

'Sphere of Science' Opening at State Fair Sept. 26



STEEL COBWEB of scaffolding fills the inside of the geodesic dome as workmen prepare Sandia's "Sphere of Science" exhibit for the New Mexico State Fair. In the foreground are Ron George, left, Painting Section 4513-3 supervisor, and Walter Granfield (3441 on loan to Public Relations Division). Translucent material of dome appears as white background in this photograph.

Western Electric Will Install Nike Zeus Facilities in Pacific

The Army has announced that Western Electric will install and maintain test facilities for Nike Zeus missiles on Kwajalein Island as part of a Zeus test range planned for the South Pacific.

The Zeus—first United States weapon designed as an anti-missile missile—will be tested for its ability to intercept intercontinental ballistic missiles launched from Johnston Island, 1,650 miles east of Kwajalein. In addition to the two Pacific Island sites, the new test range will also include

facilities to be constructed at Point Mugu, Calif.

Western Electric, the Army's prime contractor on the Nike Zeus project, will establish elements of a Zeus firing battery on Kwajalein and will also be directly involved in the test firings. Bell Laboratories and Douglas Aircraft Company will also play important roles in this phase of the operation. The Labs has been at work developing the Nike Zeus system, Douglas the missile hardware and launching equipment.

The Zeus is the third in a family of Nike missile systems built for the Army by Western Electric. Its forerunners, Nike Ajax and Nike Hercules, were designed to protect the nation against attacking aircraft.

Sandians Present Two Tech Papers

Two technical papers by Sandia Corporation employees were presented this week at conferences.

F. N. Coppage (1626-1) presented "Preliminary Study of the Effects of Exposure of Electronics Components to 2-Mev Electrons and Other Kinds of Radiation" in New York City to the Second Conference on Nuclear Radiation Effects on Semi-conductor Devices, Materials and Circuits.

E. L. McHugh (4510) presented "Installation Techniques" to the Building Trades Conference in El Paso, Tex.

D. M. Ellett Describes SERF to Albuquerque Ivy League Group

D. M. Ellett, Radiation Effects Division 1626 supervisor, presented a talk last week to the Harvard-Yale-Princeton Club of Albuquerque. He described the Sandia Engineering Reactor Facility now under construction in Area III.

The talk was presented at a luncheon meeting of the organization on Sept. 14.

SNT Picnic Sept. 20

Annual Family Picnic of the Society for Nondestructive Testing will be held Sunday, Sept. 20, from 1-5 p.m. at the Los Alamos Picnic Grounds.

For reservations contact D. W. Ballard (2541), Ext. 24248.

With the entrances of New Mexico State Fair scheduled to open after the parade on Saturday morning, Sept. 26, Sandia's "Sphere of Science" display is in the midst of a final rush of construction. The geodesic dome has been erected at the fairgrounds and workmen are now completing the inside displays.

As the Sandia Lab News went to press, inside the dome was a maze of cobweb-like metal scaffolding as the men worked on the overhead display. A huge ribbon parachute, painted midnight blue, will form a canopy backdrop simulating outer space. Small blinking lights will contribute to the effect.

Suspended from the ceiling on either end of a revolving, inverted V-shaped bar will be a brightly spotlighted scale model of the Vanguard satellite and a simulated prototype of the planned one-man Mercury space capsule.

An elevated promenade running through the middle of the dome will give spectators an over-all view of the show and a closer look at the overhead exhibit. Persons on the promenade will be in a position to see not only the overhead exhibit but also a series of large color transparencies depicting Sandia technical activities. A dozen telephones on the promenade will offer a continuous tape-recorded

message telling of Sandia Corporation's work and mission and Sandia's part in the peaceful applications of atomic energy.

Thunderbird Theater

Behind the dome will be the "Thunderbird Theater," a 70-seat extension of the building where spectators will be offered a continuous showing of a 30-minute color film, "The Sandia Story."

A Corporation-wide effort has gone into the production of the 14 inside exhibits of the "Sphere of Science," designed and coordinated by the Community Relations Section, Public Relations Division 3431. Many organizations have contributed ideas and the

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W. H. Kingsley Will Give 'Hazards' Talk To Safety Engineers

"Health Hazards of Epoxy Resins" will be discussed by W. H. Kingsley (3361) at the Sept. 25 meeting of the American Society of Safety Engineers. The meeting will be held from 2 to 4:30 p.m. at the Coronado Club.

A film, "Rescue Breathing," will also be shown. Reservations are not necessary for the meeting.

H. H. Patterson Awarded Patent for Invention

A patent, in the name of the Atomic Energy Commission, has been awarded H. H. Patterson (5230) and George H. Webber (formerly of Sandia Corporation) for their invention of "A Detector for Modulated and Unmodulated Signals."

The invention comprises a broad band antenna, a crystal detector mount, and a high-gain amplifier with provision for either a speaker or earphones. The detector not only indicates the presence of a modulated or unmodulated radio frequency carrier, but is also capable of modulating or unmodulating a modulated signal.



NEW REPLACING AGREEMENT was signed this week by officials of the Albuquerque Guards Union, Local 27, International Guards Union of America, and Sandia Corporation. The new two year agreement becomes effective Oct. 1. Shown seated above are (l to r) Jack M. Miller, Local 27 business agent; E. C. Peterson, Labor Relations Department manager, and John M. Wahlenmaier, Local 27 president. Standing are W. H. Chandler, Labor Relations Division supervisor; Marvin H. Brown, IGUA international president; and G. A. Parker, Jr., Director of Industrial Relations.

SCECP Fund Drive Kicks Off Oct. 9, to Benefit 32 Agencies

The third annual drive to raise funds for 32 agencies participating in the Sandia Corporation Employees Contribution Plan kicks off Friday, Oct. 9. The drive will continue the following Monday and close Tuesday, Oct. 13.

In 21 months of successful operation of the plan, Sandia employees have given a total of \$192,000 to the charitable, health and welfare agencies participating in the SCECP. Twenty-four agencies are included in the Albuquerque Community Chest (United Fund) and eight local chapters of national agencies participate.

The 1960 SCECP drive will be conducted with the same theme and in the same manner as in the past. Marv Sektnan (3431-2), drive coordinator, reports. Team captains, being selected now, will head squads of solicitors who will personally contact employees who are not now participating in the plan by payroll deduction. Some 3,250 employees will be contacted. "Give Once and For All" continues as the SCECP slogan.

Participants in the plan, em-

ployees who are giving at least 25 cents a week or not less than \$12 annually by payroll deduction, will receive a letter of gratitude from the SCECP Committee and will be given an opportunity to increase or change their contribution to meet the growing needs of the agencies in the booming Albuquerque community.

All members of the plan receive a sticker to be displayed on the door or front window of their homes as a notice to door-to-door solicitors for charity drives that the member has already contributed.

"Convenience and efficiency are the key words of the SCECP," Coordinator Sektnan says. "Through the payroll deduction method, a generous gift can conveniently be collected in small amounts throughout the year. We have the satisfaction of knowing that our combined contributions amount to a sizable total that benefits a great many necessary and worthwhile health, recreation and welfare activities."

In addition to the Albuquerque Community Chest, participating

agencies include the American Cancer Society, National Arthritis and Rheumatism Foundation, Cerebral Palsy Association of Bernalillo County, Muscular Dystrophy Association of America (Bernalillo County Chapter), Bernalillo County Heart Association, New Mexico Society for Crippled Children and Adults, Bernalillo County Chapter of National Multiple Sclerosis Society, and Albuquerque Association for Retarded Children.

Allocation of funds to the different agencies is done by percentages based upon recent fund raising results of the agencies in Bernalillo County. The SCECP committee is currently reexamining the figures to determine the allocation of the SCECP funds for 1960.

Dave Tarbox (4540) is chairman of the SCECP committee which includes T. B. Sherwin (3431), secretary, A. Y. Pope (5140), M. D. Tucker (4131), W. R. Rosenburg (2220), J. N. Johnson (3122), L. J. Heilman (3400), H. E. Burrell (4224), A. A. Amato (3442), Kendrick Kerns (3445) and John Wahlenmaier (4842).

Sandia Board Of Directors Meets Sept. 16

Sandia Corporation's Board of Directors met here Wednesday, Sept. 16. The directors met with the Small Staff in the morning and spent much of the afternoon visiting the Defense Atomic Support Agency.

The morning session included the following classified presentations: "Weapon Programs—Current and Future," R. W. Henderson, vice president, development; "Safety in Nuclear Weapons," Mr. Henderson and R. E. Poole, vice president, Livermore Laboratory; "Trend in Production Responsibilities," S. P. Schwartz, vice president and general manager; "What's New in Field Testing?" and "Sandia's Participation in Detection Systems Development," G. A. Fowler, vice president, research.

The visiting board members were: from the Bell Telephone Laboratories — J. B. Fisk, president, and R. L. Helmreich, vice president and general manager; from the Western Electric Company — H. I. Romnes, president; W. L. Brown, vice president and general counsel; P. R. Brousse, vice president, manufacturing division; C. R. Smith, vice president, radio division; and J. J. Merry, secretary.



VACATIONING JAMES W. McRAE, former Sandia Corporation president, visited at Sandia last week. He is shown here talking with Rosalie Crawford, his secretary while he was at Sandia. During his stay at Sandia Mr. McRae attended a luncheon with Sandia's Small Staff. He was on his way to California where his daughter Beth, who has worked this summer in 3466, enters Stanford.

Sandian Henry G. Neues of New York Office Holds Medal of Freedom

The recent posthumous awarding of the Medal of Freedom to Donald Quarles has brought to light the fact that another Sandian, Henry G. Neues, also holds the high civilian honor.

