 1 after eight and one-half years in Sandia's Packaging Division (2232).



Mr. Weaver

Hank finds the growth of Sandia surprising but not nearly as amazing as the way Albuquerque has built up around him.

Twenty-one years ago when Hank and his wife moved to a plot north of town (now 115 Vineyard Rd., N.W.), North Second Street was grazing land beyond Indian School Road and North Fourth ended as a residential area at Candelaria.

After retirement he plans to divide his time between gardening, taking care of his livestock, and doing a little carpentry work.

In the fall the Weavers plan to visit their former home in Illinois, for the first time in 40 years, and attend the annual "Weaver" family reunion on Sept. 1. Hank Weaver family, Albuquerque branch, consists of seven children and 11 grandchildren.

## Santiago Villareal Plans to Retire

Santiago Villareal plans to return to the fertile fruit-growing valley north of Espanola on May 1 when he retires after five years with the Corporation as a janitor (2419).



Mr. Villareal

Santiago's family has acreage in Alcalde and an orchard. Since 1952 when he started work in Albuquerque he has gone home every week-end to help with the work.

The Villareals have 11 children and 13 grandchildren. The children are all in Alcalde except for three in Albuquerque, one in California and one in a Dominican Convent in Columbus, O.

## J. I. Hegge Heads Electronic Advisory Board for C. of C.

Joe I. Hegge (1470) has been named chairman of the Electronic Advisory Board of the Albuquerque Chamber of Commerce Industrial Committee. Purpose of the Board is to advise electronics firms indicating interest in locating in the Albuquerque area.

C. J. McGarr (2200) and Dr. R. K. Moore, Sandia Consultant from the University of New Mexico, are members of the Advisory Board.

## Seeking Softball Officials For Sandia Employee League

Qualified persons interested in being umpires or scorekeepers for the Sandia Employees Softball Association are urged to contact Employee Services (3122) ext. 29157.

## Welcome Newcomers

April 1-12

Albuquerque	
Gloria Atler	7225
Jesus M. Baca	2742
Norma L. Ballard	7225
Charlie M. Barnes	1452
Elsie R. Bemis	7411
Leaburn D. Bice	2231
Shirley S. Blake	2543
William G. Branson	2323
Viola G. Castillo	7225
Bertie E. Chappell	2153
Sue E. Conrady	2711
Catherine Davis	7225
Caroline C. Dougherty	2352
R. Ann Forrester	4112
Cora B. Goff	2333
Mary M. Gonzales	2325
Hazel D. Graham	3151
Clarence W. Hansen	2742
Estra C. Hill	1831
Patricia Hill	7226
Noel R. Jackson	2464
Pearl R. Johnston	1812
Maxene L. Koetter	3125
D. June Leonard	3152
Donald A. Lloyd	1821
Ann C. Lucero	3122
Barbara J. McCormick	2461
Nancy J. Nelson	7411
Peggy Porterfield	7225
Robert J. Reed	2131
W. Joanne Rhoney	2333
Janie M. Sharp	2112
M. Virginia Shoemaker	2461
Thomas K. Smith	7232
Velma D. Sprentz	7225
Geraldine R. Summers	2461
Edith I. Thomas	3152
Antonio G. Torres	2461
LuVena M. Trujillo	7225
Robert T. Tuffnell	2464
Thomas D. Williams	4153
Arizona	
Robert R. Neel, Tucson	1243
California	
John B. Adams, Lafayette	1831
Dianne C. Deater, Hayward	1831
Estra C. Hill, Livermore	1831
Pearl R. Johnston, Livermore	1831
Hugh H. Larson, San Gabriel	2131
James M. Morris, Escalon	1831
Carrie L. Schall, Livermore	1832
Ottie C. Thomas, Sunnyvale	1264
Helen C. Woodward, Livermore	1832
Colorado	
Hudson Dennis, Cortez	1441
Georgia	
Gerald F. Hastings, Hampton	7411
Illinois	
Leland Alford, Chicago	1263
Donald A. Lloyd, Alton	1821
Robert P. McGovern, Rockford	2722
Iowa	
Raymond L. Negus, Muscatine	2151
H. Donald Sivinski, Ames	1613
Kansas	
Orville Clark, Wichita	2722
William L. O'Trimble, Topeka	2464
Michigan	
Byron C. Coats, Detroit	2514
William C. Larson, Oak Park	1245
Harvey E. Morse, Muskegon	2532
Missouri	
Kenneth Frank, St. Louis	2463
Paul E. Gammill, Kansas City	1451
New Jersey	
Donald E. Holliday, Westfield	1215
New Mexico	
Carl O. Kemp, Santa Fe	2462
Ohio	
Philip L. Class, Columbus	1261
Robert L. Valentine, Harbor View	2131
Oklahoma	
Virginia Baker, Oklahoma City	4135
Pennsylvania	
Joseph E. Deveney, Philadelphia	1243
John P. Trodden, Philadelphia	1462
Washington	
Arthur W. Kellom, Seattle	1247

## Speaker Describes Search for Neutrino To IRE Members

The Albuquerque-Los Alamos Section of the Institute of Radio Engineers will meet Friday, April 26, at The Lodge in Los Alamos.

"The Search for the Neutrino" will be the subject discussed by Dr. Clyde Cowan, group leader of the Experimental Physics Division of Los Alamos Scientific Laboratory.

