

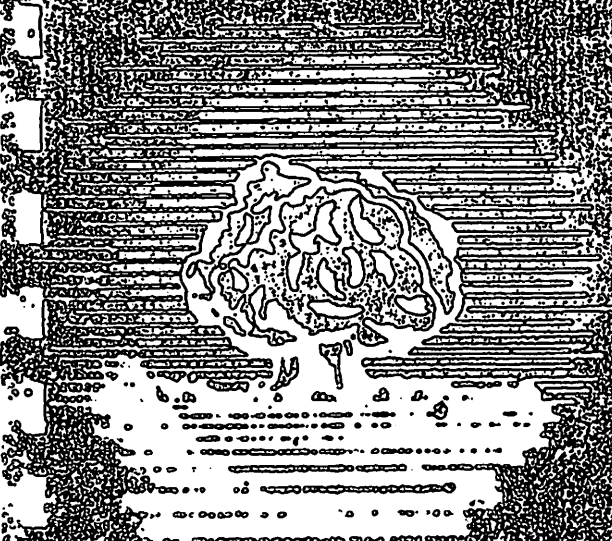
# TRINITY TEST SITE

NEW MEXICO

## a study of alternatives

U.S. DEPARTMENT OF THE INTERIOR  
NATIONAL PARK SERVICE

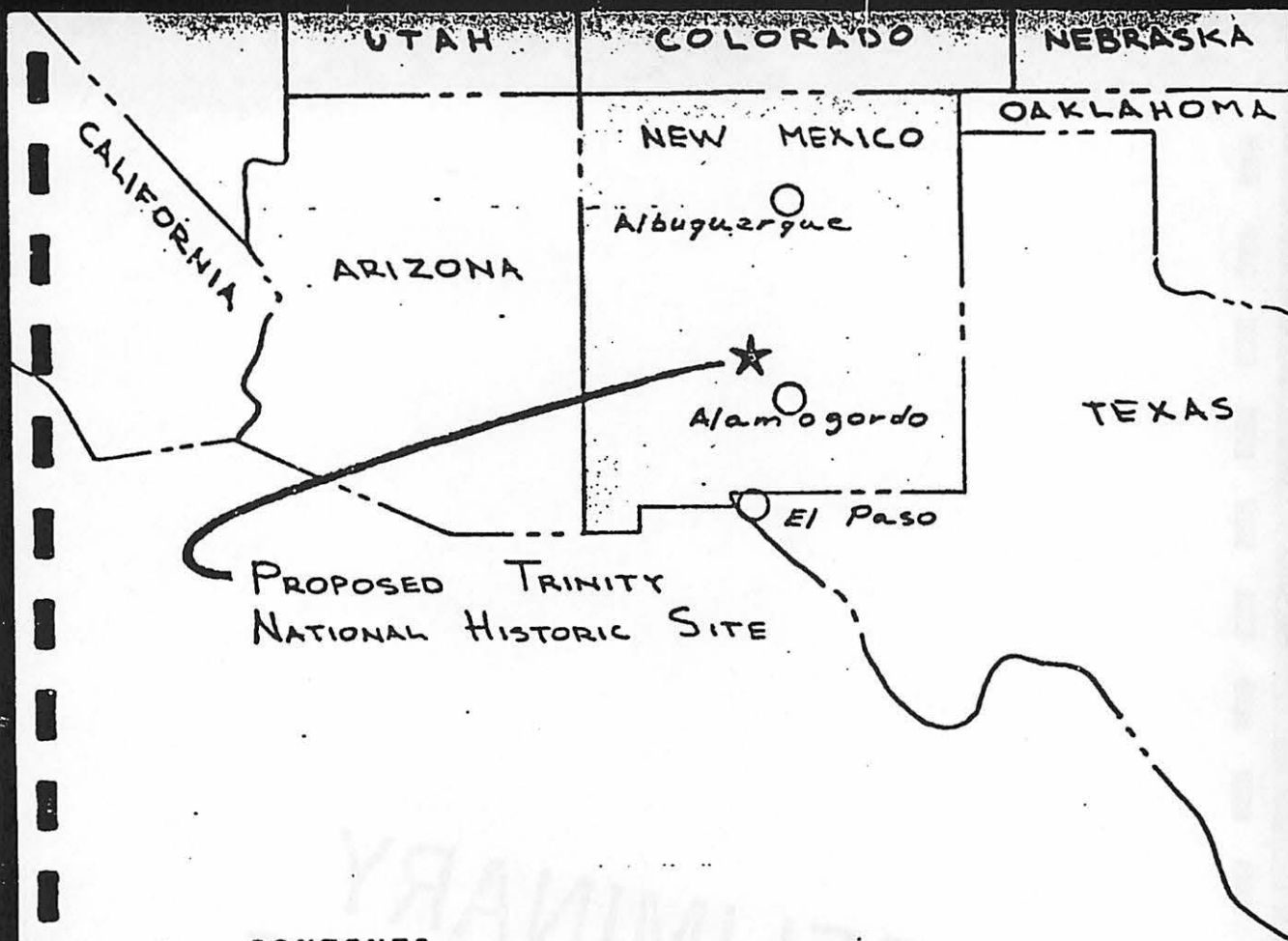
APRIL 1968



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PRELIMINARY  
WORKING DRAFT



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At 5:31 on the morning of July 16, 1945  
occurred the climax of what was probably  
the most dramatic and scientific venture  
in history.

At this moment,  
on the dry, hot desert of Jornada del Muerto  
in southern New Mexico,  
man's first attempt  
to produce a nuclear explosion  
succeeded.

## INTRODUCTION

This study provides data for the Department of the Interior report on S.288, a bill introduced by Senators Anderson and Montoya of New Mexico. The bill would provide for identification and preservation of historic resources at Trinity Test Site, pending establishment of a national historic site. Establishment would occur only when national security permits, for the Trinity Test Site is located within a restricted area of the White Sands Missile Range.