Mr. Neues (2723-2, New York office) was awarded the bronze



H. G. Neues

medallion in 1951 for his work in establishing radio relay communications between Japan and Korea during the early stages of the Korean conflict. At the time he was a civilian employee of the Department of Army, stationed with the Eighth Army Headquarters in Japan.

"I was very proud to receive the medal," Mr. Neues said, "but never quite realized its significance until I learned at later dates that I was sharing this honor along with

Buffet-Dance Sept. 26

Coronado Club will feature another buffet supper dance Saturday, Sept. 26. Dinner will be served from 6-8 p.m. followed by pantomimes by Don George. Jimmy Caldwell's orchestra will play for dancing from 9 p.m. to 1 a.m.

Tickets may be obtained and reservations made at the Coronado Club office. The price is \$2.50 each for club members and \$3.50 for guests.

Welcome Back

Back on the job is Max Weber (5121) who returned last week after a lengthy illness.

Jolene Stillwell (4423-2) has returned to work after recent surgery.

Members of 4250 welcome back Winston French (5252-3), who has been ill for more than a month.

such co-recipients as Charles E. Wilson, John Foster Dulles and Lewis Strauss."

Since his employment by Sandia Corporation in March 1958, Mr. Neues has been field calibration representative in the New York office and is in charge of calibration, maintenance and modification of all production testers in the East Coast area. Previously he was six and a half years with the Bell Telephone Laboratories as an engineering aide in the exchange transmission group, Systems Engineering Department.

Author Visits Livermore To Gather Material For Drafting Textbook

Sandia's drafting system will be described in a chapter of a forthcoming standard textbook.

A.S. Levens, professor of mechanical engineering at the University of California, Berkeley, and author of Graphics — In Engineering and Science, recently visited Sandia's Livermore Laboratory.

The chapter will include the methods used by Sandia to improve communications between engineering, manufacturing and inspecting groups. This will include Sandia's adaptation of the geometrical tolerancing concept, which is aimed at providing more realistic tolerance zones from the position of features on parts and the geometry of shapes of parts.

Another Sandia innovation Mr. Levens is expected to mention concerns datum translation drawings, which permit both the inspector and the manufacturer to start from the same place when they begin to manufacture or inspect a part.

AIIE Meets Sept. 21

American Institute of Industrial Engineers will hold a business meeting Monday, Sept. 21, at the Sandia Base Officer's Club. Dinner will begin at 6 p.m. followed by the meeting at 7.

Committee activities, programs, and budget considerations will be discussed at the business meeting. Following this an industrial film will be shown.

For dinner reservations call J. W. Sims (4111), ext. 31173.

Back from Military

Two men have returned to their jobs at Sandia Laboratory after recently completing military service.

David W. Bushmire, an electrical engineer in Tubes and Semicon-



D. W. Bushmire R. A. Costales

ductor Section 2544-3, served two years in the Army Signal Corps. His tour of duty included a month in Korea, Japan and Hawaii, and the remainder of the time at Killeen, Tex., or Sandia Base with the Defense Atomic Support Agency. He had worked for the Corporation six weeks before going on military leave of absence.

Robert A. Costales returned to his job in the Central Mailing Section 3464-2 last month after two years in the Navy. He was assigned to the USS Salinan and since it is a small ship his duties were a combination of signalman-radioman-yeoman. Key West, Fla., and Norfolk, Va., were both frequent ports of call. Bob had worked for Sandia Corporation six months before called into military service.

Historic Items Wanted

Exhibits of patriotic or historic interest are being sought to compete for a gold cup awarded annually during the State Fair by the New Mexico Society of the Sons of the American Revolution.

According to H. D. Finch (5254-1), secretary of the society, the exhibits may be in any category — such as antique, stamp collections, etc. — but the American Revolutionary or Post Revolutionary periods are preferred. A bronze medal is also awarded the best junior exhibit of patriotic or historic interest. Mr. Finch may be reached at ext. 33265 for additional details.

Secretary Business Course Set

A Secretarial Institute in Business Administration, sponsored by the National Secretaries Association, will be given at the University of New Mexico during the coming semester.

The non-credit course will be instructed by Dr. Howard Finston, associated professor of business administration. Classes will be held each Wednesday evening starting Sept. 30 for a 12-week period.

For additional information or registration blanks contact Jo Hanna (2630), ext. 26132.



Cynthia Davis (3126)

Take A Memo, Please

The safe driver is one whose horse sense under the hat is greater than the horsepower under the hood.

Several Sandians Remember Yellowstone Area Earthquake

The recent earthquakes in the Yellowstone area are still the subject of conversation of several Sandians.

Being awakened in the night by the rumbling that preceded the quake is a terrifying experience that will be long remembered by Angela Hopkins (2732-1). She was spending the night with her family on the edge of West Yellowstone.

"Everything began to quiver and shake," she recalled, "and the motel swayed like it was going to shake apart. It was awful! My husband said he felt like he was on a large ship that was tossing in a rough sea."

The Hopkins had been in Yellowstone that day and had intended to return the next day to go fishing. Angela said the most badly-hit area was blocked off to prevent curiosity seekers and scavengers from entering.



JUNIOR STATE archery champion is Bob Burbidge, Jr., son of Bob Burbidge (4412-1). The 10½-year-old boy scored a total of 621 aggregate points, based on 28 field rounds. Bob, who uses a 33 lb. pull bow, has been shooting for just a year and a half and in that time has either won or placed second in four major tournaments.

Flying Fishing Trip

A plane-load of grouper, yellow tail and mackerel was the result of a Labor Day week-end trip to Kino Bay, Mexico, by Jack Holmes (1224), Bob Peet (5252) and Jim Berry (5251).

Jim, who has held a private pilot's license for nine years, flew the fishermen down in a Cessna-172 belonging to the Crossroads Flying Club.

The flight from Albuquerque to Hermosilla, Sonora, then to Kino was uneventful even though the landing was made on an "improved" dirt road.

Lack of accommodations and language difficulties provided an interesting stay at the beach. A power-launch trip to Tiburon Island (Gulf of California) for fishing was the high point of the excursion.

Wins Bowling Trophy

Lillie Mae Sanchez (4423) was presented a trophy at the end of the summer bowling season for having the most improved average in the Star Dust League.

The earthquake also had members of division 5122 on pins and needles about the whereabouts of Sto Bell and his family. Sto sent his co-workers a post card from Yellowstone just before the quake, then there was complete silence.

Finally another card arrived—this one from the Grand Tetons in Wyoming. The family was having a nice vacation and had not been in danger.

Moving Time

Mary Ellen (3150) and Jim Sisler (1626) spent the Labor Day holiday moving into their new home at 6204 Ponderosa NE.

H. A. Becker (8163-1) and his family moved into their new home at 820 Adams Ave., Livermore, recently.

There's a whole batch of new home owners in the 4200 organization: John Fenter (4252-1) and his family now live at 10512 Love NE; Walter (4251-2) and Marian Tillman (4233-1) are settled at 5902 Bellamah NE, and Vince Schaeffer (4253-1) and his family have moved to 9501 Shoshone Rd. NE.

Congratulations

Born to:

Mr. and Mrs. Duane Randall (5142) a daughter, Shaune Suzanne, on Aug. 27.

Mr. and Mrs. Don Keith (4153) a son, Steven Richard, on Aug. 30.

Mr. and Mrs. Don Gorsline (5241) a son, Robert Paul, on Sept. 2.

Mr. and Mrs. Ken Guerin (3122) a daughter, Catherine, on Sept. 4.

Mr. and Mrs. Roger Thorp (4153) a son, Clifton Scott, on Sept. 4.

Mr. and Mrs. Leo F. Brady (5231-1) a son, Stephen Lee, on Aug. 17.

Mr. and Mrs. Joaquim De Vargas (3452) a daughter, Gloria Ann, on Sept. 1.

Mr. and Mrs. H. L. Williams, Jr. (3453) a daughter, Terri Lynn, on Sept. 2.

Mr. and Mrs. J. J. Platt (2531) a son, Gregory Martin, on Sept. 5.

Mr. and Mrs. B. E. Arthur, Jr. (2540) a daughter, Patricia, on Sept. 1.

Mr. and Mrs. Lloyd Barnes (2621) a daughter, Eleanor Elaine, on Sept. 3.

Mr. and Mrs. R. M. Simmons (4543) a son, William Richard, on Aug. 27.

Sympathy

To John Melvin (5241) for the death of his father recently.

To Clarence Lane (2723-3, Los Angeles office) for the recent death of his mother.

To Emily Edwards (5240) for the death of her brother-in-law in Seattle Sept. 6.

To W. A. Gardner (1610) for the death of his small daughter Rosanne on Sept. 8.

To Neal L. Vinson (5332) for the death of his father in Bisbee, Ariz., recently.

To Peter J. Cook (5532) for the death of his mother in El Paso, Sept. 11.



