

*Welcome to*

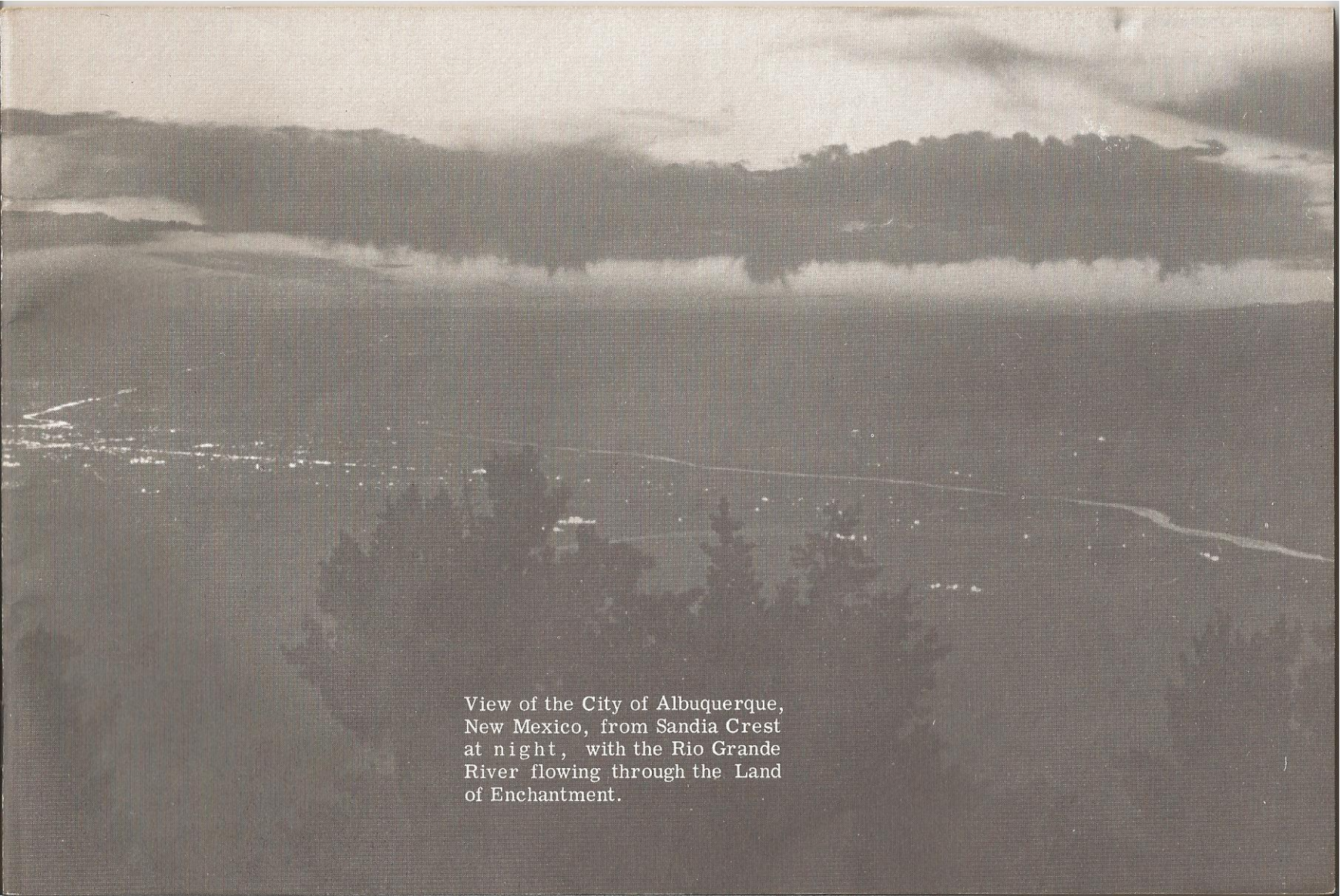
# ATOMIC WEAPONS TRAINING GROUP

FIELD COMMAND, DEFENSE ATOMIC SUPPORT AGENCY  
SANDIA BASE, ALBUQUERQUE, NEW MEXICO









View of the City of Albuquerque,  
New Mexico, from Sandia Crest  
at night, with the Rio Grande  
River flowing through the Land  
of Enchantment.



# AWTG

## HEADQUARTERS FIELD COMMAND, DEFENSE ATOMIC SUPPORT AGENCY, SANDIA BASE



The world has just crossed the threshold of atomic energy and is busily engaged in exploring an area which is still relatively new and possesses unlimited potential. You may have an important part in a field of endeavor which literally has no bounds.

Congratulations on being selected for attendance in a course of instruction at Sandia Base, New Mexico. Successful completion of your course of instruction will open up new horizons and opportunities. The knowledge you will gain as a student in the Atomic Weapons Training Group, and later while actively working in the atomic weapons field, will enhance your Service career. At some future date, you may find related principles learned in this training valuable in civilian pursuits.





## ALBUQUERQUE, NEW MEXICO

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In order to better prepare you for your course of instruction and your arrival and tour of duty at Sandia Base, this booklet for prospective atomic weapons training students contains a brief resume of the course in which you are enrolled, how it is presented, and the extent to which various subject fields are explored. It is hoped that you take maximum advantage of this opportunity for your career.