The dinner meeting will be at 7 p.m. Reservations and arrangements for transportation can be made by calling Gene Newlin (6010), ext. 44145.



Dr. Cowan



MEETING RECENTLY at Sandia Corporation was the Weapons Subcommittee of the Atomic Energy Commission's General Advisory Commission. Shown above (L to R) are J. W. McRae, Sandia Corporation President; Dr. Edward Teller, University of California Radiation Laboratory at Berkeley; Mrs. Jane Hall, Assistant Director of Los Alamos Scientific Laboratory, secretary to the subcommittee; and Dr. J. B. Fisk, Executive Vice President of Bell Telephone Laboratories. Robert Wilson of Standard Oil Company was unable to attend the April 3 Subcommittee meeting.

## Supervisory Appointments

MAX K. LINN to manager of Staff Administrative Service Department, 7220.



A Corporation employee for five years, Max started in Technical Information Division and became supervisor of what is now Section 7223-1. In

Sept., 1954, he was promoted to supervisor of Case Costs, Library and File Services Division 7221.

Max was previously at the State University of Iowa from 1946-52 teaching English and Technical Writing while doing graduate work in English.

He holds a BA degree in English from Westminster College in New Wilmington, Pa., and also studied Engineering at Carnegie Tech.

He was employed three years by Jack & Heintz, Inc., of Cleveland, in drafting and design work.

Max is a member of the American Society of Engineering Education.

DONALD FITCHHORN to supervisor of Sandia Apparatus and Commercial Parts Specifications Section 7422-1, Specifications Division.



Donald joined Sandia in June, 1948, in surveillance and four years ago transferred to specifications work.

From 1944-48 he was a junior engineer at the Johns Hopkins Applied Physics Lab at Silver Spring, Md. The previous two years he was in the music store business with his father in Delaware, Ohio.

He studied Engineering at Ohio Wesleyan University and at North Manchester (Ind.) College.

JACK L. TISCHHAUSER to supervisor of Mathematics Section B, 5242-3, Test Data Department.



Jack has been in math analysis and mathematical programming during his six years with Sandia Corporation.

He recently served on the committee which studied and made recommendations regarding purchase of the IBM "705" data processing machine.

He has a Bachelor's degree in Physics from St. Louis University. At the present time he is doing graduate work toward a Master's in Mathematics at the University of New Mexico.

Jack served one and a half years in the Marines during World War II.

He is a member of the Association for Computing Machinery and Pi Mu Epsilon, Mathematics honorary.

ALLEN C. DALE to supervisor of Section 7424-2, Nomenclature System Division.



Allen has been with the Corporation for six years in the same type of work. He previously spent a few months with AFSWP at Sandia.

He holds a Bachelor's degree in Business Administration from the University of Nebraska and has done graduate work in Geology at the University of New Mexico.

During three years in the Army Allen studied Basic Engineering for nine months at the University of Arkansas, then served in the European Theater as a forward observer for an artillery unit.

PIERRE CHEVALIER to supervisor of Tonopah Land Range 5214-4, Field Operations Division.



"Pete" has worked for the Corporation at Salton Sea Test Base since August, 1951, as a pipefitter, an auto mechanic and a layout operator.

From 1945 to 1951 he was a motor mechanic in Indio, Calif. His other work experience includes four years as a chief inspector for North American Aviation, two years as an inspector for Northrop Aircraft, and nine years as a motor mechanic in Dallas, Tex. He was also employed by other motor companies from 1929-40.

LEIGH HENDRICKS to supervisor of Data Analysis Section 5125-1, Statistical Division.



Leigh has worked for Sandia since Nov. 1948, with the exception of one year when she returned to school teaching. At Sandia she has been in mathematical data analysis.

During the 1951-52 school year she taught Math at Jefferson Junior High. She previously taught at Washington Junior High from 1945-48 and in a high school in Monroe, La., before moving to Albuquerque.

She was a statistician for Wright Aeronautical Company in Cincinnati during World War II and also was one of the wartime women tellers at a Cleveland bank.

She has a BA in Mathematics from Louisiana Polytechnic Institute and has done graduate work at Louisiana State University and the University of New Mexico.

JAMES F. REED to supervisor of External Testing 5142-1, Experimental Aerodynamics Division.



Jim has been with the Corporation five and one-half years, most of the time in wind tunnel testing work.

The previous two and one-half years before coming to Albuquerque he was an aeronautical research scientist with the National Advisory Committee on Aeronautics at Moffett Field, Calif.

He has a Bachelor's degree in Aeronautical Engineering from the University of Colorado and is doing graduate work at the University of New Mexico.

Jim served 15 months in the Navy.

He is a member of Pi Tau Sigma and Sigma Tau, Mechanical Engineering honoraries, and the Institute of Aeronautical Sciences.

### Ordnance Association Elects AEC Officials

Three Atomic Energy Commission ALO employees were recently elected officers of the Albuquerque Post of the American Ordnance Association. Adm. W. W. Juvenal, administrative engineer for Lytle Engineering and Manufacturing, was elected president, Rudolph Hogland, DOD Relationships Division, Office of Manufacturing, was elected treasurer.

Adm. A. E. Uehlinger, manager of the ALO Sandia Area Office, and W. W. Staff, manager of the ALO South Albuquerque Area Office, were named to the Board of Directors.