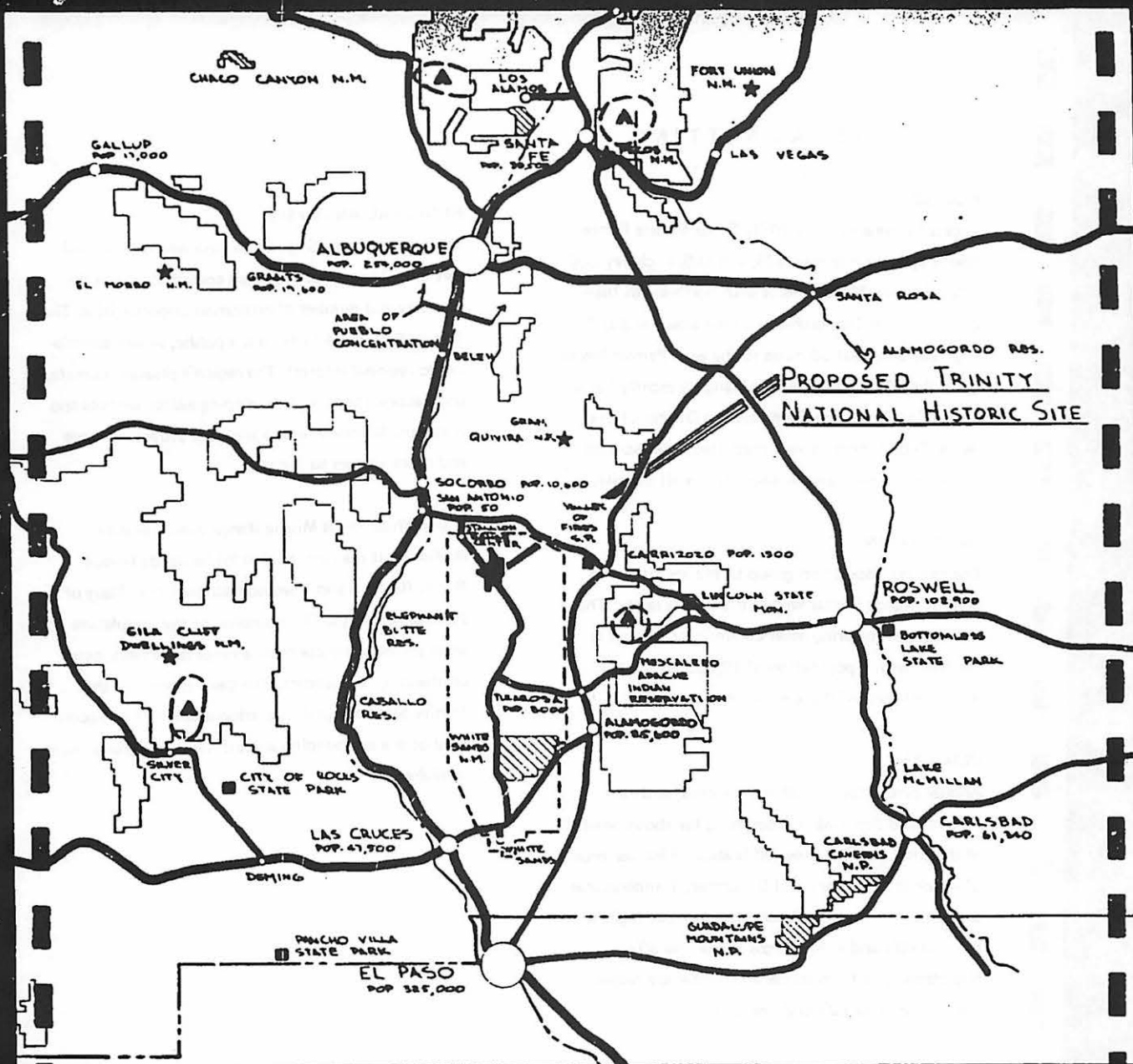
The National Park Service first became officially interested in preserving Trinity Site in August 1945, coincident with the first public revelation of the Trinity test. In early November 1945, a Service study team visited the site and reported on it, recommending establishment of a national monument at some future date—when the area could be released from security restrictions. The report also recommended interim measures to assure preservation of historic resources and features.

On January 28, 1946 the National Park Service recommended that the Trinity Site should be established as a national monument; however, this effort was negated by the War Department because the land had been withdrawn for military purposes and would remain in this status as long as needed. Assurance was given the Service at that time that the Army would cooperate fully in the interim preservation of historic sites.

Subsequent attempts made in 1948 and in 1950-52 to establish national monument status for the site produced essentially the same results. By this time the old bombing range had become a missile range and, as security relating to the Trinity test became less restrictive, security surrounding secret missile operation increased.

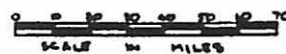
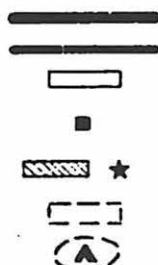
A special report in 1965 by the Service urged national historic landmark designation and immediate interim preservation efforts. Announcement of landmark eligibility followed, which resulted with the introduction of legislation in 1966 and 1967.





# LEGEND

- INTERSTATE HIGHWAYS
- OTHER ROADS & HIGHWAYS
- NATIONAL FORESTS
- AREAS ADMINISTERED BY THE STATE
- AREAS ADMINISTERED BY THE NATIONAL PARK SERVICE
- MILITARY RESERVATION
- AREAS OF CONCENTRATED CAMPING



## REGIONAL MAP

PROPOSED TRINITY  
NATIONAL HISTORIC SITE  
NEW MEXICO

RPSSC  
MAR. 1968

NM-TRI  
20000

## GENERAL SETTING

### ACCESS

Access to the area is via White Sands Missile Range Route 7, State Highway 525, and U.S. Highway 380. U.S. Highway 380 connects with north-south Interstate 25 (30 miles northwest of the area), and U.S. Highway 54 about 50 miles to the east. Permission to enter the White Sands Missile Range presently has to be obtained from the Commanding Officer of the range. Public access is very restricted; one escorted public group each year is allowed to visit the site.

### POPULATION

The nearest population group to the area is at the Stallion Range Center within the missile range. The nearest town offering most community services is Socorro, with a population of 10,600, located 36 miles northeast of the area on Interstate 25.

### CLIMATE

Annual precipitation is about 9 inches, with July, August, and September accounting for about one-half of the total. Annual snowfall is about 8 inches, most of which is in January and December. Temperatures are typical of the high desert with summer highs in the mid 90's and winter highs in the low 50's. Nighttime lows for summer and winter are respectively in the low 60's and low 20's.

### PARKS AND RECREATION FACILITIES

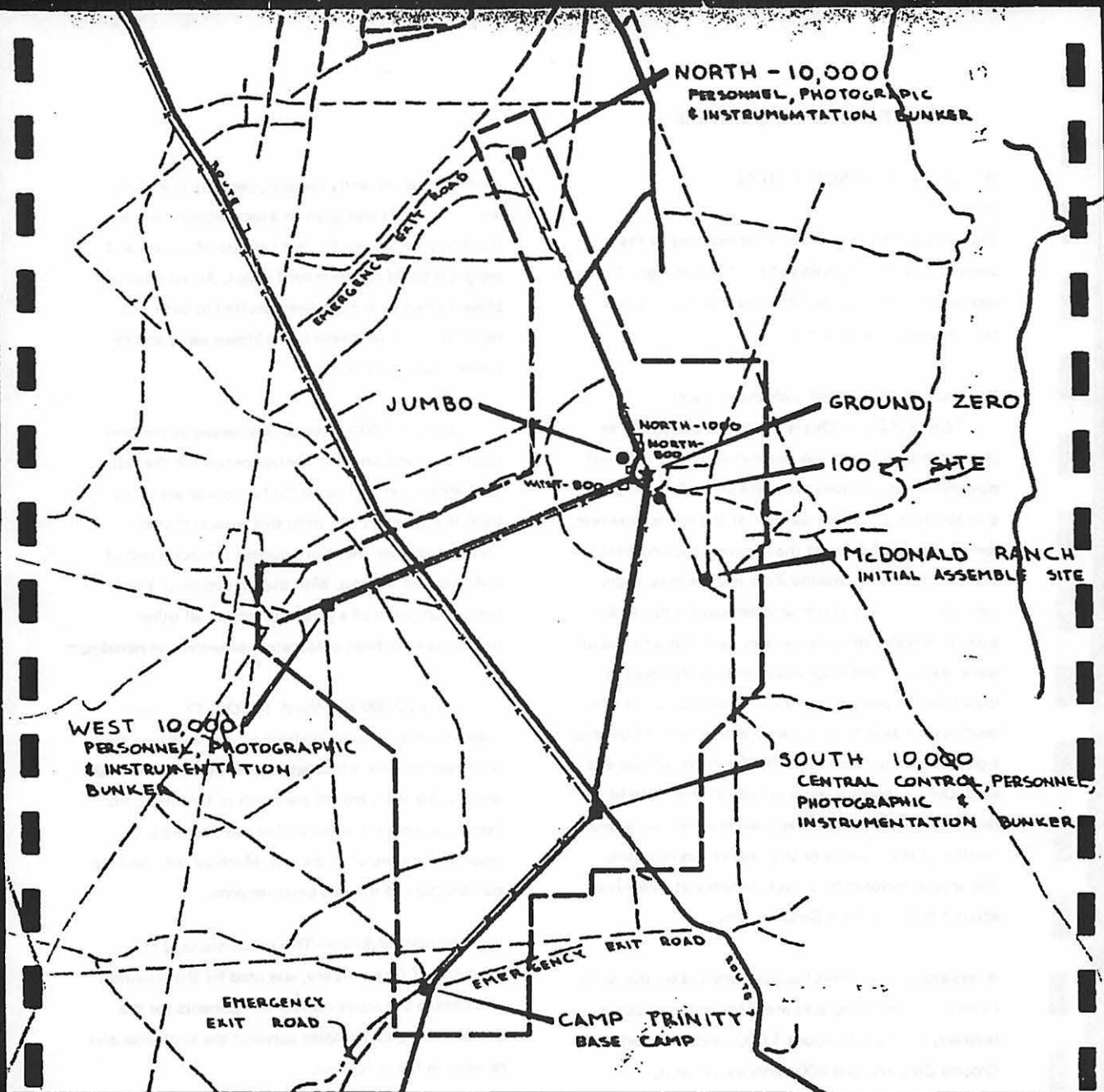
Within a 2-hour drive of the study area are White Sands National Monument, Forest Service camping facilities southwest of Carizozo, State recreation facilities at Elephant Butte Reservoir, picnic facilities at Valley of Fires State Park, Lincoln State Monument (Billy the Kid), and southernmost pueblos near Albuquerque. Other local, State and Federal park and recreation facilities are throughout the State of New Mexico.