*J. F. Dorrington*  
J. F. DORRINGTON

Captain, USN

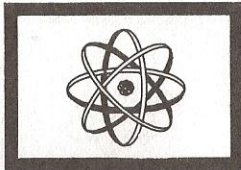
Deputy Chief of Staff

Atomic Weapons Training Group



# AWTG

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# AWTG

## FIELD COMMAND, DEFENSE ATOMIC SUPPORT AGENCY



One of the largest joint Service organizations in the Armed Forces is Headquarters, Field Command, Defense Atomic Support Agency (DASA). Command of this organization is rotated among the Services. Personnel of the various Services and Government civilian employees work toward a common goal at Field Command, DASA.

The training mission of the Defense Atomic Support Agency is to assist the Office of the Secretary of Defense, the Joint Chiefs of Staff, the military departments, and the military Services within the departments, and unified and specified commands, by providing training advice and services in the field of atomic weapons.







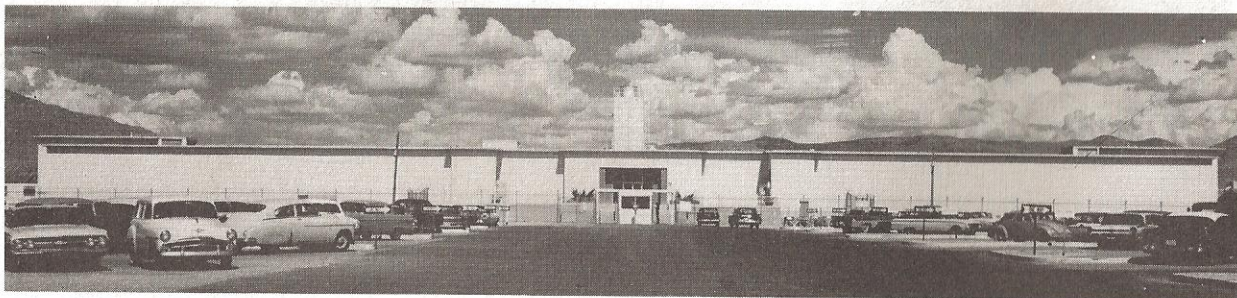


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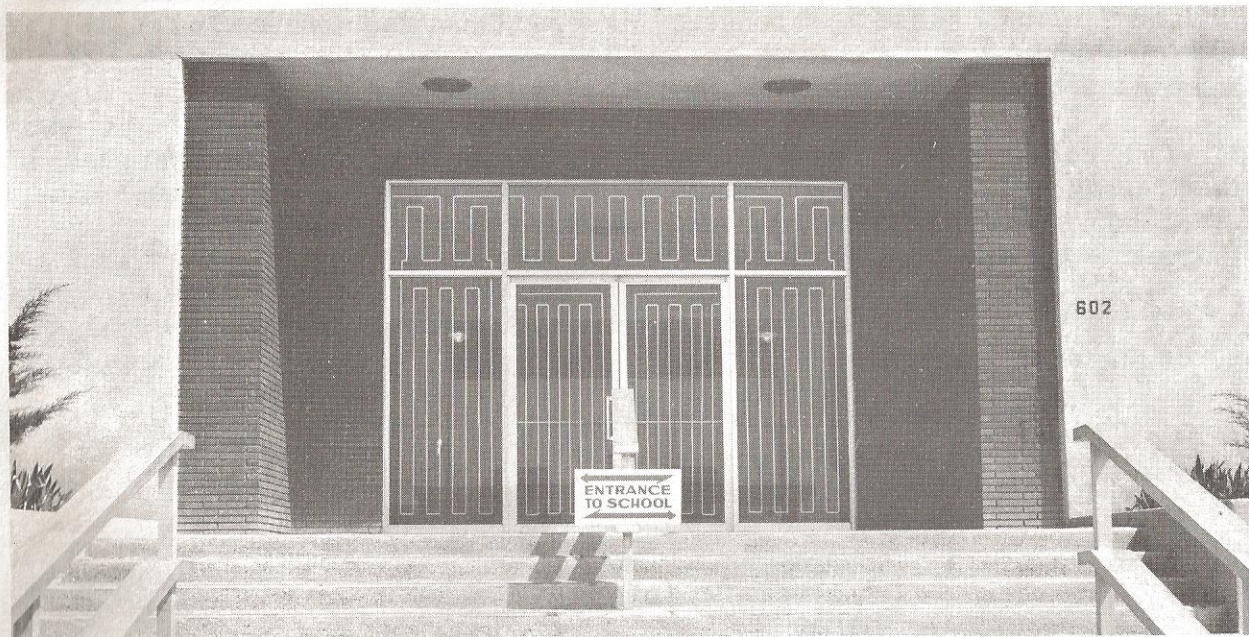
## ATOMIC WEAPONS TRAINING GROUP

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The staff and faculty of the Atomic Weapons Training Group is comprised of technically qualified personnel from all the Services who carry out the joint Service responsibilities of DASA as they pertain to training.









**AWTG**

## **ARMY NUCLEAR WEAPONS ELECTRONICS SPECIALIST COURSE (9-S-304.1)**



The 9-S-304.1 (Phase II) electronics specialist course provides basic MOS training for Army enlisted personnel in field and depot maintenance and repair of electrical and electronic components and test equipment associated with nuclear weapons; and in the principles and techniques of comparison checks.