W. M. O'Neill (5530) is the retiring vice president.

## Imperial Valley Teachers Visit Salton Sea Base

High School teachers and principals from the Imperial Valley will visit Sandia's Salton Sea Test Base on Saturday, April 27, as part of their continuing program to become better acquainted with industrial and business facilities in the area.

T. A. Sprink, Salton Sea Department Manager, said that the tour will be confined to the administration and service areas of the Base and will not include the range.

Use of the San Felipe Lodge for luncheon has been offered the visiting group. Mr. Sprink added that the swimming pool may be used by youngsters and members of immediate families of teachers and principals who may accompany them.

### Announce Three New Colloquium Programs

Schedule of the Sandia Research Colloquium for the next three weeks has been announced by Craig Hudson (5111).

"Small Rockets for Investigations in the Upper Atmosphere" is the subject to be discussed Wednesday, April 24, by John L. Crone, National Security Agency, Washington, D.C. Tickets are not required for this meeting.

Wednesday, May 1, R. L. Drexler, General Electric Co., Aircraft Nuclear Propulsion Laboratory, Idaho Falls, will discuss "Handling Problems in Reactor Operations." Tickets will be required for admission.

P. C. Hammer, Director of the Numerical Analysis Laboratory, University of Wisconsin, will discuss "Numerical Analysis of Engineering and Systems Problems" Wednesday, May 8. Tickets are not required.

All meetings will begin at 9:30 a.m. in the basement conference room of Bldg. 802.

### F. C. Alexander Heads New Mexico MIT Club

F. C. "Ted" Alexander, Jr. (4111) has been elected president of the MIT Club of New Mexico. The Club is a unit of the Massachusetts Institute of Technology Alumni Association.

Walter E. Brown, Jr. (1454) was elected secretary and treasurer to serve a three year term.

The Club is planning a joint meeting with the Holloman Air Force Base MIT Alumni at The Lodge in Cloudcroft on Saturday, May 4. Col. J. P. Stapp, renowned for his association with the Holloman rocket sled, will be the speaker on the program.

MIT alumni may make reservations by contacting the secretary at ext. 42244.



Juanita McDonald Receives Award from K. F. Hertford  
—skill in handling AEC-ALO Visitor Control—

## AEC Honors 3 ALO Employees With Superior Accomplishment Awards



Robert E. Giles  
—"courage and action"—

### G. E. Engineer to Tell of Handling Radioactive Devices

A special meeting of timely interest for all members of the New Mexico Council of Technical and Scientific Societies is scheduled Wednesday, May 1, announces Larry Snodgrass (2414), president.

"Problems of Remote Assembly, Disassembly and Testing of Large Radioactive Devices" will be discussed by Robert L. Drexler, a representative of the General Electric Co. Engineering Liaison Department at the Aircraft Nuclear Propulsion Test Station in Idaho.

Mr. Drexler will also discuss engineering problems associated with the design of equipment which has to be disassembled remotely and the companion problem of design of hot cell facilities to perform the task.

The meeting will begin at 7:30 p.m. in Rm. 122 of Mitchell Hall at the University of New Mexico.

Three AEC employees have been honored for outstanding performances in connection with their work.

AEC-ALO Manager K. F. Hertford presented a Superior Accomplishment Award to Juanita McDonald, chief of the AEC-ALO Visitor Control Section. The award cited "her skill as a supervisor, her appreciation for the complexities of this operation and her initiative in developing new procedures and methods to meet their requirements." Her office receives and processes requests for cleared visits to all Albuquerque Operations installations—which average about 4,000 a month. She has been with the AEC here since 1950.

Robert E. Giles and Thomas R. Chavez were cited for their efforts to extinguish a fire and to protect the public when a truck bearing 1,100 pounds of high explosives caught fire near Los Alamos in July, 1955. Both were then AEC shipment security couriers.

Mr. Giles, now a Security Assistant in the AEC's Sandia Area Office, was recognized for his "courage and action" while Mr. Chavez, presently stationed outside of Albuquerque, was honored for his "great courage."

When a tight brake shoe caused a fire on the underside of a truck they were escorting, Mr. Giles sprayed the blaze with a fire extinguisher while Mr. Chavez called Los Alamos firemen and set up road blocks.

### Three IRE Groups Schedule Meetings

Three professional groups of the Institute of Radio Engineers will meet in the next two weeks, according to John McLay (1455), group coordinator.

#### Audio

"Comparison of Klipsch and Carlson Type Horns" will be discussed by J. E. Palmer (5221) at a meeting of the Professional Group on Audio Wednesday, April 24. The meeting will be at 1420 Freeman Ave. NW at 8 p.m.

#### Circuit Theory

Professional Group on Circuit Theory will meet Thursday, April 25, at 8 p.m. in Rm. 217 of the Electrical Engineering Building, University of New Mexico. Bob Creveling (1414) will discuss "Precision Timer Circuits."

#### Telemetry, Remote Control

Professional Group on Telemetry and Remote Control will meet Tuesday, April 30, at 8 p.m. at Person Station generating plant of the Public Service Co. of New Mexico. The group will inspect and tour the plant. It is located about five miles south on Broadway.