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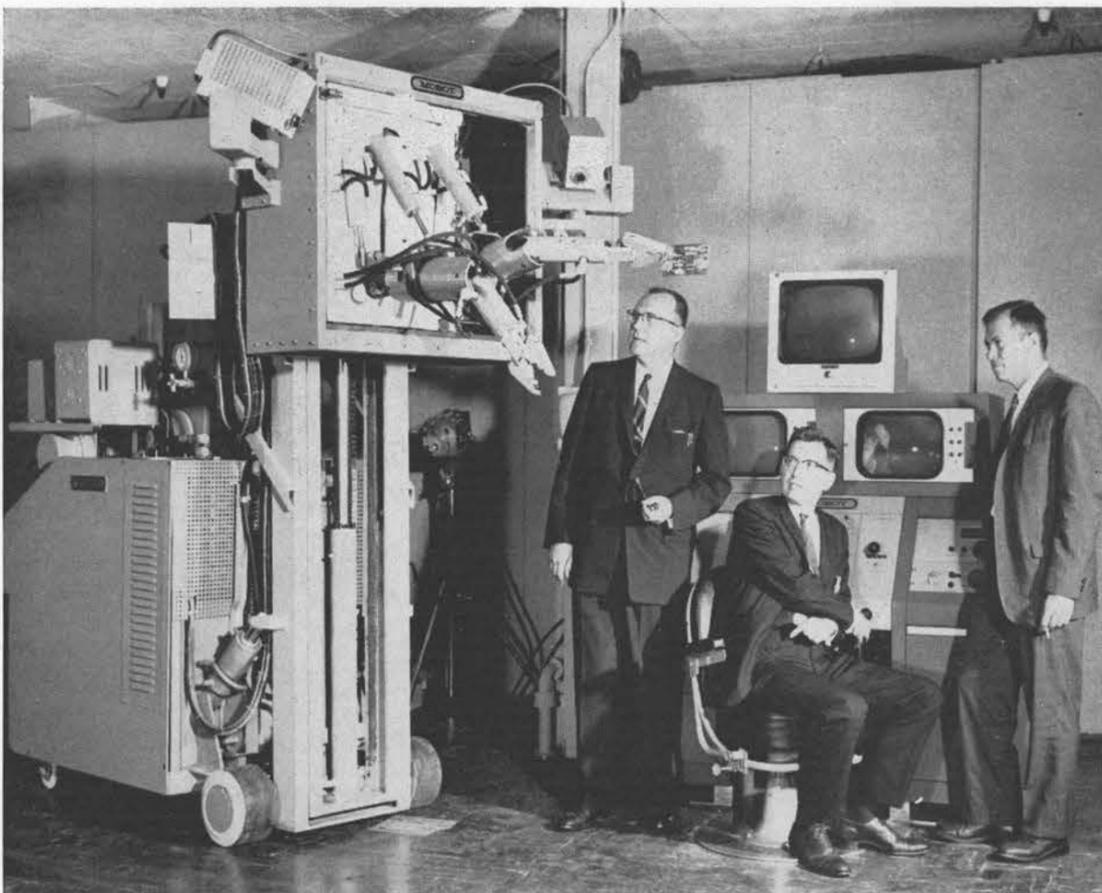
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"SANDY MOBOT," a remote mobile handler designed for use in Sandia's SERF reactor facility, will be operating in front of the "Sphere of Science" during the New Mexico State Fair. Shown (l to r) inspecting the Mobot are Robert W. Henderson, vice president development, John W. Clark and Allen E. Puckett, officials of Hughes Aircraft Company, which was the developing contractor.

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'Sphere of Science' Opening

physical production of displays. As visitors enter the dome and walk around the circular floor, they will see first a transistor exhibit indicating the operation and various parts of a typical transistor. Harry Mason (1451) is the project engineer responsible for this display.

Next will be a pressure sensing exhibit showing an application of a piezoelectric crystal to detect surface ships by a submarine. Model ships in a tank of water will illustrate the principle. The display was prepared under the direction of Arthur Hill (1464) with much of the design work being done by George Janser (1464).

A radiation effects display by Elmo Hirni (5150) will illustrate the effects of radiation on plastics with various samples and a molecular model.

Chemistry Display

Chemistry will be illustrated by showing two processes of chemical separation, extraction and distillation. Laboratory units filled with fluorescing liquids will be used. S. L. Erickson (1622) directed the production of this display.

Sandia's chaff rocket will be on display with an exhibit showing operation and make-up of the rocket. George Baker (5142) coordinated the display production.

A shake table display, coordinated by Eldon Julius (1614), will show a model airplane mounted on a vibration table to illustrate environmental testing.

A mathematics exhibit, coordinated by Dick Hildner (5122), will challenge the spectator to test his knowledge of mathematics by matching six formulae with verbal definitions. A similar exhibit, coordinated by Ken Granzow (5150), will offer a physics knowledge challenge. Operable displays will illustrate mechanical, electrical and optical phenomena.

Photography Exhibit

R. L. Lusby (3465) directed the preparation of a photography exhibit and production of a continuous motion picture on uses of photography in engineering.

Illustrating the extent of Sandia's manufacturing control system will be a graphic display showing Sandia's procurement of manufactured items from parts originating all over the country. A circuit tester will exemplify Sandia's testing activities. Joe Taylor (2562) coordinated the display.

The Sandia-developed nuclear cell or atomic battery will be displayed in an exhibit directed by R. P. Stromberg (1473). A large model of the cell will be used with a display of parts and circuitry.

An exhibit coordinated by George Tucker (3361) will illustrate background radiation by showing relative radioactivity of samples of air, water, sand, etc., on a counter.

The overhead display mentioned earlier was prepared by Herb Bowen (5257) and M. J. Davis (5513).

"Sandy Mobot"

Operating on a concrete apron in front of the dome will be Sandia's RMRH (Robot Mobile Remote Handler) nicknamed "Sandy Mobot." The device recently received national mention when it was unveiled in Los Angeles by the developing contractor, The Nuclear Electronics Laboratory of

Hughes Aircraft Company. John L. Colp (1626) will be in charge of Sandy at the State Fair.

"We have tried to make a contribution to the public's understanding of the work of Sandia Corporation," John Leslie, supervisor of the Community Relations Section, says, "and to offer an educational insight into science."

"The 'Sphere of Science' would not have been possible without the efforts of Tom Zudick (3431-2), Lou Baldwin (3423), Art Hill (1464) and the many others who helped with the display work."

"I think it is particularly important for the viewer to know that design and planning alone do not make a State Fair show. It is the skilled craftsmen and technicians and artisans of the Maintenance Shops, Photo Labs, Technical Art Division and the Development Shops that make the show something we can all be proud of."

University of New Mexico Announces Fall Offerings of Evening Credit Courses

Numerous credit courses of interest to Sandians are scheduled evenings and Saturdays by the University of New Mexico Community College.

Registration is being held today and tomorrow in Johnson Gymnasium on the campus with classes in the fall semester starting Monday.

Among the courses offered in the UNM Community College are the following:

Architecture

Seminar 197.

Business Administration

Business Communications, Business Statistics, Business Law, Principles of Marketing, Corporation Finance, Credits and Collections, Property and Casualty Insurance, Principles of Organization and Management, Salary and Wage Administration, Human Factors in Administration, Fiscal Policy and Business, Research in Business.

Accounting

Principles of Accounting, Intermediate Accounting I, Intermediate Accounting II, Government Accounting, Income Tax Accounting.

Chemistry

General Chemistry 1C, 2, Gen-

eral Chemistry 1LI, 1LJ, 1LK, 2LD, Organic Chemistry 101, 102, Organic Chemistry Laboratory 103L, 104L, Structure of Matter, Inorganic Chemistry.

Economics

Introduction to Economics, International Economic Relations, Institutional Economics.

Engineering

Introduction to Nuclear Engineering.

Chemical Engineering

Seminar 151.

Civil Engineering

Applied Mechanics (Statics), Structural Design I, Advanced Structure of Materials, Structural Design III, Research and Testing of Highway Materials.

Electrical Engineering

Principles of Electrical Circuits I, Principles of Electrical Circuits I Lab 61LE, 61LF, Electromagnetic Fields, Electric Circuit Analysis, Field and Circuits Lab, Electronics II, Seminar, Microwave Generation and Transmission, Microwave Generation and Transmission Lab, Bases of Communication Theory 191A, 191B, Communication Lab I, Transients in Linear Systems, Electromagnetic Waves, Principles of Communication Systems, Radio

Wave Propagation, Digital Computers.

Mechanical Engineering

Dynamics, Petroleum Production, Mechanical Vibration, Fluid Dynamics, Experimental Stress Analysis, Experimental Stress Analysis Lab 215LA, 215LB, Advanced Applied Dynamics.

Mathematics

Intermediate Algebra 2D, 2E, College Algebra 15C, 15D, Plane Trigonometry, Calculus and Analytical Geometry 50C, 50D, 51C, 51D, 52B, Introduction to Foundations of Mathematics, Introduction to Modern Algebra, Mathematical Statistics, Applied Advanced Calculus, Point Set Topology, Theory of Functions of a Complex Variable, Partial Differential Equations, Topology, Functional Analysis.

Physics

General Physics 60, 61B, General Physics Lab 63LN, 63LO, Heat and Thermodynamics, Optics Lab and Geometric Optics, Electricity and Magnetism, Electricity Lab, Atomic and Nuclear Physics, Contemporary Physics, Statistical Mechanics and Thermodynamics, Quantum Mechanics, Advanced Nuclear Physics.

Sandia Calibrating Meteorological Instrumentation at Salton Sea Base

Tests got underway at Salton Sea Test Base Sept. 14 to help calibrate, through use of Sandia Corporation equipment, meteorological instruments used by the U. S. Weather Bureau, military services and Sandia.

Such instruments have never been tested against true independent measures of altitude until now. As a result, readings have varied as much as 1,000 ft. in very high altitudes as recorded by different instruments.

To assist in this basic research problem, Sandia Corporation made available the Salton Sea range facilities and personnel to conduct a series of balloon flights. The various types of standard meteorological instrumentation will be compared against a precise optical measurement — Sandia's Askania phototheodolite tracking system. Actively participating in the tests are the Air Force Cambridge Research Center, the U. S. Weather Bureau, Army Signal Corps, U. S. Navy and several commercial firms.