### REGIONAL ANALYSIS

The region has no single attraction which draws visitors from long distances. Most come because of the diversity and number of recreation opportunities. The Trinity Site, if available to the public, would contribute to regional interest. The region's pleasant climate, good access roads, and developing visitor services and accommodations in urban areas are attracting more and more visitors to the area.

If the White Sands Missile Range should ever be abolished, it is expected that White Sands Missile Range Route 6 and 7 would become either State or Federal highways. The economy of the population areas surrounding the missile range is partially based on the range's existence. The development of the Trinity Site for public visitation could help the economy of the surrounding areas if the missile range were abolished.





#### LEGEND

EXISTING MAIN ROADS

EXISTING MINOR AND  
UNIMPROVED ROADS

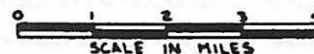
POWER LINES

MANNED BUNKER

UNMANNED BUNKER



NORTH



#### HISTORIC RESOURCES

PROPOSED TRINITY  
NATIONAL HISTORIC SITE  
NEW MEXICO

RPSSC  
MAR. 1968

NHS-TRI  
20,001

## THE RESOURCE

### RESOURCE DESCRIPTION

#### HISTORY

The principal historical theme represented in the study area is the beginning of the Nuclear Age. It was on this site July 16, 1945 that the world's first nuclear device was exploded.

Key locations associated with the test are:

**Ground Zero**—This is the actual site of the explosion. Here a bomb was detonated from a 110-foot steel tower set on heavy concrete piers. After explosion absolutely nothing was left of the tower; however, some remains of three of the concrete footings still exist. Surrounding *Ground Zero* is the almost indiscernible saucer-like crater scooped out by the explosion. This crater remains quite evident, has a radius of some 800 feet, and is approximately 8 feet deep at the explosion point. As a result of the explosion this depression was entirely covered with a layer of trinitite, a glasslike substance formed by the fusing of dirt and sand. Only a representative sample of this material remains. A wooden shed has been erected over a small portion of the crater area to preserve this remnant. The area is enclosed by a cyclone fence at a radius of about 1,600 feet from *Ground Zero*.

A lava-stone monument has been erected by the Army. Outside of the fenced area are three concrete camera bunkers, two located about 1,000 yards due north of *Ground Zero* and one 800 yards to the west.

**Jumbo Site**—Approximately 1,800 feet north-west of *Ground Zero* are the remains of a 214-ton *Jumbo* container and the twisted girders of its support tower. This immense steel vessel was designated to contain the explosion and to recover the active plutonium in case of a test failure. It was never used in the test and, while the explosion destroyed the tower, *Jumbo* survived unscathed. However, only a portion

of this vessel currently remains, partially buried by eroding sand. It was given to a local community by the Army for an exhibit, but because of its size and weight it could not be moved intact. An attempt to blow it apart with explosives resulted in both end sections of the container being blown away and removed from the site.

**South 10,000**—This bunker served as the principal command unit and control center for the test. The device that detonated the bomb was activated from this point. It was from this bunker that the "brain trust" for the entire nuclear project directed and observed the test. With the exception of a concrete foundation of a generator house, all other structures have been obliterated; ~~only the site remains.~~

**West 10,000 and North 10,000**—These two observation and recording bunkers are similar in their construction; one is located 10,000 yards to the west and one 10,000 yards to the north of *Ground Zero*. Personnel were stationed in them to observe and assist in the control of the test. Much of the concrete construction of the two units remains.

**McDonald Ranch**—This ranch house, 2 miles southeast of *Ground Zero*, was used by the scientists to assemble the active nuclear components for the bomb. This ranch complex survived the explosion and remains in fair condition.

**100-T Site**—This site is located approximately 800 yards south of *Ground Zero*. Here, 100 tons of high explosives laced with radioactive material were exploded sometime before the atomic test was made to establish a base point for measuring blast force and the radioactive yield of an atomic device.

**Trinity Camp**—This complex was built by the Army during the winter of 1944 and became a beehive of activity with more than 200 scientists, soldiers, and technicians assigned here as the new year arrived. It was here that the scientists and the supporting Army personnel lived and worked feverishly the final week before July 16, 1945. After 24 years little remains at this base unit. With the exception of two buildings and windmills, all other structures of this once active complex are gone.

**General Area**—Miscellaneous remnants, such as equipment and power and communication lines associated with the test are evident throughout the proposed area.

#### NATURAL HISTORY

**Vegetation**—The vegetative cover of the study area is characteristically Chihuahuan and represents the northern extremities of the Chihuahuan desert of northern Mexico, western Texas, southern New Mexico, and southeastern Arizona. Throughout the entire study area creosotebush is the dominant plant type with mesquite, tarbrush cacti, yucca, bur sages, burrowbrush, and desert saltbush in association. Drop seeds, black grama, and Labasa are the dominant desert grass types of this basin area.

**Geology**—The Trinity Site is 4½ miles west of the bold front of Sierra Oscura. This mountain range, which rises 3,700 feet above the test site, is an uplifted block of the earth's crust, its rocks upthrown approximately 5,000 feet above the east edge of the Jornada del Muerto along a break in the earth's crust, a geological fault, which runs along the base of the mountains. This face rises 2,500 feet in less than a mile and is marked by sheer cliffs, the lower ones of the Precambrian granite gneiss and the upper cliffs of massive Pennsylvanian limestone.

The Pennsylvanian beds are marine rocks laid down some 300-million years ago in a vast sea that covered most of New Mexico. The overlying Bursum, Abo, Yeso, and San Andres layers are of Permian age, 250- to 270-million years old, laid down partly by extensive shallow seas, but also by deltas and alluvial plains. The rocks of both ages were covered by younger beds and lay hidden until a few million years ago when a huge block of the Sierra Oscura was uplifted above Jornada del Muerto. Stream drainage from the front laid down gravels and sands that partly cover the bed-rock layer west of the mountain's face and the restless winds from the southwest have blown silt and sands from the Jornada playas onto the western edges of these alluvial blankets. Trinity, at an elevation of about 4,800 feet, is near the toe of these alluvial gravel and sand slopes that reach from the relative level floor of the eastern Jornada up toward the mountain escarpment.

**Scenic**—The Trinity Site is located in an extensive dry desert basin near the northern end of the Valle Jornada del Muerto, named by the Spanish conquistadors as the "Valley of the Dead." The basin is bounded on the east by the San Andres Mountains, the Sierra Oscura, and Cupalero Mesa, and on the west by the Fra Christobal Range.

**Wildlife**—The existing fauna in the study area is characteristic of the Chihuahuan Province found elsewhere throughout southern New Mexico and southeast Arizona. Small mammals common in the area are woodrats, numerous species of field mice, rock squirrels, bobcats, and coyotes. Cottontail and jack-rabbits are in abundance. A herd of antelope inhabit the basin and occasionally mule deer enter the higher elevations of the surrounding country. Birds of interest are the Gambel's quail, roadrunner, dove, and the sparrow hawk.