## Service Awards

### Five Year Pins

April 19-25

James H. Davis 1224, G. O. Thornburg 2483, John A. Kaczar 2722, Anthony F. Sullivan 2152, Cassimero Baker 2232, E. M. Bartolucci 2232, Harold G. Dusing 2113, Howard M. Warden 5512, M. Nell Dickson 7225, Stanley W. Clayton 5216, Mary R. Strickland 7225, Billy G. West 2331, Richard H. Watkins 1244, Clarence E. Sandy 1452, and Florencio Baca 2234.

April 26-May 2

Amado Padilla 2451, Estelle Richardson 7225, Robert B. Barry 7232, John A. Balaban 1233, Signey B. Cook 1613, Richard E. Burnam 7224, Thomas L. Moran 7231, Helen E. Tuttle 5131, Clifton D. Boxx 7113, Werner W. Bach 2713, Livinius F. Desmet 2232, William H. Allen 2542, Renfroe R. Beach 2552, Clifford A. Fawver 7421, Lee McKittrick 1611, James A. Sisler 1626, Ricarda Gallegos 7225, Elizabeth F. Six 2330, Jose D. Baldonado 2152, and Shirley Cleary 2335.

### Two Year Certificates

April 19-25

Clifford G. Selvaige 1215, Eugene F. Witeck 2712, Jane M. McDermott 4131, Mary B. Preber 4131, Ferne L. Snyder 3122, Clara M. Gearhart 2221, and Jerome J. Donaldson 1442.

April 26-May 2

W. Douglas LaCoss 5133, James R. Winchell 1613, Ralph H. Richards 1821, John L. Colp 1626, Rudolph W. Herrmann 5253, George A. Wank 7412, Richard C. Angell 7123, Marilyn Grant 2462, Mary A. Snodgrass 7225, and Brent M. Johnson 7232.

## TEN YEAR PINS



William T. Moffat  
5240  
April 22, 1947



Charley C. Bates  
2124  
April 24, 1947



William V. Hereford  
5240  
April 23, 1947



**EXERTING 350 lbs. pressure on a five-year-old fire extinguisher, a hydro-static test unit, operated by Jim Schenck (2415), determines if the extinguisher is in safe and efficient operating condition.**

### Plant Inspection Division Checking 600 Water-Type Fire Extinguishers

All of Sandia Corporation's water-type fire extinguishers will be undergoing hydro-static pressure tests at Sandia Corporation in coming weeks, Ted Rosenwald, Plant Inspection and Fire Prevention Division (2442), reports. The extinguishers, all 600 having seen five years or more of service, will be subjected to pressures up to 350 lbs. to determine if they are in safe and efficient operat-

ing condition. Jim Schenck (2415), who keeps a card file on each extinguisher in the Corporation, its type and location, is performing the tests. After passing the tests, the extinguishers will be tagged with the date of the test and the amount of pressure withstood. Each extinguisher receives an annual refill of its solution.

### Gardening Tips

## Heights Home Owners Have Own Special Problems With Mother Earth

This is the first in a series of Southwestern gardening tips by some of Sandia's most active gardeners.

"You must put back into the soil what you have taken out" is the principal gardening rule followed by G. C. Hollowwa (7120) and dozens of ribbons won in flower shows demonstrate the results.

When Mr. Hollowwa started gar-



**G. C. Hollowwa**  
—Mother Nature Needs Soil Building Help—

dening about three years ago he found that in the Heights areas of Albuquerque the ground already contains sufficient minerals, but humus and nitrogen must be added for best growing results.

He has a bin for compost material built of cinder block beside his garden wall. Onto the pile he adds vegetable material of all types—flower stalks, sod, etc. He adds water from time to time and also commercial nitrogen. When the ground is soft in the spring the compost matter is worked in.

Mr. Hollowwa has won his largest number of State Fair ribbons with dahlias. He stores the dahlia tubers with vermiculite underground in a metal drum until mid-April, when they are planted about three feet apart. Ideally for show purposes the plants should be pinched back to allow only four to six blooms to mature on each plant. But he admits that sometimes the temptation to have dahlias from June to the first frost is too strong.

### Table Tennis Doubles Championship Won by Morris and Lucero

Harlan Morris and Gene Lucero representing the 2700 superintendency defeated Grover Hughes and Casey Kassens of 1200 four straight to win the Sandia Employees Table Tennis Doubles Tournament.

The new champions joined Tom Kelly of 2000, who earlier won the singles championship, for trophy presentations recently by A. K. Leupold, Manufacturing Engineering Department Manager.

A total of 36 superintendency champions competed for the Corporation doubles crown. Almost 400 Sandia employees participated in the singles and doubles tournaments.

### Seek Employees to Take Instructors Course In Red Cross First Aid

All Sandia Corporation employees who have completed advanced first aid training and are interested in an instructor's rating are urged to contact M. T. Muzzey (3123), Bldg. 849, Ext. 29238. Arrangements are being made for an instructor's course to be conducted for five consecutive week nights, three hours each evening. The course will be taught by a Red Cross field representative.



**WINNERS of the First Annual 1470 Golf Tournament held recently are shown here receiving their trophies from Joe I. Hegge, 1470 Department Manager. Alex Chabrek, front, won low gross and Jack Houston, right, took honors for low net score.**



**DOUBLES CHAMPS** of the Sandia Employees Table Tennis Tournament receive trophies from A. K. Leupold (2550). Representing 2700, Gene A. Lucero, left, and Harlan E. Morris were top men in a field of 36 superintendency contenders for the Corporation crown.