Balloons Used

The helium-filled balloons being used are approximately 12 ft. in diameter at launching and can carry a load of 10 pounds. An average height of 40,000 ft. is expected although the balloons are capable of attaining 90,000 ft. Mid-September was chosen for the tests because of the light winds aloft during this period. The series will continue through 10 successful flights.

Staff Technical Courses Offered

Technical courses for Staff Members will be offered again during the noon hour starting Sept. 28.

Information regarding prerequisites for each course and enrollment cards may be obtained from W. H. Bailey, Staff Training and Education Section, in Bldg. 301.

Courses to be offered by Sandia Corporation include: Dynamics, Machine Design, Calculus Review, College Algebra and Plane Geometry I, Strength of Materials I, Engineering Mechanics (Basic Statistics), Analytic Geometry, Differential and Integral Calculus I, II and III.

Plane and Solid Analytic Geometry, Elementary Heat Transfer, Differential Equations I, and Fundamentals of Transistor Applications.

The airborne instrumentation string will be comprised of a combination of three of the four different kinds of radiosondes used for measuring temperature, pressure and humidity.

Twofold Purpose

Purpose of these tests is twofold: check radiosonde tracking system accuracy by precise optical measuring systems, and verify methods of computing altitudes from rawinsonde data against altitudes that are precisely known from optical measurements made by an Askania phototheodolite system. Accurate measurement of meteorological system design capabilities will be stressed rather than operational performance.

Copies of raw data will be available within two weeks after the tests and Sandia will provide reduced phototheodolite data from the four most meaningful tests within 90 days.

Although there will be no formal meetings or sessions at Salton Sea, the field tests are expected to result in a series of papers written by each participating agency assessing their own equipment performance in light of their own requirements. A joint paper summing up the tests will be written later for public distribution.

Sandians taking an active part in the meteorological instrument tests include G. L. Miller, Bob Sharp, E. D. Niper, Lowell Jones, T. J. Raftery and Mike Levesque, all of Electronic Services Division 5243, and Ray Glass, Charles Reed, and Cliff Stover of Instrument Development Department 5220.

Supervisory Appointments

V. KEITH SMITH to supervisor of Air Force Missile Test Center Operations Section 5255-1, Project Department.



Keith has been working in one of the test project divisions since he came to Sandia three years ago. He was a field test project engineer on the Mach 5 test vehicle and worked with the 5100 organization in designing rocket facilities at Tonopah, Nev.

Recently Keith has been helping design Sandia rocket launching facilities at Point Arguello, Calif. (Pacific Missile Range.)

He received a BS degree in electrical engineering at the University of Idaho and is a member of the Institute of Radio Engineers and Sigma Tau, engineering honorary society.

LAWRENCE L. LAVANIER to Assistant Buyer, Mechanical, 4361-1.



Larry has worked in the Purchasing organization (electrical subcontracting) during his two years with Sandia Corporation. Previously he was a systems engineer at

Bendix Research Laboratory in Detroit for two years and was a buyer for Goodyear Atomic Corporation in Ohio for a similar period.

From 1943-46 and again from 1949-54 Larry was in the Air Force. He spent two years at Massachusetts Institute of Technology working on project "SAGE." While in service he was also stationed for a time at Cape Canaveral, Fla., and helped establish missile tracking stations off the Florida coast.

Larry received his BA degree in business administration from the University of Cincinnati and did some graduate study at Xavier University. He is a member of the American Rocket Society.

Most Important Vote in City History Faces Residents Oct. 6

The City-County consolidated election to be held Oct. 6 will probably be the most important in the city's history. Included in the voter package will be a \$21 million bond issue, election of two city commissioners and two municipal judges, a \$3.9 million bond issue for a proposed City-County building, proposed merger of the governments of the city of Albuquerque and Bernalillo County, and election of five directors for the Sandia Conservancy District (flood control).

Polling places will be the same for both the city and county election and for the Sandia Conservancy District election although the hours will be slightly different: 9 a.m.-6 p.m. for SCD and 8 a.m.-7 p.m. for the city-county issues. Voting machines will be used for all except the SCD election, for which paper ballots will be provided.

The proposed city bond issues, upon which voters will be given an opportunity to vote, are:

1. Parks and Recreation Improvements, \$300,000
2. Fire Department Improvements, \$328,000.
3. Arterial Improvements (including rights-of-way, street construction, traffic control), \$1,250,000
4. Water Improvements, \$9,340,000
5. Sanitary Sewer Improvements, \$6,103,014
6. Storm Sewer Improvements, \$3,690,000

The two elected members of the City Commission will serve four-year terms to start immediately. Terms of office for Municipal Judges are two years, starting next April.

The proposed charter for the City-County government was drawn up by a committee established in 1952 for this purpose. Although actually comprised of seven county residents appointed by the Bernalillo County Commission

and seven city residents appointed by the Albuquerque City Commission, a total of 30 members have served on the committee during the past seven years.

Boundaries of the City-County of Albuquerque would be the same as the present limits of Bernalillo County.

As an information service to Corporation employees a few of the pros and cons of the consolidation are offered here:

Q. How will the merger affect taxes?

A. Tax rates for county residents will rise slightly but not to the present level of city taxes. Plans call for dividing the City-County into zones or classifications in which the apportionment of taxes for benefits would be in line with the benefits derived. Services such as water, sewer and garbage service, fire and police protection, public health and sanitary inspection, recreation facilities, flood protection, highways and roads, etc., will be taken into consideration.

Q. Will county residents have to assume the city's bond obligation?

A. All bonded indebtedness of the city or county shall remain the separate debt of the city or county, respectively, until fully paid.

Q. What assurance can rural residents be given that the agricultural nature of their land may be maintained?

A. No one proposes to disturb proper agricultural usage of land; however, as areas develop and become more populated it is within the City-County's power to zone the area. Large areas of land will be preserved in their present agricultural or rural nature and protection will be given against encroachment on these lands.

Q. Will county residents be "overly regulated" when it comes to a simple thing like building a shed on their property?

A. County and city residents alike will be required to have a building permit before any construction can be done.

Application for a permit requires a rough drawing of the proposed construction and the dimensions. Building code regulations must be met, but this provides protection for the home owner against faulty wiring and plumbing, compliance with property set-back lines, etc.

Q. Will any money be saved through consolidation of city and county offices?

A. It's doubtful that there will be much of a cut in number of employees or amount of office space. Total cost will probably be about the same, but better service is anticipated. These benefits would include better police protection, good and dependable water supplies, better sewer facilities, zoning regulations, building regulations, etc.

Q. How would the consolidation affect the school system?

A. There would be no change. The public school system was consolidated for the entire county several years ago and the merger has already proved highly efficient and beneficial.

Q. How would City-County officials be chosen?

A. Seven members of the City-County Commission would be elected (two of these would be residents of rural areas). Judges for the police courts and/or municipal courts would be the only other elected officials. The remainder of the administration employees would be placed under the merit system, such as that used in Albuquerque at present. A City-County Manager, employed by the Commission as chief executive and administrative officer, would have the power to employ or discharge any person engaged in administrative service, appoint the director of each administrative department, and prepare the proposed annual budget.



NEW YORK AND Hollywood bound was Maxine Metz, receptionist in Bldg. 800, who won an all-expense paid trip to these cities in a recent contest. She has been "girl reporter" on TV for a week.

25 Magic Words Win Dream Journey for Maxine Metz

Twenty-five magic words have won an all-expense paid dream trip to New York City and Hollywood for Maxine Metz, receptionist in the lobby of Bldg. 800.

In a recent contest she answered the statement, "Why I would like to be the CBS girl reporter for Televisit Week," and was chosen to represent New Mexico. She flew to New York last Friday night, and then to California this past Wednesday by jet airplane.

Maxine is one of 51 women who were named to represent their local newspapers and television stations as special correspondents, observing and reporting daily on the myriad activities involved in daytime television programming and production.

This week she's attending TV shows, luncheons, cocktail parties, press conferences and Broadway

shows, along with a host of other activities.

While in New York she was scheduled to appear on the following TV programs: "The Big Payoff," "Top Dollar," and "The Verdict Is Yours." In California she planned to visit and observe the programs, "For Better or Worse" and "On The Go," and will appear on "Houseparty."

Interviews were held with Art Linkletter, Captain Kangaroo and several television executives, producers and directors. At all of the luncheons and parties in both cities, daytime TV stars were in attendance.

An excited Maxine, about to leave for her trip, was looking forward to viewing the TV programs, meeting TV stars, seeing "My Fair Lady," having lunch at Sardi's and taking her first jet airplane ride.

In Conservancy District Election

Four Employees Candidates for Sandia Flood Control Director



W. M. Anderson



Edward Kubiak



J. S. Maxon



W. R. Rosenberg

Ballots for electing five directors for the Sandia Conservancy District (flood control) will bear the names of four Corporation employees.

W. M. Anderson will be running as an independent, Edward Kubiak and John S. Maxon will represent the Property Owners Protective Association, and W. R. Rosenberg will be supported by Citizens for Flood Control.

Bill Anderson is supervisor of Calibration and Secondary Standards Division 2723 and has been at Sandia nine and a half years. Previously he worked 10 years in various parts of the United States and in the British West Indies as a consulting engineer and in heavy construction work similar to flood control projects. He has a BS degree in civil engineering from Northwestern University and is a registered civil engineer. As a director Bill says, "I would thor-

oughly investigate all engineering phases of the program and would determine responsibilities of both the city and county regarding existing flood conditions."

Edward Kubiak is an engineer in Systems Division C 2533. He has been in the Manufacturing Development Systems Engineering organization during his 10 years at Sandia. Ed attended the University of Rochester and the University of New Mexico and previously worked for machinery manufacturers in Rochester.