**Archeology**—Experts believe that the archeological resources are very limited in the area, though no survey has been made. The New Mexico School of Mines has done excavation work near Mockingbird Gap some 8 airline miles south of the proposed site, though nothing has been published on this excavation.

## RESOURCE EVALUATION

### PRIMARY

**Historic Resources**—Of the natural, scientific, and recreational resources within the area of study, those of paramount importance are scientific. Specifically, they are those resources concerned with the history of the Trinity test.

Trinity is highly suitable for recognition as a national historic site; without question its historic value is both nationally and internationally significant. Here the test and explosion of the first nuclear device was carried out. Nowhere else can the story of what happened here or of the people who performed the task be told.

### SECONDARY

**Natural Resources**—The natural resources of the site are of secondary importance to the historic values. They are not unique or spectacular but are common to the resources found throughout the southern New Mexico desert. The vegetation, wildlife, and geology of the area studied are typical of the northern portion of the Chihuahuan Desert.

The mountain ranges surrounding this dry basin area provide a scenic background for the site; it is not, however, outstanding or unique.

**Recreation**—The proposed area is extremely limited in its recreational potential. Since the primary objective is to preserve and interpret the historical resources within this limited area, other uses are not

believed to be feasible or compatible. Also, neither the obscure location of the site, its lack of outstanding scenery, nor the intense heat prevalent during most of the travel season are conducive to recreation.

**Archeology**—Existing knowledge of the area indicates that it is of minor archeological significance. As soon as feasible, however, an archeological survey should be made.

## EXISTING AND POTENTIAL LAND USE LAND STATUS

All land in the study area is within the White Sands Missile Range under the control of the Secretary of Defense. It is believed that reversionary clauses in the document which brought the area under the control of the Secretary of Defense allow the land to return to its original owner when the Secretary's uses terminate. In the study area, Sections 2, 16, and 32 of each township were owned by the State. There are about five scattered ranches from 160 acres to 640 acres within the area; the remaining land appears to have always been in Federal ownership. No thorough land status investigation has been conducted.

## LAND USE

The land is now a missile impact and testing area. The potential use of the area, once the present military operations are terminated, is grazing. The range is in excellent condition at this time, since no grazing has occurred for a considerable number of years. A very rough estimate of the carrying capacity of the range is 20 to 30 head per section per year.

The only suitable use of the land in the immediate vicinity of Ground Zero is grazing or as a national historic area. Any other use, public or private, would not be appropriate, considering the events that occurred there.

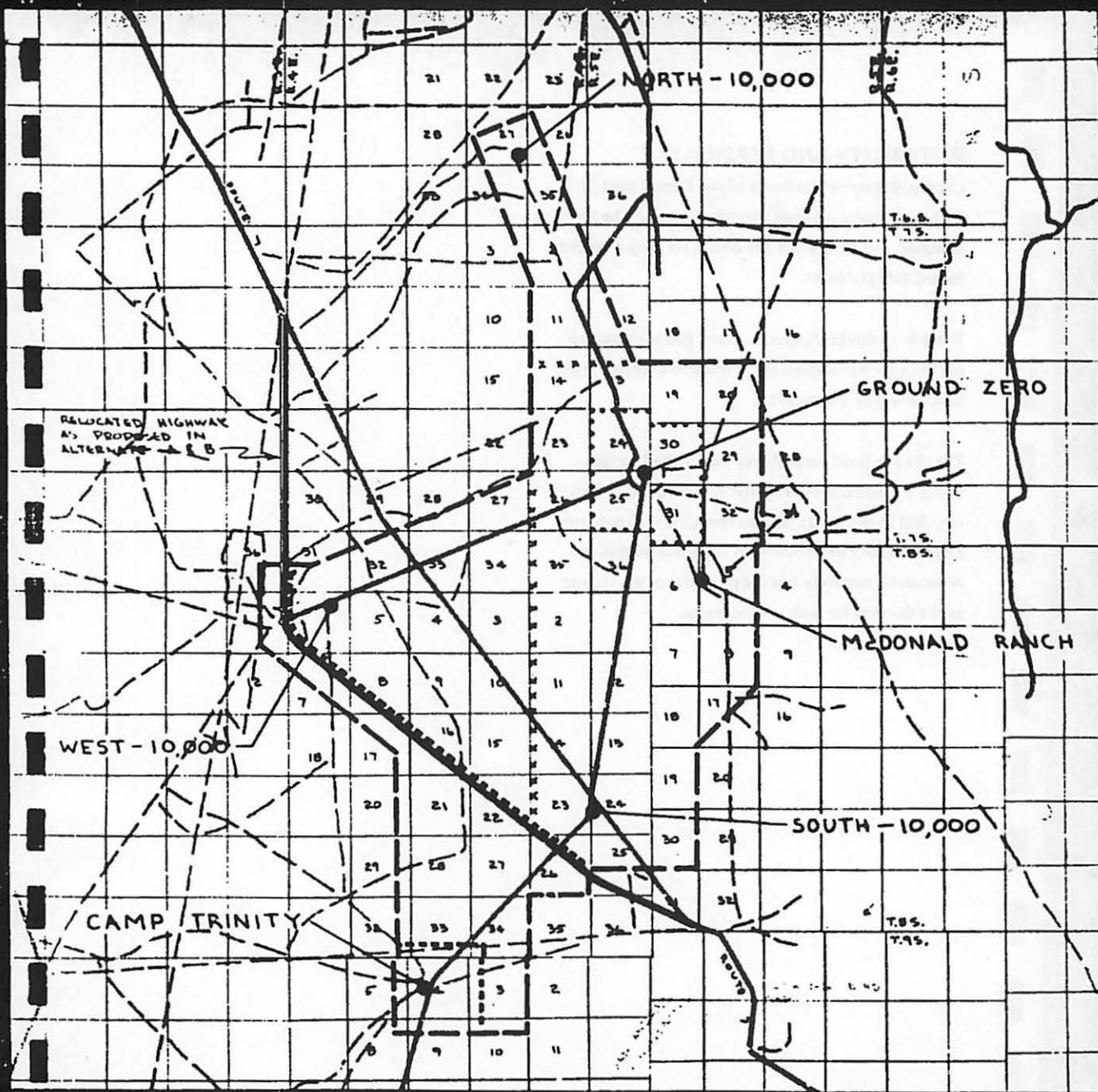
## SUITABILITY AND FEASIBILITY

Locally, the current attitude of the Department of Defense is that a national historic site should be established, but only when the area is no longer needed for military purposes.

There is no doubt that local, State, and regional support will be tremendous when the area becomes available for use by the public.

The site has good accessibility via an oiled surface military road now entering the area from State Highway 380 to the north. The surrounding area currently offers a variety of outstanding recreational opportunities and it certainly has the potential of developing as the demand for such use increases.