This course is divided into two major areas of instruction. The first phase of the program of instruction is conducted by the U. S. Army Ordnance Guided Missile School, Huntsville, Alabama. It is designed to provide the student with a thorough background in electricity and electronics.

The MOS-producing portion is conducted at Sandia Base and is divided into seven major subject areas:

- Weapons Familiarization
- Nike-Hercules
- Troubleshooting
- Nuclear Weapons Applied Electronics
- Comparison Checks
- Technical Repair
- TADM





The length of the course is approximately 15 weeks.

Subjects are taught through the medium of conferences, demonstrations, and project worksheets. Approximately 30 percent of the student's time will be spent doing practical work in the laboratory.

The graduate will leave the course with a basic knowledge of his MOS and an appreciation of some of the basic principles of nuclear weapons, radars, and weapons on circuitry; operation, repair, use, and maintenance of transfer and reference standards; and of nuclear weapons test equipment. He will realize the importance of safety and the requirement for meticulous attention to detail in nuclear weapons operations.



# AWTG

## ARMY NUCLEAR WEAPONS BASIC MAINTENANCE SPECIALIST COURSE (9-S-436.1) - - - -



The 9-S-436.1 course provides basic MOS training for Army enlisted men and civilian personnel in the disassembly, inspection, test, and assembly of nuclear weapons for which the Army has employment responsibility.

The length of this course is approximately 7 weeks and consists of three major subject areas:

- Weapons Familiarization
- General Skills
- Specific Weapons

The weapons familiarization area consists of academic classroom presentations, taught at the high school level. These classes provide the student with fundamentals which will enable him to have a better understanding of nuclear weapons functioning, operations, and testing.

The general skills area provides the student with the necessary skill in the use of tools, cleaning procedures, preservation, packaging, identification markings, and general maintenance of nuclear weapons, including shop safety.





In the specific weapons area, better than 50 percent of the student's time will be spent in the assembly bays actually working with the various Army weapons systems. The student receives instruction in the classroom and the assembly bay on disassembly, inspection, testing, and assembly of nuclear warheads and their components. In addition, the student will be indoctrinated in the use of technical publications required to accomplish the various operations, and he will be afforded the opportunity to fill out required records and reports submitted by ordnance support units in the field.

Safety precautions for handling of all components and major assemblies are stressed in all areas of instruction.

The graduate leaves the Army Nuclear Weapons Basic Maintenance Specialist Course with a basic background in his MOS and an appreciation for the nuclear, electrical, mechanical, and explosive safety procedures involved in this field. Equally important, he will realize the seriousness of his job and the requirement for meticulous attention to detail in all operations he performs.



# AWTG

## NAVY GUNNER'S MATE TECHNICIAN CLASS A COURSE (GMT)



The GMT course provides basic training for Navy, Marine, and civilian personnel in the assembly, disassembly, packaging, inspecting, testing, storage, and maintenance of nuclear weapons and components for which the Navy has employment responsibility.

The length of this course is approximately 9 weeks and consists of six major subject areas:

- Weapons Familiarization
- Records and Reports
- Electronic and Electrical Applications
- Hazards and Safety
- General Skills
- Specific Weapons

The first four major subjects provide the student with basic fundamentals which will enable him to have a better understanding of nuclear weapons functions, general maintenance operations, and testing during subsequent phases of instruction. They are taught at a high school level and are primarily academic classroom presentations.

The fifth major subject provides the student with the necessary skill in the use of tools, cleaning procedures, preservation, packaging, identification markings, and general maintenance of nuclear weapons, including shop safety.





The sixth major subject area consists of instruction in specific weapons with approximately 30 percent of the time being spent in the assembly bays actually working with various Navy weapons systems. The student receives detailed instruction, both in the classroom and in the assembly bay, on the inspection and test of nuclear warheads and components, adaption kits, and a thorough indoctrination in the use of technical publications required to accomplish the various operations. An opportunity will be given the student to complete required records and reports normally submitted by ships, depots, etc.

During all phases of instruction and particularly during this phase, safety precautions for handling of all components and major assemblies are stressed.

Upon completion of the Specific Weapons phase, students are divided into groups and work as a team. This is referred to as a Graded Practical Exercise. The exercise provides a review of shopwork in the assembly bays and a period of training in working together as a team under conditions similar to those found in a depot or "W" Division aboard ship.

The graduate of the GMT course has a thorough background in weapons systems and procedures in this field. Equally important, he will realize the seriousness of his job and the requirements for meticulous attention to detail in every operation he performs.