### Sandia Golfers to Organize League at Monday Meeting

Attention golfers! An organization meeting of the Sandia Employees Golf League will be held Monday at 5 p.m. in Rm. 132 of Bldg. 880.

Chet Fornero (7329) said that anyone interested in playing in the league should get together a three-man team. The summer-long league competition is open to all Sandia Corporation or AEC employees.

### 1470 Golfers Prep For '57 Tournament

Members of Electro Mechanical Development Department (1470) braved bad weather recently to swing their way through the First Annual 1470 Golf Tournament held at the University Golf Course. The tournament was a warm-up for the 1400 Golf Tournament to be held later this summer.

Alex Chabrek (1472) scored 85 to win low gross. Second for low was Pat Moore (1471) while the low net was topped by Jack Houston (1473). Second low net went to Red Madlener (1471). Jack Barnum (1473) starred for low on the handicap holes. Russ Maxwell (1471) rated high gross with 151.

Winners were honored at a Department party on Saturday, Apr. 6. Eighteen participated in the tournament.



"THIS IS JUST WHILE YOU'RE WORKING ON CLASSIFIED MATERIAL."

## WANTED



### GRADUATE ENGINEER

This man is a graduate engineer with abilities needed at Sandia Corporation for use in its vital weapons program. If you know of such a man you are urged to contact . . .

### EMPLOYEE REFERRAL PROGRAM

John Timmons Ext. 20151

### SHOPPING CENTER

#### CLASSIFIED ADVERTISING

Deadline: Friday noon prior to week of publication.

#### 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.

Next Deadline: Noon, April 26

#### FOR SALE

- UMBRELLA TENT, 9'x9', \$20. Waldorf, Alb. 2-8303.
- STEVENS RIFLE, 30-30 bolt action, recoil pad, sling swivels, marble sight, \$30. Horner, Alb. 6-9316.
- AUTOMATIC WASHER, Norge, new—still in crate, \$175. Mitchell, Alb. 2-6550.
- SWING SET, heavy duty, 10 foot, 2 swings, ladder, rings and/or bar, \$15. Thayer, Alb. 9-3127.
- '50 CHEVROLET, 4 door styleline, R&H, one owner, recent major engine overhaul, 2 new tires, new battery. Reasonable. Sandy, Alb. 9-0120 after 5:30.
- FOUR ROOM HOUSE, block construction, furnished, 2 lots, paving, garage with storage building, \$5750. \$300 down, \$50 month. Odell, Alb. 2-8727.
- GAS STOVE, Norge, \$60 or best offer. Litz, Alb. 9-2886.
- INNERSPRING MATTRESS and box springs. Half-price at \$60 w/steel bed frame free, frame separately, \$7.50. Graff, Ext. 3-1249, 5508 Rosemont NE.

### SHOPPING CENTER

- PIANO, upright, \$100; motorcycle, '48 Indian Chief, \$100, or will trade for car. Roane, Alb. 9-1761, 2909 Garcia NE.
- HI-FI TAPE RECORDER, V-M, Model 711, binocular sound, 25% below retail price, unused. Heineman, Ext. 52294.
- CHAPMAN HOME, 3 bedrooms, 1 1/2 baths, carpets, drapes, hobby room, fireplace, double garage, patio, landscaped, sprinklers. Oltman, Alb. 9-2155.
- '55 BUICK CENTURY, 4 door hardtop, low mileage; Lone Star 14 ft. boat, motor, trailer and accessories. Gelwicks, Alb. 9-3909.
- SCHWINN BICYCLE, balloon tires, 26" boy's, fully equipped. New, 1/2 off. Levy, Alb. 2-9562.
- BEAGLE, male, papers, shots, 6 mos.; couch, matching chair covered, reasonable. Pilat, Alb. 6-9376.
- 22 RIFLE, automatic loading, J. C. Higgins Model 29. Almost new, w/case and cleaning kit. Scates, Alb. 9-4913.
- WINDOW FAN, 2 speed, 20 inch, approximately 3400 cfm, \$25. Clay, Alb. 9-1769.
- '51 CHEVROLET, 2 door, R&H; large brief case, \$19; small brief case, \$12; Hollywood bed frame w/headboard, \$3.50. Schiess, Alb. 5-3252.
- SNOW HOME, 4 bedrooms, 2 baths, attached double garage, lawn, wall, extras, \$2000 down. Carpenter, Alb. 9-3519.
- MATERNITY CLOTHES, size 12 or 14, reasonable. Joseph, Ext. 43295.
- EASTER RABBITS, 6 weeks old, white or grey colors, \$1.25 each. Davies, Alb. 4-0719.
- 3 BR. MOSSMAN, 1 1/2 baths, \$15000 w/\$3,500 down; '48 Ford 4 door, \$325. Allen, 2813 Alvarado NE.
- CRIBS, large w/innerspring mattress, \$20; small w/innerspring mattress, \$11; Welsh boodle buggy w/pad, \$25; kerosene heater, \$8. Dingman, Alb. 4-1052.
- AQUARIUMS, 20 gal. tank, \$35; 5 gal. tank, \$13; both completely planted, fish, filters, heaters, pumps, w/lighted reflectors. Neum, Ext. 23293.