John S. Maxon is supervisor of Systems Development Division II, 1544, and has been at Sandia more than 11 years. Previously he had 15 years' experience as an engineer with an electrical instrument firm and a radio parts manufacturer. He has a BS in electrical engineering from Lewis Engineering School in Chicago.

Both Mr. Kubiak and Mr. Max-

on were appointed by the court two months ago to serve as directors of the Sandia Conservancy District board until the October election. They have been active members of the Property Owners group since its organization two years ago.

Walt Rosenberg is manager of Production Control Department 2220 and has been at Sandia 13 years. His jobs have been in manufacturing engineering, program control and purchasing organizations. He has a BS degree in electrical engineering from Oklahoma State University. In 1953 he helped organize the Albuquerque Citizens Committee and has served on its executive board for five years. Last year Walt received a citation from the Albuquerque Jaycees for community service. He basically advocates "action as soon as possible on a reasonable flood control program at reasonable cost."

After Building Job Pat Farley Needs Rest From Vacation

If Pat Farley (3153-1) needs a vacation from her vacation it's understandable.

Many Sandia men spend their leisure hours building additions to their homes but not many women are so inclined.

In Pat's case the vacation project is a one room, 20' x 32' cabin being built in the Sandia Mountains, on North Highway 10. She bought the lot two years ago; last year the well was dug, and the cabin has been growing gradually.

Although the electricity, plumbing and block wall construction were all contracted out, Pat, with the assistance of her mother and sister, have also worked a great deal.

Their biggest job was laying 3,000 bricks for the floor. They also hung all the windows and doors, painted the outside, and put up the roof.

"We have a number of neighbors who work at Sandia and they have all been wonderful in helping us," Pat added.

Welcome Newcomers

Aug. 30-Sept. 11

Albuquerque	
Jack J. Anderson	4333
Louberia A. Culley	4413
Donovan B. Dawson	4251
Carol C. Domingo	4362
Edward H. Gallegos	4152
Frank R. Garcia	4574
Emma Hollingsworth	3126
Theresa D. Johnston	3126-5
William C. Johnson	5240
Vernon T. Micklebost	2550
Evelyn A. Schwanke	5536
*Thomas A. Sheldon	4413
*Joyce F. Sirls	3126-4
*Lois C. Swearinger	3126
Shirley L. Teeter	3126
Mary C. Tegard	3126
Ray Zimmerman	4413
California	
Christie Hills, Turlock	8212-3
Robert W. Jackson, San Francisco	8223-1
Shirley A. Mosley, Castro Valley	8212-3
Benjamin F. Yates, Willows	8213-1
Vivian L. Lenz, Concord	8212-3
James A. Martin, Hayward	8213-2
Joseph C. Trembl, Castro Valley	8225-2
Betty L. Vineyard, Livermore	8212-1
Berna J. Balanda, Livermore	8212-3
Mary H. Carter, Livermore	8161-3
Colorado	
Raymond E. Faltings, Denver	8116-3
Illinois	
Donald R. Fisher, Champaign	1282
Warren C. Shaffer, Chicago	8122-1
Indiana	
Larry D. Miller, Lafayette	2561
Kansas	
Louis C. Burmeister, Manhattan	1232
Missouri	
Alvin F. Brazda, Kansas City	5243
New Mexico	
Peter J. Thoma, Las Vegas	1625
Kenneth G. Adams, Los Alamos	5111
New York	
Melvin D. Fimple, Rochester	1592
Texas	
Jack Colquitt, El Paso	4132
Washington	
Walter B. Murfin, Harper	1282
* Denotes Rehired	
Returned from Leave	
Joyce M. Gambrill, Albuquerque	4325



**Sandia Corporation Has Worked
61 Days
Without a Disabling Injury**

HERE'S WHY...

Because continued care and observance of safety rules will help keep this record improving. Safety is engineered into all jobs at Sandia and when all reasonable precautions are taken employees are able to continue work without disabling injuries.

TEN YEAR PINS



John D. England
8233
Sept. 20, 1949



Eugene M. Hopkins
4233
Sept. 21, 1949



John P. Stark
3451
Sept. 21, 1949



Frank A. Kohut
4343
Sept. 22, 1949



Paul J. Krogdahl
5532
Sept. 22, 1949



George H. Dixon
4542
Sept. 26, 1949



Malcolm J. Snyder
2225
Sept. 26, 1949



Luke J. Vortman
5112
Sept. 26, 1949



Norman L. Smith
2242
Sept. 27, 1949



Louis R. Chavez
4221
Sept. 28, 1949



James E. Smith
3465
Sept. 28, 1949



Charles Rettinger
4252
Sept. 29, 1949



Homer W. Baldwin
3211
Sept. 30, 1949



Robert S. Reynolds
5223
Sept. 30, 1949

Five Year Pins

Sept. 19 - Oct. 2

Gordon M. Prestby 3442, Frank Bennett 2722, Marston W. Skidmore 4411, Robert L. Hostetler 5232, Donald L. Markwell 1544, Jane B. Dancy 5512, John F. Dankworth 1423, V. T. Strascina 5142.

Betty J. Carroll 3423, Ruth M. McAdams 3123, Hester E. Stiver 4132, Marvin E. Barnett 5256, Leonard M. Clausen 5323, Louis E. Erne 3462, Mary E. Fischer 3123, Carhel D. Henry 2251.

George L. French 4412, Robert D. House 5223, W. D. Stoppkoite 1422, Sherry L. Smith 2542, Robert E. Pedersen 1218, Lydie Diamond 2731, B. R. Lorenzen 4543, Larry E. Horner 5522.

Radio Operator Exams Set Saturday, Oct. 3

Examinations for all classes of Commercial, Amateur Extra and Amateur General radio operator licenses will be held Saturday, Oct. 3, at Albuquerque High School.

The examination for Commercial licenses will begin at 8 a.m., and for Amateur Extra and General at 11 a.m.

Applications should be forwarded to the Federal Communications Commission office, 521 New Custom House, Denver 2, Colo., at least one week before the scheduled examination date.

A letter or note indicating intention to take one of the examinations should be included with the application form.

For further information contact Einar H. Morterud (5523-1), ext. 52252.



SINGLES CHAMP of the Sandia Corporation employees ping pong tournament Tommy Kelly (2552) throws a wicked slice to the ball as he defeats Benny Garcia (2551) in the final matches. Some 200 spectators gathered for the playoffs which took seven games to complete.



DRIVING HARD during the playoffs of the Sandia Corporation ping pong tournament is Gene Lucero (2731), left. With partner Gene Chavez (2722), right, the duo defeated Maynard Cowan (5111) and R. L. Schellenbaum (5113) in the finals for the doubles championship. More than 2,000 employees of the Corporation took part in the popular noon hour ping pong recreation program.

Sandia Flag Football League Play Underway, Game Schedules Set

In the first week of Sandia Corporation Flag Football Association play, the team combination of 1200-1300-1400-1500 won a decisive victory over AEC-4100 by a score of 31-6.

In the other two games played last Saturday, 1600 beat 2200-4200-4500 12 to 6, and 2500-2700 edged out 3400 12 to 6.

All football games will be played on Saturday mornings on

the Sandia Base Military Baseball field this season. Schedule for the next two Saturdays is as follows:

Sept. 19			
8:15	1600	vs	2500-2700
9:30	2200-4200	vs	3400
10:45	4400-5500	vs	5100-5200-5300
Sept. 26			
8:15	1200-1300-1400-1500	vs	4400-5500
9:30	2500-2700	vs	5100-5200-5300
10:45	AEC-4100	vs	3400

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

PERCUSSION MUSKET, Harpers Ferry, \$35; other antique rifles & muskets; trade for old pistols, revolvers or German Lugers. Smitha, AX 9-1096.

3 BRM BRICK, 1 1/4 baths, landscaped, large patio, sprinklers, w/w carpeting, furnished. Newell, AL 6-3333, 1020 Kentucky SE.

BED, headboard w/shelves, drawers, electrical outlet, lined oak, \$50, orig. cost \$90. Campbell, AX 9-8071.

BABY BED, deluxe Thayer w/mattress, \$20. Scott, AL 6-0818.

SHOTGUN, double barrel Stevens, 12 gauge, \$25; best offer or trade. Jolley, DI 4-0724, 3002 Sierra Dr. NE.

'51 HENRY J, 4-cyl. motor just overhauled, rings, valves, rods & bearings, \$80. Schmedeman, AL 5-2398 after 5 p.m., 722 Charleston NE.

TAYLOR TOT, \$12 or best offer; high chair, oak, \$6. Overturf, AX 9-5852.

3 BRM BRICK, 1 1/4 baths, HW floors, screened patio, sprinklers, central heat, air-conditioned, many extras, \$1900 down. McNeely, AX 9-4232, 2511 Gen. Arnold NE.

OSCILLOSCOPE, laboratory Heathkit O-11, \$47.50. Cundiff, AL 6-4649.

GAS RANGE, flat top Roper, white, \$70 or make offer. Clendenin, AX 9-2071.

CIRCULATING GAS HEATER, 20,000 BTU, 3 inch vent pipe included. Miller, AL 5-7894, 2833 Bel Air Dr. NE.

3 BRM BRICK, 1 1/4 baths, HW floors, carpet in LR-DR & hall, air-conditioned, sprinklers, landscaped. Seay, AX 9-5270, 215 Hoffman Dr. NE.

SHOTGUN, 12 ga. Springfield automatic w/case & equip., \$75; bowling ball & bag, \$17.50. Galbreath, DI 4-4306, 3730 Manchester NW.