## ADDITIONAL COURSES



In addition to the courses previously described in detail, the Atomic Weapons Training Group conducts the following courses:

- Nuclear Weapons Orientation Advanced Course (WOA)
- National Atomic Weapons Capabilities Course (NAC)
- Nuclear Emergency Team Operations Course (NETOPS)
- Nuclear Emergency Team Course (NET)
- Nuclear Materials and Associated Hazards Course (NMH)
- Army Nuclear Weapons Officer Course (9-G-1723)
- Army Nuclear Weapons Officer Transition Course (9-G-1723T)
- Army Nuclear Weapons Maintenance Technician Course (9-Q-261A)
- Army Nuclear Weapons Maintenance Technician Transition Course (9-P-261AT)
- Army Nuclear Weapons Electronics Technician Course (9-Q-262A)
- Army Nuclear Weapons Electronics Technician Transition Course (9-P-262AT)
- Army Nuclear Weapons Maintenance Specialist Transition Course (9-S-304. 1T)
- Army Nuclear Weapons Advanced Maintenance Specialist Course (9-S-436. 2)





Navy Nuclear Weapons Officer Course (NNWO)  
Navy Nuclear Weapons Electronic Calibration and Maintenance Course (EC)  
Navy Nuclear Weapons Advanced Maintenance Course (NWM)  
Special Training (Cadre)  
Nuclear Weapons Briefing (NWB)  
Two-Year Nuclear Engineering (Effects) Curriculum (RZ)  
Advanced Course in Nuclear Sciences for Medical Officers (NSMO)



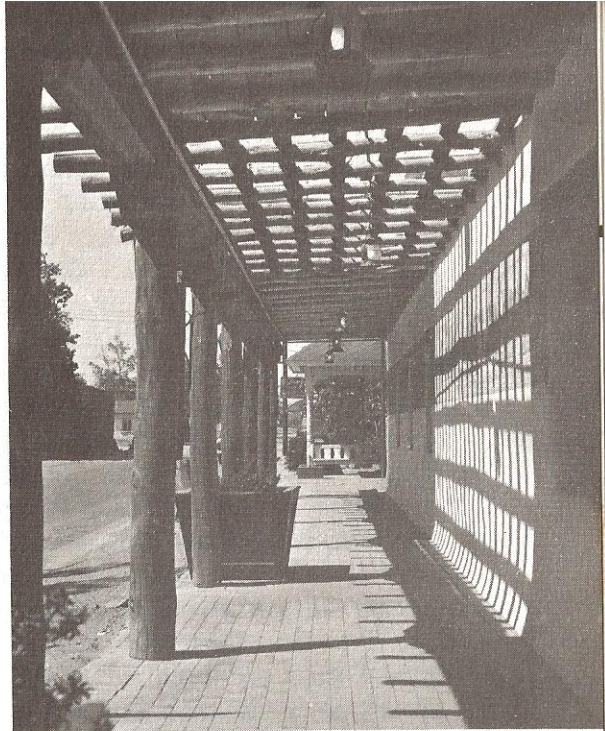


## ALBUQUERQUE AREA

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The city of Albuquerque is situated in central New Mexico on the banks of the Rio Grande River. It spreads out on both sides of the river valley and east to the Sandia and Manzano ranges of the Rocky Mountain chain. Nearby Sandia Crest rises 10,678 feet above sea level. U. S. Highway 66 (East-West) and Highway 85 (North-South) intersect at Albuquerque, and Sandia Base is in the southeast quadrant formed by this intersection. The elevation at Sandia Base is 5400 feet.