### SHOPPING CENTER

- MOVIE CAMERA, Revere "44", 8mm magazine type. Three lens turret (fl. 9 regular 2.25 wide angle and f 3.5 telephoto), \$159.50. Boyes, Alb. 6-5338.
- STORKLINE CRIB and mattress with cover; bassinet; Prokash, Alb. 4-5749, 3035 Monroe NE.
- BOAT MOTOR, 7 1/2 horse Evenrude, new, w/pressure gas tank, attachments—sells for \$268, will sell for \$218. Kemp, Alb. 9-5343 after 5.
- 2 BR. HOUSE, small, garage on lot 50'x190'. SW Valley, \$500 down, \$55 month, total \$6,200. Lopez, Alb. 9-0941.
- AIR CONDITIONER, 1 ton Remington refrigerated, used 1 month. Regular \$329, sacrifice for \$175. Mays, Ext. 20149.
- GAS RANGE, Norge Automatic, 2 yrs. old; I.H.C. refrigerator, 10 1/2 cu. ft., push button defrost, 3 yrs. warranty. Price, Alb. 9-5548.
- CAMPING STOVE, large Coleman gasoline two burner; large Coleman ice chest, used once, 20% off list price. Shock, Ext. 34194.
- BOX-SPRING AND MATTRESS, king-size Beauty rest, 4 yrs. old. Rabenhorst, Ext. 48255, 7413 Hirsch Dr. SE. (Wherry).
- WEIMARANER PUPPY, registered, descendant of champions, proven hunters. Your choice of litter, male or female, \$50. Sister, Ext. 25173.
- SCOOTER, Cushman Highlander, \$100. Frank, Alb. 5-2453, 422 Carlisle SE.
- PRESTIGE SILVERPLATE, 6 place settings, \$50. Dyke, Alb. 5-9168.
- EVAPORATIVE COOLER, \$25; lawn mower, \$8; dresses and skirts, ladies sizes 7 & 8, cheap. Bush, 420 Yale Blvd. SE.
- RADIO-PHONO CONSOLE, FM-AM, 20-20,000 cps frequency response. VM deluxe 4-speed record-changer, \$225. Drake, Alb. 2-8514 after 5:30 p.m.
- REFRIGERATOR, 7 cu. ft., \$75; apt. size gas range, \$35; both for \$100, cash only. Williams, Alb. 9-6893.
- GAS STOVE, Kenmore, 30" wide table top model, \$25. McVeety, Alb. 9-5718.

### SHOPPING CENTER

- 3 PANEL DOORS, mahogany veneer, with frames and hardware, \$10 each. White, Alb. 6-4578.
- COCKER SPANIEL, registered, 3 years old, \$25. Raney, 1141 Sunset Rd. SW.
- SIAMESE CAT, Blue-point show-type, excellent pedigree, also two seal-point kittens. Downs, Alb. 9-5022.
- 3/4 HOLLYWOOD BED, complete, \$15; 26" buck saw and miter (Stanley), \$20; child's wagon, \$2.50. Yarbrough, Alb. 5-4087.
- TELESCOPE, unitron 2.4 inch equatorial w/all standard equipment plus setting circles and camera, \$185. Farley, Alb. 9-0752.
- WASHING MACHINE, Thor semi-automatic, \$50. Rogers, Alb. 6-6341.
- RADIO-PHONO, G.E. console w/3 speed changer, \$25. Coonce, Ext. 31283.
- '53 OLDS, super 88 hardtop, R&H, PW, WSW, custom seat covers, new battery, clean, many extras, one owner. Stark, Alb. 6-8674.
- STORKLINE CRIB, white enamel w/mattress and matching chest, \$30. Freedman, Alb. 9-0242 after 5:30.
- '49 BUICK SUPER, R&H, dynaflo, near new 4 yr. battery w/guarantee, new regulator, good tires w/spare, \$250. Shaum, Alb. 5-1904.
- ELECTRIC LAWN MOWER, 18" Worcester (rotary). Brown, Alb. 9-5405.
- '52 PLYMOUTH, 4 door, \$495 or trade for panel or pickup. Romero, Alb. 9-1768.
- ELECTRIC BROOM w/attachments, \$25. Senn, Alb. 5-3109 after 5 p.m.
- ONE ROOM CABIN, 14x24 in Ponderosa Pines, cement foundation, electricity, 1 8/10 acres. Bullock, Ext. 49152.
- 3 BR. BRICK, 1 1/2 baths, hardwood floors, wool carpeting, air conditioned, screened patio, sprinklers, walled, \$16,400. Cox, 7706 Don Drive NE, Alb. 9-0480.

#### WANTED

HOMES FOR PUPPIES, healthy, about 7 weeks old, free. Cox, Alb. 9-2393.

### SHOPPING CENTER

- TWIN STROLLER, baby tenda, and other twin equipment. Petterson, Alb. 9-0164.
- WASHING MACHINE, portable. Gaskill, Ext. 43149.
- HOMES FOR KITTENS, ready for Easter, free. Magee, Alb. 6-1358.
- TO RENT TRAILER for travel, 14' to 16', three weeks as of June 14. Chase, Ext. 35295 after 5 or weekends.
- TABLE SAW, 8 inch w/joiner and planer, and 3/4 horse motor or late model Shopsmith. Abeyta, Alb. 5-5369 after 5 p.m.
- BABY SITTING in my home at 246 Wyoming NE by day or week. Alb. 5-7214, ask for Mrs. Davis.
- TRAMPALENE OR TRUNDALENE in good condition. Stamm, Alb. 4-4325.
- CHILD CRAFT BOOK set. Morris, Alb. 6-6568 after 6 p.m.
- 20" BICYCLE, prefer boy's, must be reasonable. Johnson, Alb. 4-2276.
- TO TRADE complete camping equipment for food freezer, or what have you? Chavez, Alb. 5-5461.
- TO RENT NE HOME, 3 bedrooms, den, 1 1/2 baths, walled backyard, double garage, approx. \$100 month. Will lease. Ryan, Alb. 4-6506.