'59 GE FREEZER, 13 cu. ft., upright, \$300; cost \$400. Asturias, AX 9-4173 after 5:30 p.m.

8 RCA RADIOS, BC & SW, 6 tubes, cheap; 3 Venetian blinds, \$10. Will trade for tape-recorder. Howard, AL 5-7846.

GUITAR, Gibson flat top, jumbo size, \$60 or best offer; Westinghouse electric oven, \$12.50. Anderson, DI 4-5094.

'42 PICK-UP, new sticker, goes long ways with \$1 worth of gas, \$75. Lopez, AX 9-0941 after 5 p.m.

RCA TV, 21 inch, mahogany console, \$80. Hamlet, AX 9-5124.

TABLE LAMPS, pair, \$6; want to trade one Thunderbird stamp book for book of Gold Bond. Floyd, AL 6-4898.

BAND SAW, nine inch, swing away wall mount with 1/2 HP motor, \$35. Ankeny, AX 9-5320, 9121 Lexington NE.

LUGGAGE TRAILER, 2-wheel, needs work on box, \$45; Deluxe gas range, \$50. Green, DI 4-4472 after 6 p.m.

'53 DODGE six cylinder 4-dr. sedan, R&H; engagement ring, new, diamond 1/4 carat, one chip ea. side, platinum mounting. Ruff, ext. 4-8190.

KITCHEN DINETTE w/four chairs, \$40; girls 26 inch bicycle, \$25. Mattina, AX 9-7060, 1808 Blume St. NE.

GOLF CLUBS, men's Wilson woods, Roberts irons, bag, cart; women's Wilson woods & irons, bag. Blackwell, AL 5-7677.

CROSLEY TV, 17 inch Console w/new picture tube, \$35. Grall, AL 5-9638, 828 Truman NE.

4 BRM HOME, 1 1/2 baths, attached garage & workshop, air-conditioned, wood floors, landscaped, near schools & shopping, immediate possession. Summers, AX 9-4674.

AUTOMOBILE COOLER, 12-volt Allstate, evaporative w/twin blowers, recirculating pump, adjustable louvers, \$20. Zanetti, AX 9-7582.

DX-100 X-MITTER, less than 5 hrs. operation, \$180. Silva, AX 9-2195.

'50 SERVEL REFRIGERATOR, freezer across top, \$95. Atkin, AL 5-8849.

3 BRM HOME, HW floors, garage, lawn & sprinklers, walled yard, \$11,200 w/approx. \$3000 down cash. Willett, AM 8-8439, 1026 Buena Vista Dr. SE.

BENDIX AUTOMATIC washer; Wilcalator gas ranges, one full size & apt. size; Maytag automatic washer; small space gas heater. Gonzales, 194 La Vega Rd. SW.

RIFLE, Remington 760 pump action, 30-06, \$75. Green, AX 9-0094.

LIONEL ELECTRIC TRAIN, engine & 5 cars, 2 remote control switches, remote control uncoupling, mounted on table, \$50. Kulterman, ext. 48167.

RIFLE SCOPE, Weaver K-8, never used, \$37; 22 pistol, S & W K-22, many extras, \$60. Shunty, AX 9-2877.

HOTPOINT ELECTRIC STOVE, \$50; 5-piece dinette set (Formica top), \$50; Wright, ext. 20146.

'57 PLYMOUTH 9-pass. station wagon, torque flite, power steering, 28,000 miles, \$1875. Chase, AX 9-7321.

SEWING MACHINE, Commander by Sears, in mahogany cabinet, round bobbin, \$70. Stephenson, AX 9-9114.

BOOKCASES; drafting board, T-square and instruments; electric heater. Preston, AX 9-1948 after 5:30 p.m.

ENLARGER, De Jur Versatile II, hand picked F4.5 Wollensok lens, adjustable easel & paper cutter, \$70; costs new \$200. Revels, DI 4-3033, 260 Pueblo Solano NW.

10B-SSb EXCITER w/QT-1, \$135; power con batt. eliminator, \$25. Roane, AX 9-1761 after 5 p.m., 2909 Garcia NE.

APEX AUTOMATIC washer & dryer, \$150; trombone w/case, accordion w/case, \$80 ea.; '56 scooter, \$115. Lucas, DI 4-6831.

NEXT DEADLINE FOR SHOPPING CENTER ADS Friday Noon, Sept. 25

UTILITY TRAILER, 2-wheel, 4x10, practically new tires. Moore, AL 6-2748.

'54 FORD Victoria, 1 owner; GE 17 inch TV; small electric fry pan never used. Whitehill, AL 6-6777 after 5 p.m.

WURLITZER JUKE BOX, amplifier with 15 inch speaker, \$15. Benson, AX 9-3315.

30 FT. TOWER with AR-22 rotator, \$40; 20 meter short beam, \$20. Craig, AL 5-2864.

SHOTGUN, Winchester model 37, single action 12 gauge, \$25. Roberts, AX 9-7872.

FIGURE SKATES, ladies "CCM" size 4; steel arch Riedell boot; Pathfinder blade; used 6 mos. Brummell, 324 Manzano NE after 5 p.m., ext. 20144.

RECORDER, Bell & Howell, 6 mos. old, \$225; \$300 new. Slesinger, AX 9-4626, 1602 Hoffman Dr. NE.

3 BRM HOME, 1 1/4 baths, w/w carpeting, drapes, patio, walled, landscaped, many extras; chrome dinette set, formica top, \$50. Buchanan, AX 9-7306, 1812 Field Dr. NE.

UPRIGHT PIANO, \$150; outside door top half glass, 32 inches wide, \$10; assorted Venetian blinds, \$1 ea. Cashion, CH 2-3345, 2811 Monterey SE.

SHASTA TRAILER, 15 ft.; baby buggy; jumper seat; play pen; baby swing w/stand; car seat. Stixrud, DI 4-7873.

'59 CHEVROLET deluxe cab, 1/2 ton, 4-speed, R&H, heavy duty throughout; will accept '55-57 car in trade. Dempsey, ext. 48185, 3140 39th Pl., Sandia Base.

'55 OLDS Super 88, low mileage, PS & PB, 4-dr. sedan, \$1150. Nyholm, AX 9-3932 after 5 p.m.

KARLSON HI-FI speaker enclosure, blond finish, w/12 inch RCA 502SI speaker, \$45. Stueber, AX 9-2414 after 5 p.m.

HORSES, 5 young registered Tennessee Walking, of Midnight Sun breeding. Leamon, AL 5-6419.

'57 PLYMOUTH Savoy V8, 1 owner, low mileage, R&H, w/w tires, push button drive, \$1450. Gillespie, AL 5-5834.

3 BRM HOME, 2 baths, den, AC, w/w carpeting, 2-car garage, wired for electric stove, patio, terraced back yard. Golden, AL 5-3751.

'49 PONTIAC, 4-door, 6 cyl., R&H, hyd. drive, \$125. Bullhorse, AL 6-5995.

AIR BOAT, one passenger, can be operated on small pond, \$100. Hawk, AL 6-6264, 1821 Florida NE.

TRAILER, one wheel, \$40; 45 record player RCA, \$25; baby crib, \$10; car seat, \$3; walker, \$4.50; toddler seat, \$1.50. Gray, AL 6-1560.

'57 GOLIATH, the poor man's VW, \$850. Nielsen, AL 5-2034.

EVAPORATIVE COOLER, Artic-circle, \$20; 12'x18' rug and felt pad, \$35; 8'x8' linoleum, \$2; twin beds, \$15. Sweatman, 300 Espejo NE.

VOLKSWAGEN CONVERTIBLE, Karmann Kabrolet, many extras, \$1395. Chandler, CH 3-7564 or CH 3-2971.

'51 LINCOLN Club Cp., hydramatic, dual pipes, Mallory ign., electric fuel pump, all accessories. Wistor, AL 5-1953, 4902 Southern SE.

RANGE HOOD w/light & fan, \$25; GE upright vacuum sweeper w/attachments, \$10; 24 inch girl's bicycle, \$10. Smith, AL 5-7991.

REVOLVER, 38 S&W, \$25; rifle, 7.5mm French, \$15; shotgun shells, 16 ga., \$25; ammo w/each. Will consider trade. Scranton, AX 9-4902.

'59 IMPALA Sport Sedan, powerglide, V-8 engine, PS & PB, R&H, etc. Grubbs, AL 5-0172.

3 BRM PRINCESS JEANNE home, walled yard, drapes, garbage disposal; down payment, \$1000; loan balance \$9,700. Kemp, AX 9-1231.

'55 BUICK Super 4-dr., PS & PB, R&H, \$850. Christie, ext. 44164.

'53 BUICK Roadmaster, air-conditioning, new paint. Fjelsted, ext. 2-3278 after 5 p.m.

BUILDING, 10'x10'x8', good lumber, will tear down or move as is, \$65; double stock trailer, \$40. Haley, DI 4-3919 after 6 p.m.

CLARINET, Malerne w/case, \$55. Morter, AL 6-7843.

GASOLINE ENGINE, 2 1/2 HP, Clinton, ported, perfect for go-kart or small car, \$25. Laskar, AX 9-1024.

PORTABLE TYPEWRITER, Remington w/carrying case, new, \$60. Tillman, AL 5-6292 after 5 p.m.

JEWELER'S VISE w/level & three leg adjustable screws; glass jaws, blue; Sears bumper jack, new, \$4. Rettinger, AL 6-1552 after 5 p.m.

STOVE, Frigidaire, electric, 30" oven, autom. oven control, electric clock, light & timer, \$60. McFarling, AX 9-8554.