#### LEGEND

EXISTING MAIN ROADS

EXISTING MINOR AND  
UNIMPROVED ROADS

#### ALTERNATIVES

A. NATIONAL HISTORIC SITE

B. NATIONAL HISTORIC SITE

C. NATIONAL HISTORIC SITE

D. NATIONAL MEMORIAL



NORTH

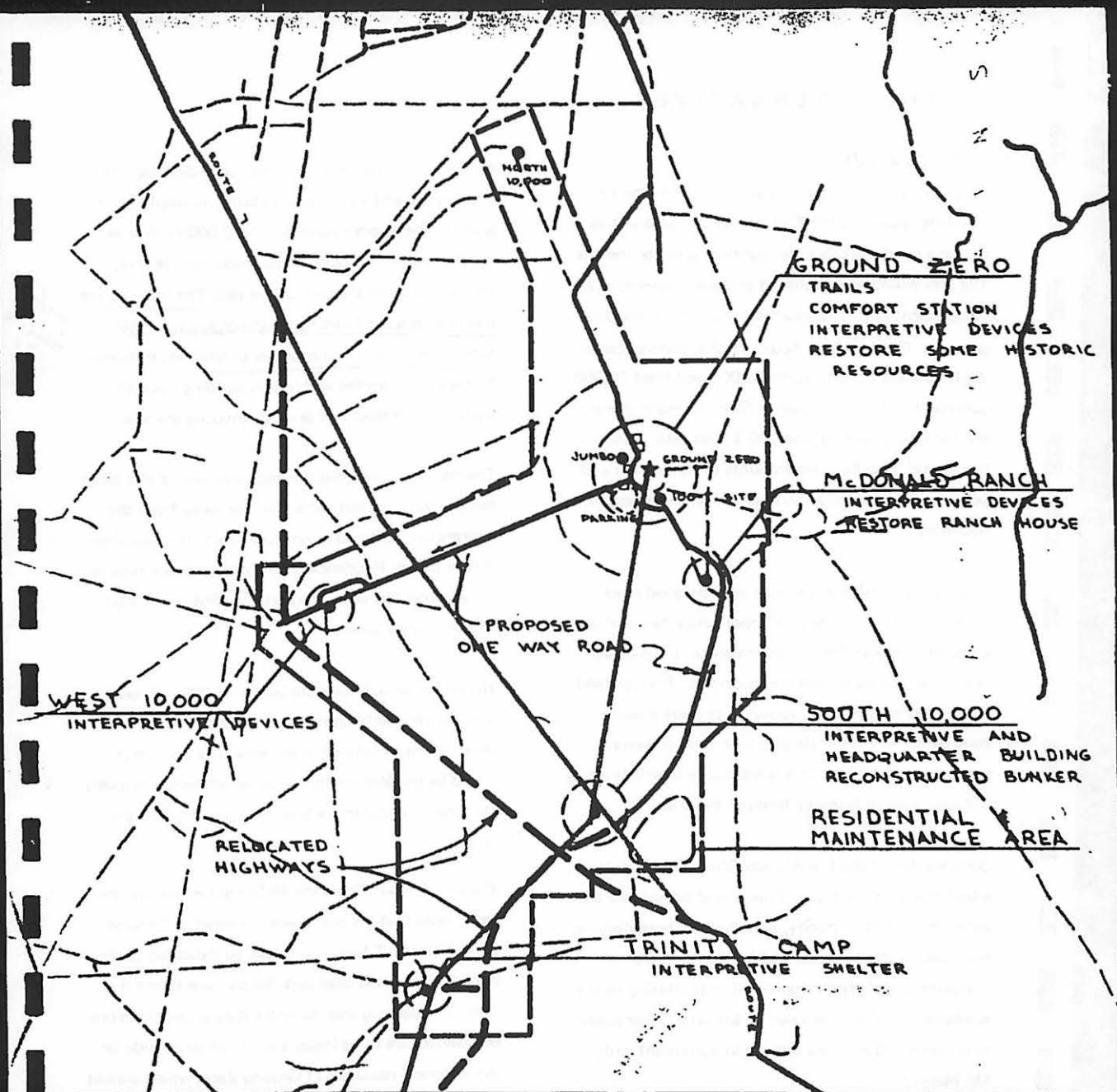
SCALE IN MILES

#### BOUNDARY MAP

PROPOSED TRINITY  
NATIONAL HISTORIC SITE  
NEW MEXICO

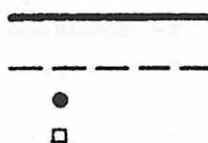
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MAR. 1968

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#### LEGEND

- EXISTING MAIN ROADS
- EXISTING MINOR AND UNIMPROVED ROADS
- HISTORIC RESOURCES
- UNMANNED BUNKERS



ON FILM



0 1 2 3 4  
SCALE IN MILES

#### NOTE

1. ALL ROADS AND STRUCTURES NOT ASSOCIATED WITH THE TEST ARE TO BE OBLITERATED.
2. THE COMPLETE BOUNDARY IS TO BE FENCED.
3. HISTORIC RESOURCES ARE TO BE RECONSTRUCTED OR RESTORED AS THE INTERPRETIVE PERSPECTUS DIRECTS.
4. ALL OTHER HISTORICAL RESOURCES ARE TO BE STABILIZED.

#### GENERAL DEVELOPMENT

PROPOSED TRINITY  
NATIONAL HISTORIC SITE  
NEW MEXICO

RPSSC  
MAR. 1968

NHS-TRI  
20,003

## THE ALTERNATIVES

### ALTERNATIVE A

This alternative will not only preserve all of the key elements relative to the Trinity test, but also will establish a good workable management unit for the site. The area would be established and administered as an independent unit. The locations included in the proposal are: Ground Zero; South 10,000 control center; the McDonald Ranch; North 10,000 and West 10,000 command bunkers; the Jumbo Site; the main camera and recording bunkers; the 100-T Test Site; Trinity Camp; and miscellaneous amounts of equipment and power and communication lines, all within a common boundary.

The area is of sufficient size to provide good road circulation, thus offering an opportunity to tell the complete story at Trinity; the entire unit can be adequately protected within this boundary. Enough land is included within this proposal to provide a buffer zone which will eliminate encroachment of private interests near the site. This is especially desirable along the future paved highway through the area.

John Manley of the Los Alamos Scientific Laboratory, a participant in the test at Trinity and considered the most competent authority, says that the boundary—as described in this proposal and in Alternative B—is adequate to include all significant sites relating to the scientific and historical value of the test. Other scientists connected with the test are in agreement with Mr. Manley.

**VISITOR USE, INTERPRETATION, AND DEVELOPMENT**—The general development plan proposes a one-way road connecting the major points of interpretive interest to the visitors except Trinity Camp. The existing Route 7 would require relocation to avoid interruption of the one-way road. The visitor would enter the area at the South 10,000 bunker. Here he would be oriented as to the significance of the area

by an interpretive center's audio visual devices. The interpretive and administrative building would be related to the reconstructed South 10,000 bunker as the first point in establishing a mood for the area, representative of the time of the test. The interpretive and headquarters building are in conjunction with each other for better manpower utilization. Entrance fees will be collected within this building since all visitors are to stop here prior to entering the site.

*public service ??*

The residential and maintenance area would also be in this general area, but some distance away from the interpretive center so as not to detract from the interpretive mood. Residences and apartments are required for all personnel since adequate housing is not available in near-by towns.

The visitor would leave the South 10,000 area on a one-way road in his personal car and drive to the other points of interest in the area. The next stop would be the McDonald Ranch, which would possibly be restored to depict its condition just prior to the test.

The visitor would leave the McDonald Ranch by the same route that the bomb was delivered to Ground Zero. The 100-T Site would next be indicated to the visitor, who would then park his car near Ground Zero. The parking area, comfort station, and interpretive devices are to be located so as not to intrude on the historical resources at Ground Zero, which should recreate the scene and mood that occurred immediately following the blast. Trails will give access to the individual points of interest, such as Jumbo and the recording site.

The visitor will leave Ground Zero by the West 10,000 bunker, where he may view Ground Zero as seen by personnel present at the time of the test.



The visitor now has the option either to leave the area entirely or to proceed along the public highway to Trinity Camp. The location of the camp will be marked and there possibly will be some reconstruction and restoration of buildings.

Interpretive personnel will be located at South 10,000, McDonald Ranch, and Ground Zero during periods of heavy visitation. The West 10,000 and Trinity Camp will be interpreted and protected by a roving patrol.

The entire area will be fenced so as to exclude grazing, which is not compatible with the purpose of the area, and for protection of the historical resources and National Park Service facilities.

All historical resources not restored or reconstructed will be stabilized to prevent further deterioration.

**LAND NEEDS**—This proposal includes approximately 39,400 acres within its boundaries. Termination of the existing White Sands Missile Range would cause the land to revert back to its original owners; about 4,000 acres would revert back to the State, about 1,900 acres to private individuals, and the remainder would remain in Federal ownership. The proposed visitor use and development require that fee ownership be obtained.

#### **ALTERNATIVE B**

This alternative reduces the size of the proposal to some extent. It includes all of the key elements of the test site listed in Alternative A and would be established and administered as an independent unit. All of the historic site would be included within a common boundary with the exception of Trinity Camp, which would become a detached unit.