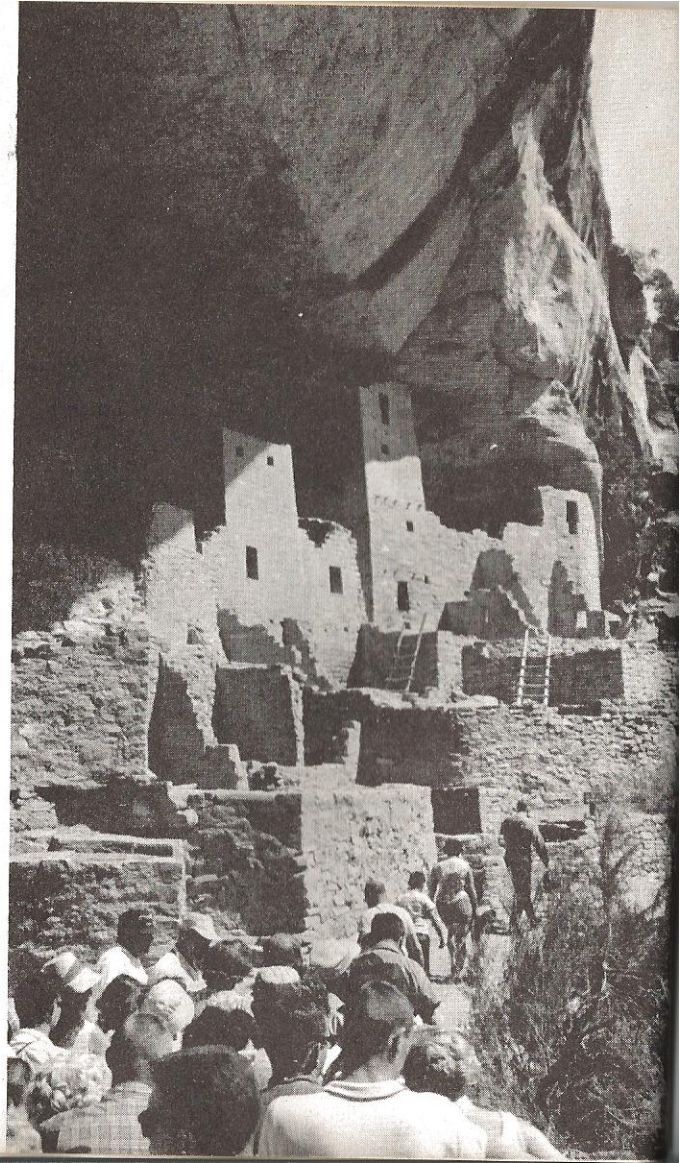




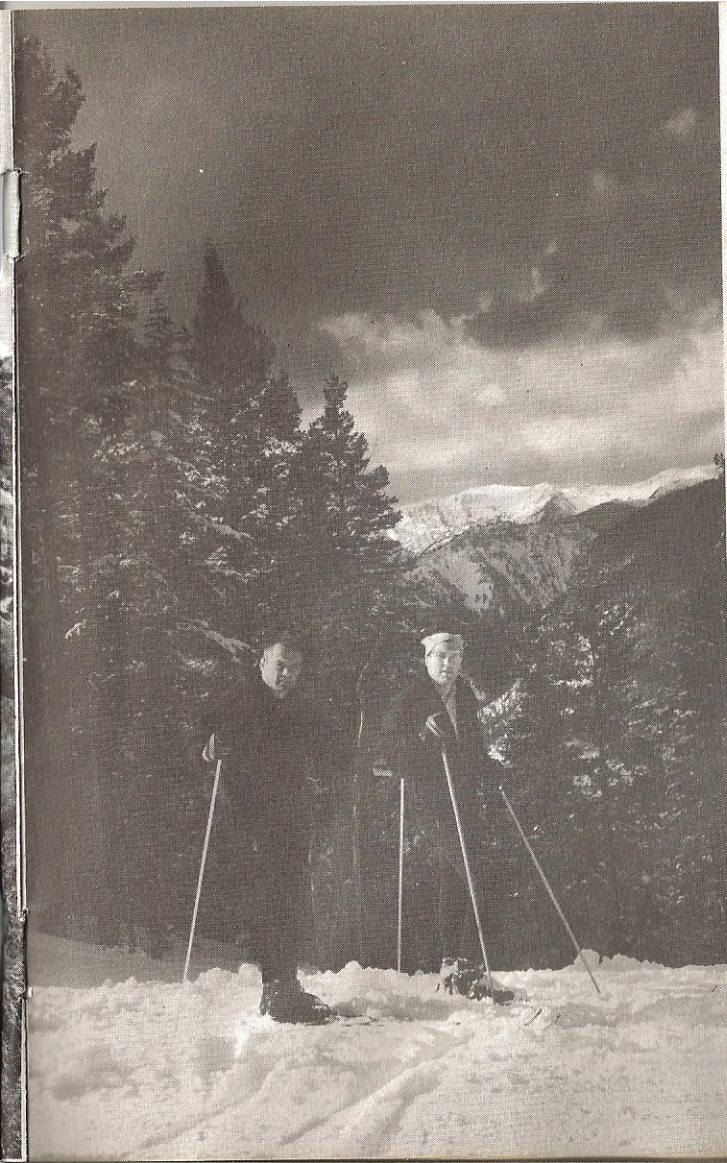
Albuquerque was founded in 1706 by Don Francisco Cuerva Y Valdez, who brought a few Spanish families south from the older town of Bernalillo. Earlier, the Spanish Conquistadores, who passed through the Albuquerque area in search of the fabled seven cities of Cibola, were: Coronado in 1540-41, Espejo in 1582-83, and Onate in 1598. Ruins of seven pueblos lie beneath the modern city of Albuquerque. The present population is approximately 299, 130.



Within a day's drive from the city are the inhabited pueblos of Acoma, Cochiti, Isleta, Jemez, Laguna, Nambe, Sandia, San Felipe, San Ildefonso, San Juan, San Lorenzo, Santa Ana, Santa Clara, Santa Domingo, Taos, Tesuque, Zia, and Zuni. The oldest state capitol building in the United States, the Palace of the Governors, built in 1610 on the Plaza of old Santa Fe, is only 62 miles northeast of Albuquerque. Besides the Jicarilla Apache and Mescalero Apache Indian reservations, there are 6 state parks, 10 state monuments, 9 national monuments, and 1 national park to lure the tourist to the Land of Enchantment. New Mexico is a state of ever-changing panoramas. Prehistoric cliff ruins still stand only a few miles from modern atomic laboratories. Mountain peaks and forests give way to picturesque green valleys.







For the sportsman, available in season a short distance from Albuquerque, are hunting, fishing, camping, horseback riding, boating, and skiing. There are two public golf courses and eight bowling alleys in the city.

Because of the 5400-foot elevation, temperatures drop sharply after sunset. Albuquerque has a high-altitude, arid climate. The average summer temperature varies from 90 degrees to 60 degrees, and the average winter temperatures range from 48 degrees to 24 degrees. The humidity in New Mexico is low, averaging 45 percent, with daytime averages dropping to approximately 25 percent. There is only an average rainfall of 8 inches annually, most of which falls from July through September. Spring dust storms, generated by sudden strong winds, are generally of short duration.



# AWTG

## GENERAL INFORMATION

### REPORTING FOR TEMPORARY DUTY AS A STUDENT

Enlisted personnel will report upon arrival to:

Army: Building 352A  
Navy: Building 351D  
Marine: Building 351D.

#### DUTY HOURS

(Summer) 0700-1600  
(Winter) 0730-1630.