'51 FORD, V8 convertible, good second car, new top, w/w tires, R&H, autom. trans. Wynant, DI 4-3328 after 6 p.m.

GIRLS BIKE, 26" Schwinn w/basket. Ward, AL 5-1320.

2 BRM HOME, tile bath, H/W floors, weatherstriped, aluminum awnings, insulated garage, walled yard, sprinklers, trees, \$12,500. Lee, CH 2-5505, 1613 Wilmore Dr. SE.

'56 CADILLAC, 60 white w/AC. Will trade or sell outright. Branson, AX 9-1360, 9706 Apache NE.

'59 RAMBLER, American, autom. shift, w/w tires, 2-tone, R&H, continental kit, 7000 miles, \$1900. Fortenbury, 222 Sanchez NW.

RIFLE, Savage, bolt action, 30-30 cal., clip fed, peep sight, sling, \$25. Scott, AX 9-3412.

STUDIO COUCH, dark green cover, \$20 or best offer. Morris, AX 9-3804.

'51 PLYMOUTH sedan, reliable second car in daily use, \$150. Reynolds, AX 9-0709, 1722 Hoffman Dr. NE.

TRAILER HITCH, for 1955-56 Nash, \$8.50; tire chains, Taylor made bar reinforced, 7.60-15, \$4.50; Juicex, juice extractor, \$35. Carlson, AM 8-8138.

HAM RECEIVER, National NC-300, XTAL calibrator. Wilson, ext. 2242.

TRUMPET, B-flat, w/case, original cost \$130, no reasonable offer refused. Kubiak, AL 6-1513.

'47 FORD half-ton pickup, \$150. Pearl, AL 5-4664.

REFRIGERATOR, Kelvinator, 9 cu. ft., \$85; electric range, Kenmore, 36", auto-timer, deep well, Minute-Minder, glass oven door, \$80. Maynez, 503 Ash SE.

GAS RANGE, Magic Chef, 4 burner, \$30; carpeting, 15'x20', grey cotton, \$25. Mancuso, AX 9-4279.

'47 MERCURY convertible w/1950 Ford motor, new top, \$145. Gustafson, AX 9-3270, 1920 Saint St. NE.

REVOLVER, Higgins model 88, 22 cal., 9 shot, 6 inch barrel, in original box, \$25. Horner, AL 6-9316.

AIR CRAFT, Piper Super Cruiser, 45 hr. SMOH, new metal prop., license May 1959, new glass & fabric, \$2300 or trade. Ortiz, CH 3-9597 or DI 4-5630 after 6 p.m.

35MM GERMAN Practo Enlarger Stern-keil Munchen Cassar 3.5 50MM lens, \$60; 8x10 easel, \$10; clock, timer, \$10. many other accessories. Healey, DI 4-8378.

2 BRM HOME, LR and BR carpeting, pitched roof, walled backyard, lawn w/shade trees, \$10,700, FHA commitment. Garcia, AL 5-6929, 628 Madera SE.

BABY CARRIAGE, can be used as car bed, \$15. Dauphinee, AL 5-6367.

LEWIS VIOLIN, full size, includes bow, case and music stand, used very little, cost \$100, sell for \$55. Mancuso, AX 9-5252.

WANTED

TRADE for anything; have German Shepard pups, 4 females. Chavez, ext. 38163, 1511 Atirico SW.

CHILD CARE in my home, age 3 to 6, hot lunch, Hoffmantown. Guthrie, AX 9-3284.

USED TYPEWRITER and hand operated adding machine. Roberts, AL 5-9527.

TWIN STROLLER. Showalter, AX 9-8008.

FEMALE COMPANION to share home with married lady, 5 minutes from base. Gabaldon, ext. 3-5135, 8116 Kathryn SE.

CHILD CARE in my home. Morris, 920 Kentucky SE, AL 6-0152.

ELDERLY WOMAN for light housekeeping and caring for one child, four days a week. Wickham, Ext. 47296.

FOR RENT

2 BRM HOME, walled, carpeted, near Lomas & San Mateo, available Oct. 15; water, garbage paid, \$97.50 mo. Villella, AX 9-7915.

LOST AND FOUND

LOST—Brown bone pocket knife w/3 blades in case; glasses w/black plastic frame; cuff link w/gold rib; 5 year SC pin; 2 keys w/"BALLY" inscription; prescription sunglasses, tortoise shell in brown leather case, envelope w/2 Sears refund checks amounting to about \$6.50; 6 (approx.) keys, house and Ford. LOST AND FOUND, Ext. 26149.

FOUND—Pen knife, silver w/LDS inscription; 10 year SC tie clasp. LOST AND FOUND, Ext. 26149.

S.S.T.B. Employees to Take Part in Imperial Valley United Fund Drive

Solicitation will begin Sept. 29 at Salton Sea Test Base for contributions to the Imperial Valley United Fund.

Last year 11 towns in the Imperial Valley were consolidated for United Fund drive purposes. Participation by Sandia Corporation employees was relatively small because the Base was not solicited until late in the drive. However, this year full participation is anticipated.

The combined goal for the Imperial Valley will be \$107,378, about 22.5 per cent higher than the 1958 goal. Agencies in the area adjacent to Salton Sea which will benefit from the fund include: Boy Scouts, Campfire Girls, Casa de Amistad, Central Services, Children's Home Society, Children's Hospital, Hipass Health Camp, Orthopedic Hospital, Salvation Army and the Y.W.C.A.

Banners will be made available to groups of 10 or more employees who have 85 per cent participation.

The fund drive will extend

Livermore Lab Closes Summer Bowling League

Bowling was predominate in the sports scene at Livermore Laboratory last week with presentation of trophies to winners of the summer mixed handicap league.

League members also voted to present a check for \$159.50 to the Valley Memorial Hospital. Lee Hollingsworth (8120), a member of the hospital's board of directors, accepted the check in behalf of the institution.

Trophies were presented to the top keggers in the summer league. The league began its fall series on Sept. 10 with 14 teams signed up for the 32 weeks of competition.



S. S. Harris

through Nov. 15. About 120 persons at Salton Sea Test Base will be solicited, including employees of both Sandia Corporation and the Prophet Company, according to S. S. Harris, manager of Salton Sea Department.

Arrangements are being made so that Sandia employees may place their contributions on a year-round basis through regular payroll deductions.



C. A. Bicking

Statistics Talk Set For ASQC Meeting

The first meeting of the coming season for the Albuquerque section of the American Society for Quality Control will be held Monday, Sept. 21, at 8 p.m. in the Hospitality Room of Southern Union Gas Co.

Speaker will be Charles A. Bicking, manager of quality control branch of The Carborundum Co. research and development division in Niagara Falls, N. Y. He will discuss "Application of Industrial Statistics in Research and Development."

Mr. Bicking is a mechanical engineering graduate of the University of Delaware. He also holds a business and engineering administration degree from Massachusetts Institute of Technology. He is a Fellow of the American Society for Quality Control, of The American Statistical Association and of the American Association for the Advancement of Science.

Two Sandians to Teach at UNM Community College Fall Semester

Two Sandians will be teaching non-credit courses for the University of New Mexico's Community College this fall.

Marvin McKinley (2561) will in-

struct Statistical Quality Control I and Lawrence E. Null (1621) will teach Acetylene and Arc Welding.

A quality control engineer, Marvin has been at Sandia almost a year. Before coming here he worked for Chrysler Corporation in Los Angeles. He was in the Navy 10 years prior to that.

Marvin graduated from the U. S. Naval Academy and took post graduate schooling at the University of Southern California. He was an instructor in service schools and also for industry training sessions.

Larry has been at Sandia about a year and a half in Metallurgy Section II. Immediately prior to coming to Sandia he worked for ACF for two years. From 1953-56 Larry worked for Nevada Welding Supply, becoming president and general manager of that firm in 1954.

He has also worked for the Silas Mason Co. as an engineering inspector, the Corps of Engineers as an inspector and construction supervisor, and for several other welding firms.

Jean Gillette to Teach Women Executive Course At UNM Fall Semester

"Executive Development for Business Women" will be taught by Jean Gillette (3132) in the University of New Mexico's Community College this fall semester.

The course will be a series of discussions covering the basic principles of how to meet and communicate with other people. This includes job evaluation, job responsibilities, motivation, initiative and follow-through, human and personnel relations, changing economic concepts in the world of business and others.

Jean, a staff assistant in General Training and Education Division, is in charge of secretarial training conferences for Sandia employees. She has worked at Sandia 10 years, and her background includes secretarial and sales training experience and office management.

Offer Special Course In Speaking, Reading Of English Language

A noon-hour class in English for Speaking and Reading will be offered at Sandia beginning Monday, Sept. 28, in Bldg. 833. The course will run 12 weeks, meeting on Monday, Wednesday and Friday starting at 12:10.

The course is designed for those whose primary language is not English, or for those who feel a need for English language instruction.

Employees wishing to enroll may register at the Evening School office, Bldg. 813, or by calling Ext. 47255. No textbook is required for the class.

Delbert Wilder (3132), instructor of the class, was formerly head of the Remedial Program in the Communications Skills Department, State University of Iowa.

He has 10 years teaching experience in Remedial English and Tech Writing, and is co-author of two books, Reading Factual Prose, and Toward Better Writing.

Mountain Club to See Fall's Sights In 1959 Aspencade

Beautiful fall leaves will be foremost in New Mexico Mountain Club plans for the next two weeks.

On Sept. 26-27 the club will conduct its annual aspencade to southwestern Colorado. The "Million Dollar" highway from Silverton to Ouray is famed for its brilliant aspens. The old mining town of Telluride, west of Ouray over Dallas Divide, will also be visited. Reservations must be made with Nick DeLorris (1625), trip leader, by Sept. 23.