#### FOR RENT

- VACATION TRAILER, 15' Aljo, fully insured, sleeps 5, hitch furnished, by day, week or month. Nelson, Alb. 6-6300.
- 3 BR. HOUSE in NE, near bases, w/w carpeting, stove, refrigerator. Penn, Ext. 37150.
- SHARE MY HOME with one or two fellows, close to Base, automatic washer, nicely furnished. Gambill, Alb. 6-0547.
- MODERN MOUNTAIN CABINS and trailer spaces, 12 miles from Bases; cabins \$55 month; trailer spaces, \$15 month. Bolduc, Ext. 46140.



**NO WEAPON**—This militant appearing piece of hardware is a test vehicle used in Parachute study. Ben C. Benjamin, Supervisor of Sandia Corporation's Optical Measurements Division (5216) will speak in Washington D. C. later this month telling of Sandia's use of the cameras mounted between the tail fins. Left is G. Q. Wilson (5252) project engineer, and on the right is W. R. Drake (5212).

## Cameras Dropped With Missiles Help in Ballistic Behavior Study

A tough little camera has been developed by Sandia Corporation which can survive violent impact with the ground, float on water, or if demolished by accident, leave its film intact.

B. C. Benjamin, supervisor of the Optical Measurements Division (5216) which uses the camera, will describe this rugged "on-board missile camera" in a talk to The Society of Motion Picture and Television Engineers late this month in Washington, D. C.

The camera case is about 4½ inches in diameter and slightly over 10 inches long. It is attached

to experimental shapes which are dropped from aircraft at ballistics ranges used by Sandia Corporation.

Need for rugged construction is apparent when use of the camera is explained. It may be shot from the missile by a small charge of black powder. It may drop free to the ground from several thousand feet up or be lowered by parachute. On other occasions it rides with the missile to the ground in a free fall or a parachute drop.

The 16-mm camera was designed by Sandia and built by Century Engineering Co. It runs at either 64 or 200 frames per second.

There are many reasons for attaching a camera to a missile, Ben points out. He will show motion pictures of the camera's use in helping develop a parachute to lower gently to the ground a test vehicle loaded with instruments.

"Not all of our operations have been completely successful," Ben reports. When a camera falls into the water it can be recovered if the case does not rupture on impact. If the recovery boat doesn't get there quickly it will sink if it's leaking. Cameras falling free on sand are not badly damaged, especially if they land lens first. But when they hit hard ground or rocks they are smashed beyond recognition.

"We are developing a special case for the film which may allow us to salvage that much if ever

the camera is wrecked," Ben says.

If the camera is to fall into the water an aluminum case is used but for a fall onto land it is placed in a steel case. On occasion the men of the Optical Measurements Division have turned into a search party when the camera has been shot away from the missile and lowered to earth by its own parachute. Winds sometimes carry it miles away from the target area.

Despite lost and wrecked cameras, Ben maintains that the missile-borne camera system is a success. The cameras have recorded malfunctions in parachute operation, showing how the 'chute rips under the stress of opening under certain conditions, the manner and rate of rotation of the device as it falls, and how it separates from the drop aircraft.

"We have gathered data with these cameras which could be obtained no other way," he says.

### Use of 'Carbon-Tet' For Stain Removal Calls for Caution

"How to Remove Stains," a booklet recently distributed through the booklet racks, tells how to remove spots from fabrics, but caution should be used in following its recommendations as the book indicated on page two. Disregard of the correct conditions for safe use of carbon tetrachloride has been so frequent that W. H. Kingsley, Industrial Hygiene Division Supervisor (3161), believes that the liquid should be used only as a last resort and only with extreme caution.

Other solvents are available commercially that are as good cleaners, he says, but care is still required in their use. However, these are less lethal than carbon tetrachloride which affects the human body in a manner similar to chloroform.

†† Sandia Corporation trichloroethylene is used as a substitute for carbon tetrachloride. Mr. Kingsley points out that even the substitute should be used out of doors or in a well ventilated area.

He suggests that chlorinated cleaning solvents never be used in enclosed areas. The solvents should never be stored in an open container. Evaporation may cause deadly concentration. Always store in small amounts in a tightly closed container out of reach of children.

### Movie Schedule

The noon hour Wednesday movie schedule will offer "The Story of a Star" on April 24 and "Twins on the Ohio" on May 1.

The films are obtained from Modern Talking Picture Service and are shown free in Conference Room B-4, Basement of Bldg. 802, beginning at 12:10.

## Tibet to Texas Journey of Wood Carving Deep Mystery

John "Charlie" Abeyta has a mystery on hand.