This alternative is less desirable than Alternative A as a management unit because it would allow human intrusion along the through road and much closer to

the main elements of the test site. It would, however, delete some 6,600 acres of the buffer zone land which, at the present time, possesses a limited grazing potential. If and when this land, withdrawn by the military, reverts back to private ownership, opposition to any proposal can be expected from livestock grazing interests. Without question this alternative will be much more acceptable to such interests than the larger Alternative A.

**VISITOR USE, INTERPRETATION, AND DEVELOPMENT**—Visitor use, interpretation, and development would be identical to Alternative A.

**LAND NEEDS**—This proposal includes approximately 32,800 acres within its boundaries. Since termination of the existing White Sands Missile Range would cause the land to revert back to its original owners, about 3,550 acres would revert back to the State, about 1,900 acres to private individuals, and the remainder would remain in Federal ownership. The proposed visitor use and development require that fee ownership be obtained.

#### **ALTERNATIVE C**

This alternative reduces the size of the area by 20,500 acres from that proposed in Alternative A. While it will include the essential historical resources, it will delete several key elements which were relevant to the test and should be preserved, including the North 10,000 and West 10,000 control bunkers and the Trinity Camp. In addition, it will be difficult to interpret the complete site story if these elements are deleted.

Because of the reduced size, there would be much less opposition from grazing interests. Development and staffing costs would be considerably less than in either of the former alternatives. The area would be established and administered as an independent unit.

#### **VISITOR USE, INTERPRETATION, AND DEVELOPMENT**

Visitor use, interpretation, and development would be identical to Alternative A, except for the elimination of the Trinity Camp and the West 10,000 site.

**LAND NEEDS**—This proposal includes approximately 18,900 acres within its boundaries. Since termination of the existing White Sands Missile Range would cause the land to revert back to its original owners, about 1,920 acres would revert back to the State, about 1,040 acres to private individuals, and the remainder would remain in Federal ownership. The proposed visitor use and development require that fee ownership be obtained.

#### **ALTERNATIVE D**

This alternative proposes the establishment of the site as a national memorial, and includes only that area around the explosion site. Some 2,560 Federal acres of land is proposed, which will include Ground Zero and the minor historic resources within this immediate area. This proposal would be administered in conjunction with White Sands or Gran Quivira National Monument. No personnel will be stationed at the site.

#### **VISITOR USE, INTERPRETATION, AND DEVELOPMENT**

Development under this alternative would be minimal. Unmanned interpretive devices along with parking would be placed on site. No water or sewerage system would be necessary. The Ground Zero area would be developed as a commemorative site with appropriate ground improvements and include the marker. The structures and roads that remain from the test would possibly be removed.

#### **INTERIM PROTECTION**

Because of national security regulations, it is not feasible to establish Trinity National Historic Site at this time. It is recommended that the historic resources described earlier in this report be preserved pending eventual establishment of such a unit of the National Park Service.

Three forms of preservation are necessary. The historic structures related to the site should be stabilized to halt any further natural deterioration. Also, all historic structures should be fenced to protect them from damage or vandalism. Though it would be highly desirable to fence the entire area along the proposed boundary, this is not practical since the White Sands Missile Range personnel require daily passage through the area. And historic structures that cannot be fenced, such as power lines, should be salvaged and stored at one location or signed to indicate they are of historic value.

The land and historic resources are now under the control of the Secretary of Defense. The National Park Service, with its technical knowledge in the field of historic stabilization and historic salvage, can be of assistance to the Secretary of Defense in assuring proper preservation of all historic resources.

The public is presently allowed access to the site once each year under a military escort. The National Park Service can assist the White Sands Missile Range personnel in conducting this tour. National Park Service personnel stationed at White Sands National Monument could handle the organizing and interpretive portion of the yearly trip with missile range personnel controlling the security restrictions. No additional facilities or extension of the present tour is proposed.



## RECOMMENDATIONS

It is recommended that Trinity Test Site be established as Trinity National Historic Site, as described under Alternative A.

All key resources related to the test are included in the alternative and it would establish a good management unit. Because of the outstanding importance and significance of these historic values, the site deserves to be preserved and developed to make its significance meaningful to the visiting public.

Many of the resources included within the proposal have deteriorated very badly in the past 23 years. It is of paramount importance that these units be preserved or put into deep freeze immediately and remain so until the area is released by the Department of Defense. Emphasis must be placed on this interim preservation if the key elements are to remain meaningful.

It is recommended that the existing legislation be rewritten to include immediate participation by the National Park Service in the interim preservation of the unit. Through agreement with the Department of Defense, the National Park Service should provide the technical advice relative to the stabilization necessary to preserve the historical resources and be allowed to cooperate in the protection of the area during this interim period.

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## STUDY TEAM

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## PHOTOGRAPHS

South 10,000 Command Bunker. Structures obliterated in 1964; site identifiable. 1945 photograph.

Ground Zero—aerial view from the north.

Ground Zero—lava-stone monument recently erected by the Army at explosion point.

McDonald Ranch—house where the active components of the "bomb" were assembled.

West 10,000 camera and recording bunker. Three units such as this were located approximately one mile from Ground Zero.

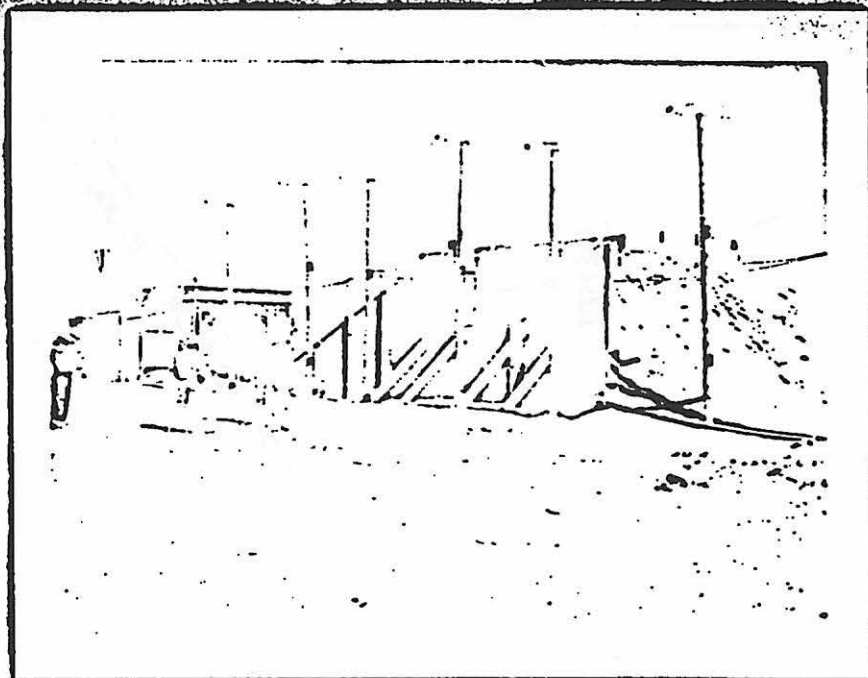
Jumbo—remains of 214-ton steel container located 1,800 feet from Ground Zero.

West 10,000 observation and recording bunker. A unit similar to this is located at North 10,000.