Saturday night, Sept. 19, club members and guests will hold a steak fry in the mountains and the following day Sandia Crest to U.S. 66 via the 15-mile crest trail will be the group's destination.

Trips leave from Nob Hill at 8 a.m.

E. V. Roisum Dies After Brief Illness

Funeral services were held last week for Elmer J. Roisum, 53, who died at his home Sept. 7 after a brief illness. Burial was in Madison, Wis.

He was a staff assistant in Program Administration Division B 2632 and had been with Sandia Corporation for four and a half years.

Survivors include his widow, Hilda, and a brother and three sisters, all residing out-of-state.



BANNERS WILL FLY next week at the Livermore Laboratory to launch the United Bay Area Crusade. The Laboratory's goal is set at \$10,000. Peggy Flindt (8212-3) poses prettily with street banner.

Three-Day Campaign to Raise \$10,000

Livermore United Crusade Drive Ready for Flying Start Monday

Getting ready for a flying start Monday, United Bay Area Crusade workers at the Livermore Laboratory have planned an all-out three-day campaign Sept. 21 through 23 to reach the \$10,000 goal.

The contribution of Livermore Laboratory employees will be part of the \$23,000 goal set for the city. This in turn is part of the \$11,000,000 goal for the Bay Area.

These are rock-bottom figures, according to Crusade officials. Here's why:

In Alameda County, agencies received 5 per cent less in 1958 than in the previous year. This reduction, in the face of years of unmet budgets, meant that some agency services were curtailed and that agencies had to raise even more funds from supplemental appeals.

Agency costs are constantly rising. Since 1955, local agencies allocations increased only 4.5 per cent. Compare this with the Bay Area economic indices below.

Consumer Price Index — Up 12 per cent since 1955 — Crusade agencies must pay more for rent, supplies and other services. This means that agencies were unable to provide as much service per available dollar as they could in 1955.

Local Government Costs—Up 45 per cent since 1955—The cost of government reflects services to the community. Crusade agencies also serve the entire community but are caught in the pinch of ever rising costs.

Business Activity — Up 26 per cent since 1955—This reflects the general prosperity and is an indication that the Bay Area is a good place in which to do business. Crusade agencies, serving companies and their employees, also make this a good place to do business.

Population—Up 8 per cent since 1955—The agencies are trying, to the best of their ability, to serve the ever-increasing population with less income. The inevitable result can only be less service to the community.

Livermore Laboratory employees will be given the opportunity to contribute over a 12-month period through a payroll deduction plan, starting in October. Payroll deduction cards will be given to each employee by solicitors to sign and return. Each solicitor will contact 10 employees.

Employees who are on vacation, sick leave, or on Corporation business will be contacted upon their return to work.

The drive will support 263 health, welfare and youth agencies in the Bay Area.

Crusade Officers

Officers for the 1959 crusade are: Chairman, Jim Brock (8224); Vice Chairman, Dick Cook (8161-1); Treasurer, J. P. Hubner (8213-2); Auditor, Val Peterson (8213-2); and Publicity, Dick Dickson (8233-1).

Squad leaders are: Art Eiffert (8230), Don Johnson (8115-1), Clyde Jones (8124-1), Bert Barker (8141), John Miller (8152-1), Gene Aas (8162), Ray Huston (8212-2), Ernie Alford (8233-2), and Earle Paxton (8233-2).

Solicitors

Livermore campaign solicitors are: Carolyn Kersey (8231-2), Bessie Roach (8232-2), Robert Bryant (8232-1), Eddie Berry (8232-1), Albert Bastian (8232-1), Shirley Foster (8233-2), Margaret Zum-

walt (8233-1), Vincent Curran (8234-2), Regina Kamp (8234-1), Jack Grape (8161-2), Robert Neighbors (8161-3), Max Schell (8162-1), and Robert Frost (8162-2).

Robert Clem (8163-1), Russ Richards (8163-2), Bert Anderson (8121-3), Harry Jacobs (8121-1), William Reske (8121-2), Joseph Vanderpoorten (8121-2), Robert Carrell (8122-2).

Hartley Jensen (8122-2), Henry Sorensen (8122-1), Ivan French (8123-2), Robert Tockey (8123-2), Edward Williams (8124-1), Dale Cook (8141), and Freddy Whitworth (8141).

Frank Beers (8143), Harold Remington (8221-2), Jessie Floyd (8222-2), Clyde Martin (8222-2), Will Williams (8222-1), Ruth Spence (8223-3), Clarence Johnson (8223-1), Raymond Falcon (8223-2), Mary Ann Lenning (8224-2), Jessie Oden (8225-1), Charles Calhoun (8225-1), Bob Eisele (8114-1), Mike Ferrario (8114-1), Bill Coelho (8114-2), Joe Dann (8114-2), James Duggar (8114-3), Dave Kirk (8114-3), and Mary Crow (8114-4).

Joe Smith (8114-4), Millard Taylor (8114-5), Tom Dadian (8115-1), Mike Gregory (8115-2), Joe Vieira (8115-1), Irmal Brown (8116-2), Bob Schick (8116-3), Jim Carrell (8152-1), Giles Reed (8152-2), Bruce Worden (8152-1), Bill Clark (8153-1), Bob Schaefer (8153-2), Warren E. Chandler (8211-1), Robert E. Crow (8212-4), Dorothy Wiemken (8212-3), Marvin Hunt (8213-1), and Sharon Watson, Joyce Ralph, Shirley Borch, Betty Dietrich, Susan King, Betty Hardy, Joan Acker, and Ruth Flanagan (all of 8212-3).

Promotions

- Donald D. Butts (4233) to Wireman
- G. T. Kleindienst (2721) to Inspector
- Shelby J. Kimball (4135) to Invoice Clerk
- Joseph B. Flanagan (3464) to Camera Operator
- Lillian P. Bowers (4152) to Accounting Clerk
- Robert J. Reed (1541) to Staff Asst., Tech.
- Robert N. Tomlinson (1614) to Staff Asst., Tech.
- Alfred B. Bauer (1611) to Staff Asst., Tech.
- Jack L. Kiker (1622) to Staff Asst., Tech.
- Alfred A. Amato (3442) to Staff Asst., Admin.
- Mary T. Harrison (4654) to Staff Asst., Admin.
- Clarence P. Foster (4411) to Staff Asst., Sr. Draftsman
- S. F. Harvey, Sr. (4152) to Staff Member
- Lloyd W. Busch (4251) to Machinist
- M. Lucille Farmer (3126) to Secretarial Steno
- Elizabeth C. Bass (3126) to Secretarial Steno
- Dorothy B. Widman (3126) to Secretarial Steno
- Janet S. Devalk (3126) to Secretarial Steno
- V. C. Jennings (4582) to Secretarial Steno
- Mary G. Geilenfeldt (4131) to Payroll Clerk
- Emily Makal (4135) to Investigator
- Ruth M. Spence (8223) to Assembler
- Conrad H. Rogers, Jr. (8222) to Jr. Tradesman
- Elmie R. Newton (8222) to Jr. Tradesman
- Anita C. Meintr (5544) to Secretarial Typist
- Dorothy S. Hand (5544) to Secretarial Steno
- Mary M. Watkins (8212) to Secretarial Steno
- Joel L. Landrum (3448) to Staff Member
- Marvin L. Coon (4152) to Staff Member
- Leo R. Parsons (3466) to Document Clerk
- Julian R. Hoffman (5242) to Staff Member
- George W. Stohner (4152) to Staff Member
- Rocco S. Natoli (2713) to Investigator
- M. W. Kinman (3121) to Personnel Clerk
- Harkey Boling (3463) to Technical Illustrator
- Nicholas R. Montoya (3441) to Property Clerk
- Rogelio G. Gonzales (4518) to Laborer
- Raymond Falcon (8223) to Shop Clerk
- Charles T. Romano (8234) to Order Analyst
- Walter L. Smith (4542) to Staff Asst., Tech.
- William E. McDonald (3442) to Staff Asst., Admin.
- Thomas K. O'Kelly (8234) to Staff Asst., Admin.
- Larry D. Tichenor (4224) to Helper
- W. J. Villanueva (4224) to Helper
- John E. Hager (4233) to Plate Maker
- Odelio J. Otero (4231) to Technician
- Lola B. Todd (3421) to Admin. Clerk
- Velda M. Hooten (3461) to Document Clerk
- Catharine M. Smith (4423) to Record Clerk
- Alice M. Rodriguez (4423) to Record Clerk
- Mary M. Case (5512) to Record Clerk
- Opal D. Noel (5512) to Record Clerk
- Mary J. Witreck (1615) to Data Reduction Clerk
- Hector L. Maynez (5241) to Data Reduction Clerk
- Lyle T. Davis (5241) to Data Reduction Clerk
- Sandra M. Jeffus (5243) to Aux. Equip. Opr.
- Justine Bassett (2530) to Secretary
- Eleanor A. Slutts (6010) to Secretary
- H. W. Richardson (1612) to Laboratory Asst.
- Supervisory Lateral Transfers**
- W. A. Little from 8121 to 8122
- E. F. Ingledue from 8122 to 8163
- F. J. Maloney from 8161 to 8163
- W. H. Martin from 4518 to 4514
- L. D. Chapman from 4514 to 4518
- L. F. Denton from 5542-1 to 5541-3
- G. W. Moses from 5542-2 to 5541-4
- D. G. Palmer from 5112-2 to 5231-4
- T. A. Allen from 2231-3 to 4231-3
- J. J. Michnovicz from 3462 to 3465
- J. Karo from 3465 to 3462

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