#### UNIFORM REGULATIONS

Uniform regulations for Sandia Base are prescribed in current Service regulations, as modified herein by Sandia Base Regulations. Both summer and winter uniforms are worn at Sandia Base with changeover dates specified by the Base Commander. Normally, these dates are in April and October.





After duty hours, appropriate civilian attire is authorized. Sport shirt with a coat or jacket may be worn at the Army-Navy-Air Force Club, Base Theater, and Gymnasium. While engaged in athletics, suitable and appropriate attire may be worn. Wearing of civilian clothes in consolidated messes is authorized as follows: evening meals on weekdays, noon and evening meals on Saturdays, and all meals on Sundays and holidays. Nonduty status personnel may wear civilian clothing at all meals. This clothing must include trousers with belt, shirt with tie, or sport shirt with standup collar. Levis, overalls, blue denims, fatigue-type clothing, or cowboy boots will not be worn. All personnel who wear civilian clothing in lieu of the prescribed uniform will be prepared to identify themselves at any time.



## BOWLING ALLEY

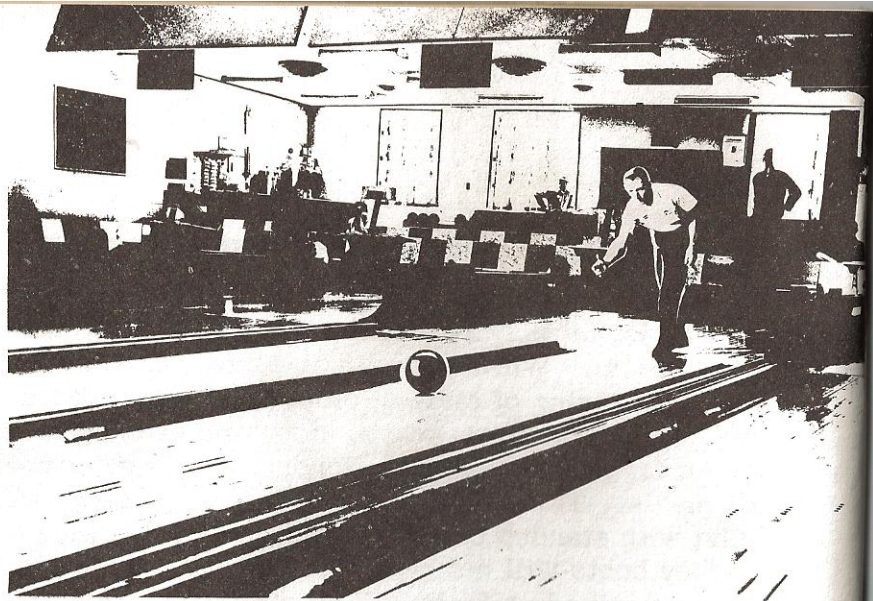
(Telephone: 264-4327)

The bowling alley is located in Building 228. Bowling hours are:

Monday through Saturday	1130-2230
Sunday	1300-2200

### NOTE

All hours shown in this booklet are subject to change due to summer and winter operational hours.



## SERVICE CLUB

The ANAF Service Club is located in Building 226 on Texas Street and is open daily to all enlisted personnel at no charge. Facilities of the club include games, record library with listening booths, reading and music-listening room, ballroom, lounge, and patio with barbecue pit. The regular program includes Sunday night dances, small-games tournaments, quiz shows, dance classes, picnics, and tours with special programs added from time to time.





## GOLF DRIVING RANGE

(Telephone: 264-8402)

The golf driving range is located on the mesa east of the Officers' Club for use of all personnel. A qualified golf instructor and practice balls and clubs are available as well as a large putting green. The driving range is open:

Monday thru Friday	1130-Sunset
Saturday	0800-Sunset
Sunday	1300-Sunset

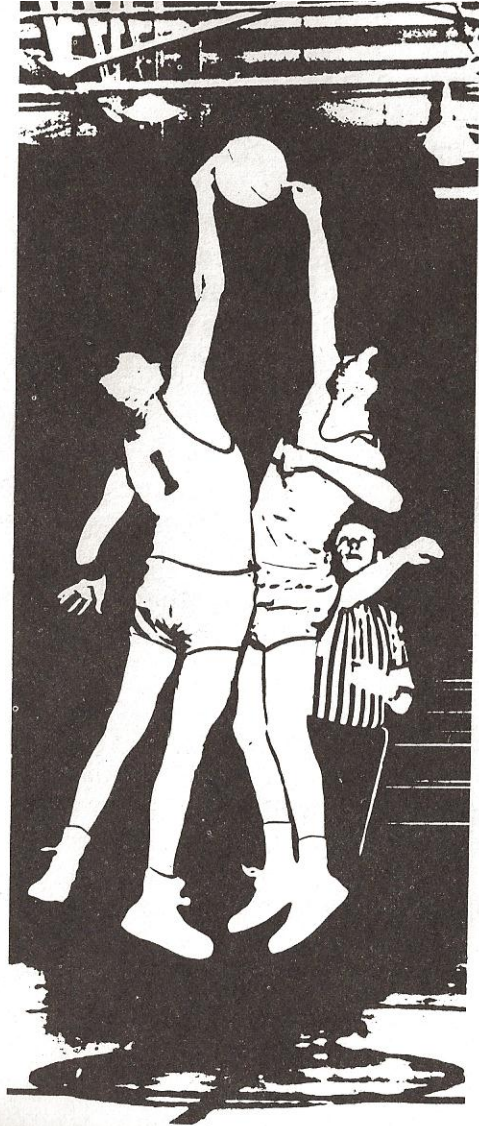
Besides the above range, there are two public golf courses in Albuquerque.