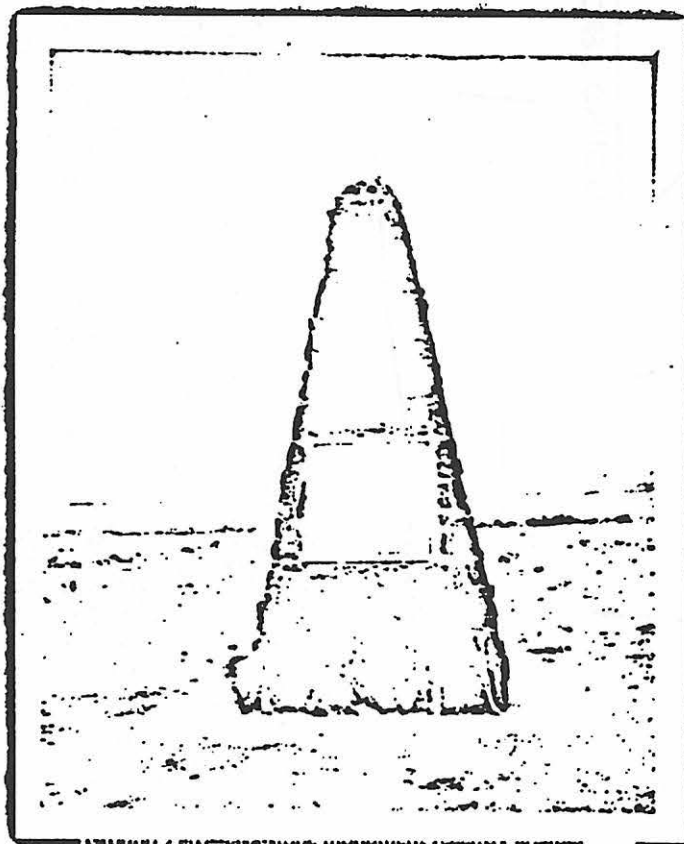
View from West 10,000—looking toward Ground Zero.

Remains of the Trinity Camp.

Communication line from control and recording bunker to "bomb site."



South 10,000 Command Bunker. Structures obliterated  
in 1964; site identifiable. 1945 photograph.



Structure obliterated by the Army at explosion point.

McDONALD RANCH

SOUTH 10,000

BASE CAMP

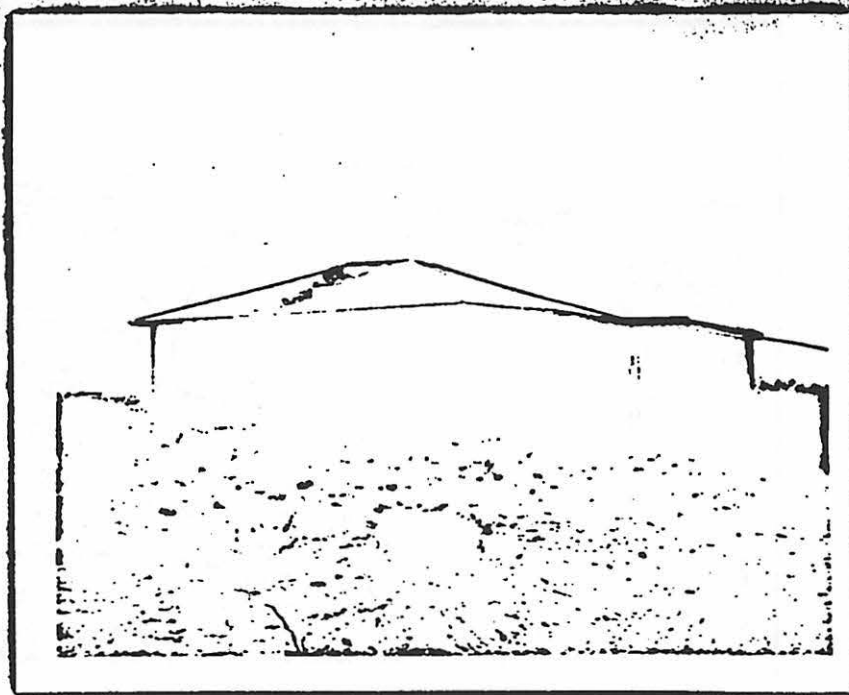
WEST 10,000

GROUND ZERO

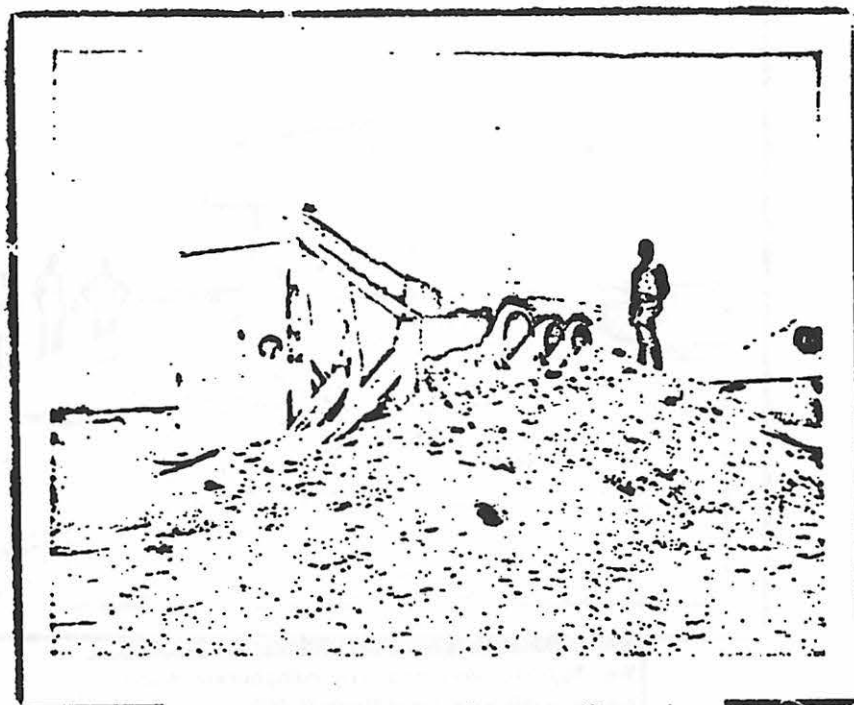
JUMBO

TO NORTH 10,000

Ground Zero—erial view from the north. U.S. AIR FORCE PHOTO

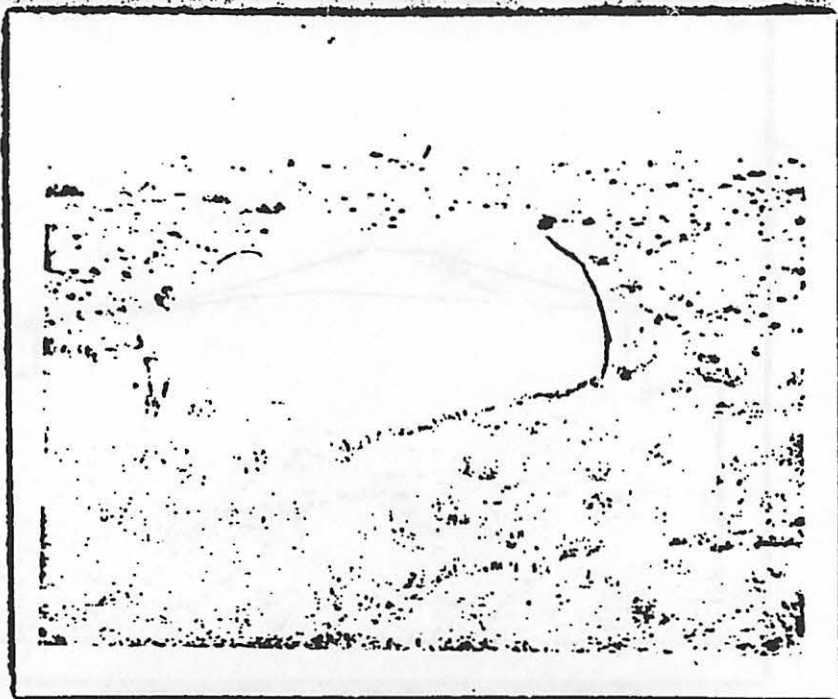


McDonald Ranch—house where the active components of the "bomb" were assembled.