Charlie found a wood carving of a vicious looking half-man, half-snake figure menacingly wielding a sword. The reverse side contains a dozen neat rows of carving in flowing Tibetan script. His mystery: how did it get from Tibet to Texas.

This piece of wood, hard, dark and a kind unrecognized by Forestry Service experts was found by

Charlie in an irrigation ditch along the Rio Grande near El Paso.

Origin of this curious carving has been a source of speculation for Charlie who has queried museums, art galleries and educational institutions to learn its history and get translations of the Oriental words.

Charlie, who works in 2711-6, found it while surveying for the U. S. Bureau of Reclamation. He was walking to a new survey station along the irrigation ditch when he noticed a knob of wood protruding in his path. He kicked at it and became curious. The top portion was partially burned, probably the result of a brush fire, and it was nearly obscured by grass roots.

After picking it up and brushing the caked mud from a part of it, Charlie noticed the strange carvings. Later after a thorough cleaning he realized he had found a strange relic. Obviously the piece was oriental, possibly centuries old, and yet found along the Mexican border.

Over a period of time Charlie has written to the Loretto Academy in El Paso, University of New Mexico, Smithsonian Institute, the University of Chicago and Yale University.

From Yale University, Professor W. E. Needham, an expert on Tibetan languages and culture, offered Charlie the following explanation:

"The inscription contains a Tantric-Buddhist incantation or magic spell repeated three times, followed by another similar but shorter spell. The real meaning of these 'words of power' is known only to Tibetans who are initiated. The carved figure holding a sword, on the other side, appears to be a Naga, a mythological creature with a human body which ends in a serpent's tail . . .

"They are generally supposed to live in fountains, rivers, lakes and springs and to be able to cause rain. The symbols which resemble Chinese characters, over the Naga's head, are completely unknown to me."

Someday Charlie hopes for a complete explanation—He feels it must be a fascinating story how the carving made its way from faraway Tibet to an irrigation ditch in Texas.

### Here's Another Good Argument Favoring Share Ride Plan

A total of 3,676 vehicles owned by Corporation employees were issued new base decals during the recent three-day re-registration, according to the Base Provost Marshal's office.

The number of persons issued decals directly at the PM's office brings the total up to an estimated 4,500.

This high figure, combined with the number of military and government-owned vehicles, emphasizes the importance of car pools to limit the number of cars on the Base during rush hours.

If you have room for a passenger or would like a ride, check with Roseanne Bascom, Employees Services (3120), ext. 26149.

### Medical Department Encourages Employees To Get Polio Shots

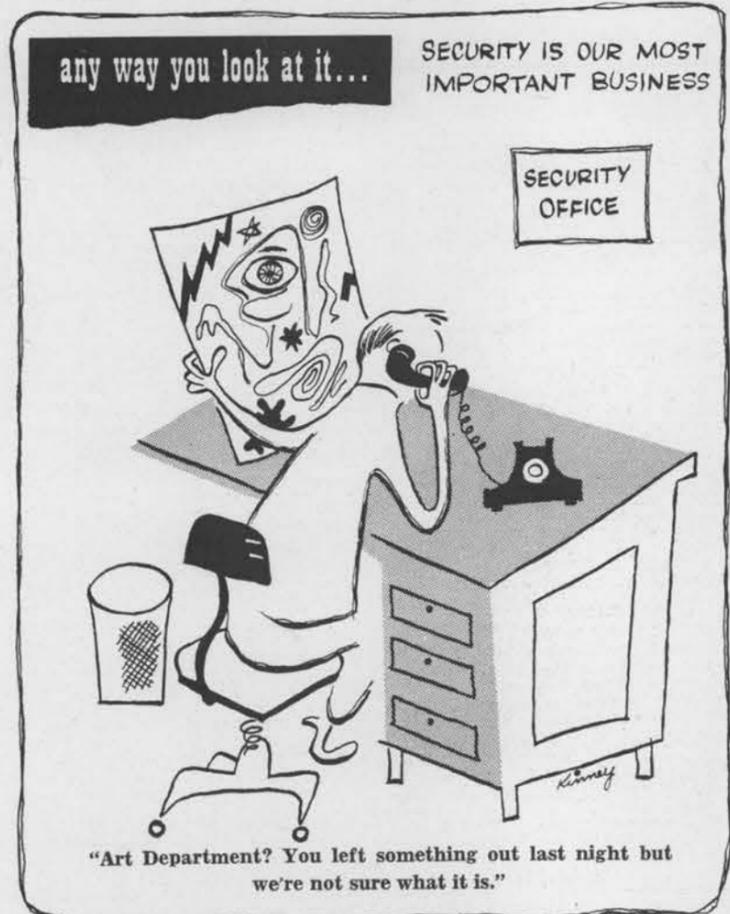
Sandia Corporation Medical Department is still receiving numerous calls concerning the polio immunization program, Dr. S. P. Bliss, department manager, reports.

Sandia Corporation does not contemplate any program for inoculation of employees. Careful consideration of the matter by the Medical Department has led to the conclusion that the traditional doctor-patient relationship should be preserved in such programs.

The Sandia Base Hospital has discontinued giving such inoculations to Corporation employees. Those who received their first shot at the military hospital are urged to obtain their second and third shots from their own doctor or some other source.



**Ben C. Benjamin**  
—tough cameras tell the story—



**John "Charlie" Abeyta (2711)**  
—A Mystery from Tibet to Texas—