## BASE CAFETERIA

The base cafeteria, located in Building 206, operates on the following schedule:

Monday through Friday	0600-2100
Saturday, Sunday, and Holidays	1400-2100





## BASE GYMNASIUM

(Telephone: 264-1414)

The base gymnasium is located in Building 228. Facilities available consist of tennis, basketball, handball, volleyball, squash, weight lifting, boxing, etc. Gymnasium hours are:

Monday through Friday	
(Summer)	0700-1800
(Winter)	0730-2200
Saturday	0900-1700
Sunday	1300-1700

The Sandia Base Swimming Pool, which is olympic size, located west of the gymnasium, is open during the following hours:

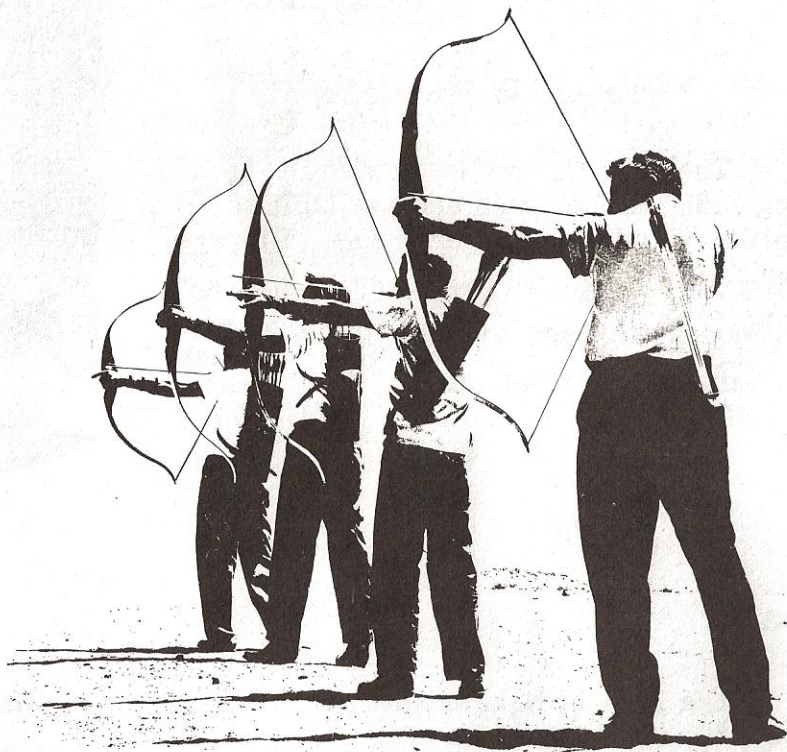
Monday	Closed
Tuesday through Friday	1100-1800
Saturday and Sunday	1000-1800

The season is May through September.



## ARCHERY RANGE

The archery range is located in the southwest section of the base. The archery group and control of the range are administered by the Base Special Services Office. This program varies somewhat with the number of participants.





## BASE LIBRARY

(Telephone: 264-7320)

The base library is located in Building 219. Its facilities are available to all military and civilian personnel. Library hours are:

Monday through Friday	1100-2100
Saturday, Sunday, and Holidays	1300-1700



## BANK

The Bank of New Mexico has a branch bank on the base located in Building 360. Banking hours are:

Monday through Thursday	0900-1500
Friday	0900-1800





# crafts center

## ARTS AND CRAFTS CENTER

(Telephone: 264-1619)

Facilities available in Building 361 consist of lapidary, leathercraft, mosaics, woodworking, and photography. Hours of operation are:

Monday, Tuesday	Closed
Wednesday, Thursday, Friday	1300-2100
Saturday	0800-1700
Sunday	0830-1700

## BASE THEATER

The base theater is located in Building 225. Evening shows are presented daily at 1730 and 1930. Times vary for shows of more than normal length. A Saturday and Sunday matinee is shown at 1400.





## SNACK BARS

Snacks and lunches may be obtained in the three snack bars located in Buildings 130, 449, and 602 (AWTG) during the following hours:

Monday through Friday	
(Summer)	0630-1430
(Winter)	0700-1500

## QUARTERMASTER CLOTHING SALES

Items of military clothing, both Army and Navy, can be purchased at the Quartermaster Clothing Sales located in Building 350B. Hours of operation are:

Monday through Friday 0930-1530





## BASE EXCHANGE

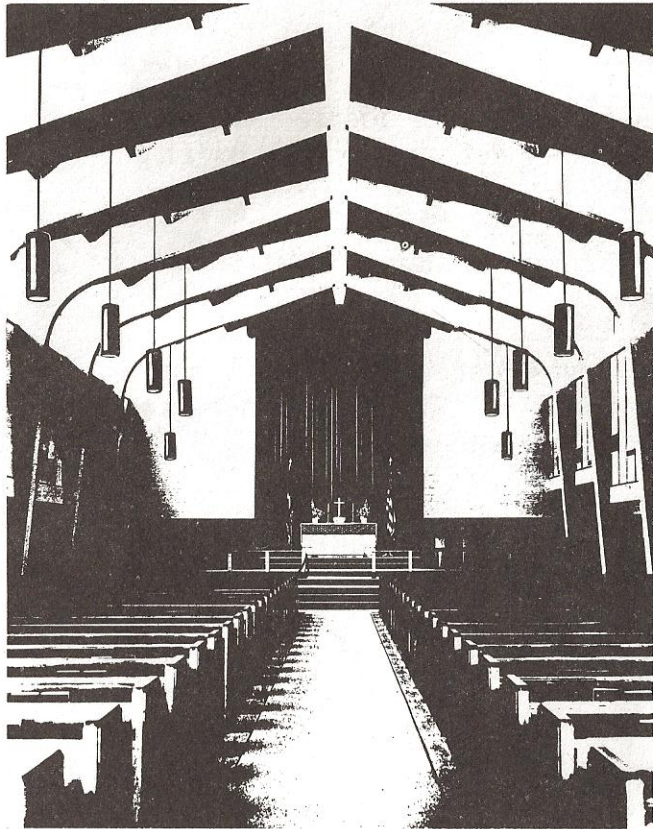
The base exchange, located in Building 224, is open during the following hours:

Monday through Friday	0900-1700
Saturday	0900-1300

The following concessions are located in the same building. Operating hours are the same as for the base exchange.

1. Tailoring, Dry Cleaning, and Laundry.
2. Watch Repair.
3. Shoe Repair.
4. Barber Shop.





Catholic and Protestant services are conducted in the base chapels as follows:

**CATHOLIC MASS:**

New Base Chapel (Building 107):

Friday 0800

Old Base Chapel (Building 1850):

Sunday 0900  
1000  
1100  
1200

Monday through

Friday 1205  
Saturday 0800

**PROTESTANT WORSHIP:**

New Base Chapel (Building 107):

Sunday 0945  
1100  
1830



**JEWISH SERVICES:**

Jewish services are held in Albuquerque synagogues every Friday evening and Saturday morning. For transportation, call the Base Chapel, Extension 20124 or 34227, before noon Thursday. Hours of services are as follows:

Reformed Temple Albert Congregation  
1006 Lead Street, SE. (Telephone: 243-1276):

Friday                      2000

Conservative Congregation B'nai Israel  
415 Cedar Street, SE. (Telephone: 242-5811):

Friday                      2000  
Saturday                    0900

**NOTE**

Local representative, Jewish Welfare Board, Temple  
Albert Congregation, Telephone 243-1276.



## MAIL

Personal student mail is received and distributed by respective student units of each Service. Mail should be addressed as follows:

Army: (Grade) (Name) (Service Number), Student  
Hq and Hq Company, U. S. Army Element  
Sandia Base  
Albuquerque, New Mexico

Navy and  
Marine: (Grade) (Name) (Service Number), Student  
Naval Administrative Unit  
Sandia Base  
Albuquerque, New Mexico

## CAMERAS

Private cameras may be used to take pictures on Sandia Base except inside limited or exclusion areas or where otherwise prohibited or limited by sign or personal guard. The limited or exclusion areas are:

- Building P-200 (Headquarters Field Command)
- Building P-130
- Building P-360
- Building P-381
- Military Tech Area (Atomic Weapons Training Group)
- Igloo Area

Military police are authorized and instructed to impound both camera and film when circumstances lead them to believe that provisions of the above have been violated. Film will be developed at Government expense. After review by Base Security, both camera and film may be returned.



NOTES

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# HELPFUL INFORMATION

Sandia Base: 264-8211

For transportation, information, or other assistance:

During duty hours (Visitors Bureau) (Building 201) 264-3522

During nonduty hours (Field Command Staff Duty Office) (Building 200) 264-4527

Army Mailroom (Building 351C) 264-4825

Army Personnel Record Section (Building 202D) 264-2515

Army Student Company (1st Sergeant) (Building 352B) 264-2717

Navy Chief-Master-at-Arms (Building 351D) 264-2220

Navy Enlisted Personnel Office (Building 351D) 264-1815

Navy Mailroom (Building 351D) 264-1720

Telephone Information 113

## Civilian Transportation

When making offbase calls, dial 9 and listen for dial tone prior to dialing desired number.

### Airlines:

Trans World Airlines, Inc.	242-5271
Continental Airlines	268-4581
Frontier Airlines	247-1473
Trans-Texas Airways	247-3777
Bison Airlines, Inc.	243-9728

### Buslines:

Continental Trailways	243-5538
Greyhound Bus Lines	243-4435
New Mexico Transportation Co., Inc.	243-4772

### City Busline:

Albuquerque Bus Co.	243-1721
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### Railroad:

Santa Fe Railway Co.	247-0741
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### Taxis:

Black & White Cab Co.	243-7777
Checker Cab Co.	243-7777
Clifford's Taxi Line	243-7811
Yellow Cab Co.	247-8888



PREPARED BY  
CURRICULUM AND EVALUATION BRANCH  
OF THE  
OFFICE OF PLANS AND OPERATIONS  
AWTG, FC, DASA  
SANDIA BASE, N. MEX.

Revised 15 May 1964