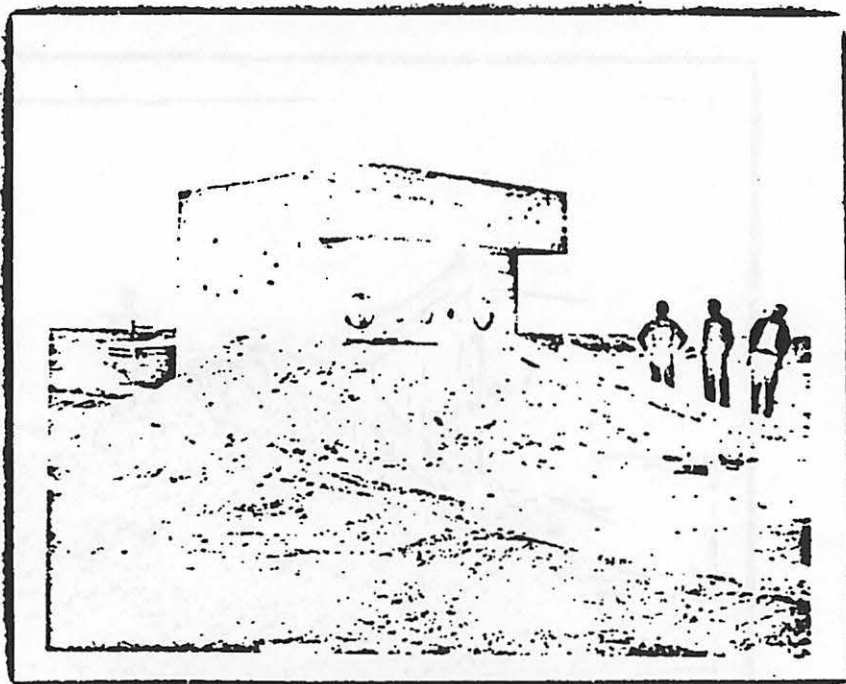


West 10,000 camera and recording bunker. Three units such as this were located approximately one mile from Ground Zero.

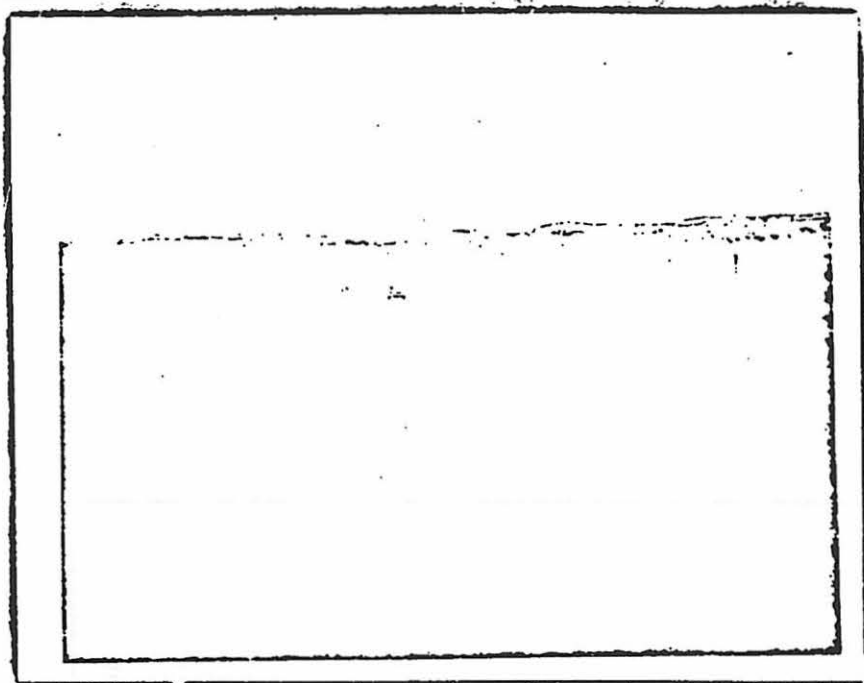




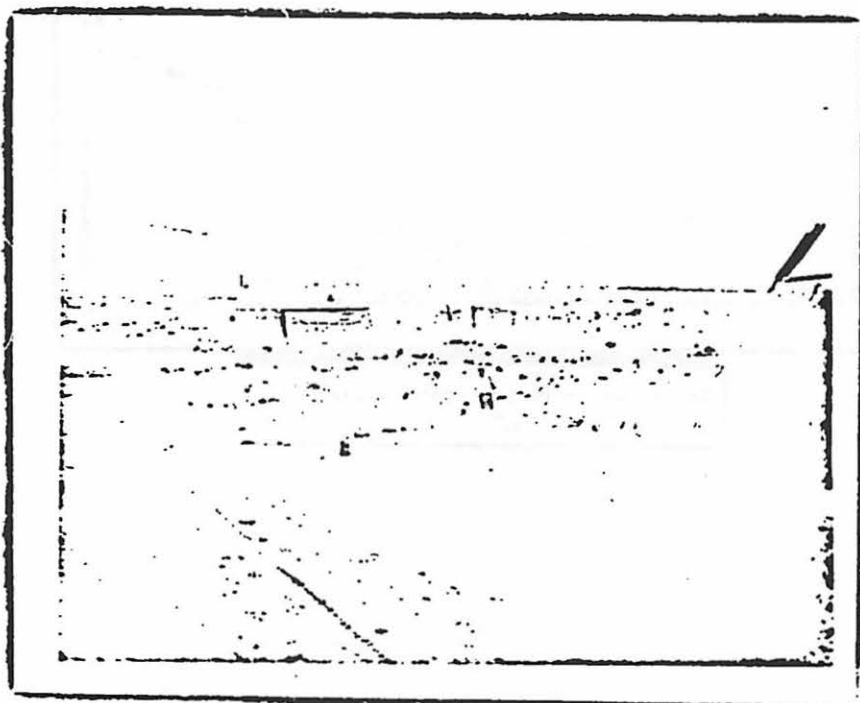
Jumbo—remains of 214-ton steel container located 1,800 feet from Ground Zero.



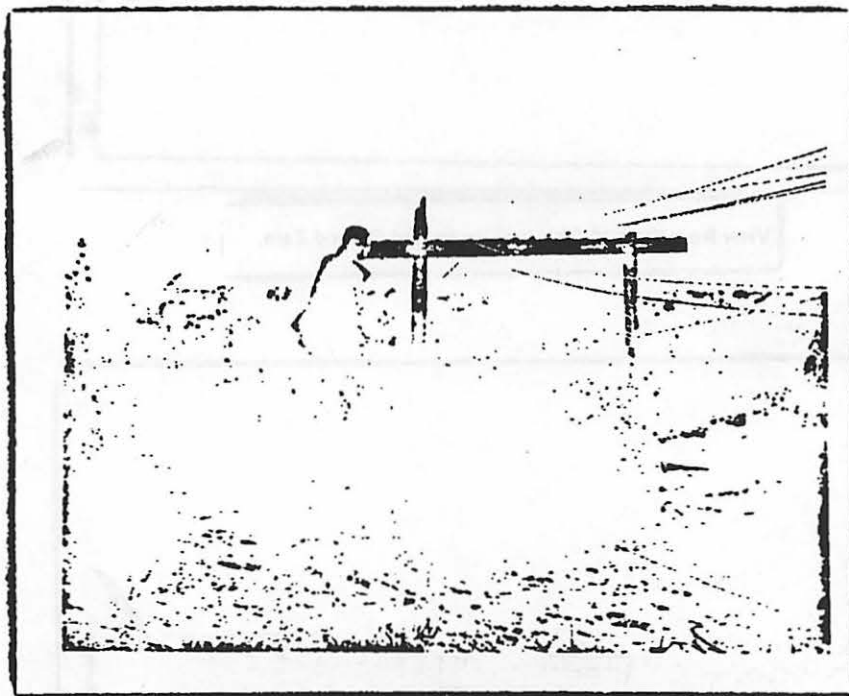
West 10,000 observation and recording bunker. A unit similar to this is located at North 10,000.



View from West 10,000—looking toward Ground Zero.



Remains of the Trinity Camp.



Communication line from control and recording  
bunker to "bomb site."