HAFB Report #1996-006
Project KWRD 973200 B

BUILDINGS 107, 289, AND 291 DEMOLITION HABS/HAER ARCHITECTURAL ASSESSMENT HOLLOMAN AIR FORCE BASE OTERO COUNTY, NEW MEXICO

by

Moira Ernst
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Air Combat Command
United States Air Force
United States Department of Defense

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On June 10 and 11, 1996, an architectural assessment of three buildings was conducted on Holloman Air Force Base, Otero County, New Mexico, by Geo-Marine, Inc. Buildings 107, 289, and 291, constructed during World War II, are scheduled for demolition as part of the German Air Force Beddown project. Buildings 107 and 291 are considered ineligible for placement on the National Register of Historic Places (NRHP) because of their extensive alteration. HABS/HAER Level IV documentation was completed on these two buildings. Building 289, although retaining historic integrity, does not satisfy the criteria for significance as an individual property. As the building still retains historic integrity and could potentially be considered a contributing feature as part of either a district or multiple property nomination, HABS/HAER Level I documentation was completed on this building. The two levels of HABS/HAER documentation were determined to be sufficient to exhaust all research potential for these buildings. Cultural resources clearance is recommended for the demolition project.

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CHAPTER 1
INTRODUCTION

Geo-Marine, Inc. personnel conducted architectural assessments on three World War II structures located on Holloman Air Force Base (HAFB), Otero County, New Mexico (Figure 1). The structures are slated for demolition as part of the German Air Force Beddown project (Project KWRD 973200 B). The assessments were conducted at the request of the U.S. Army Corps of Engineers, Fort Worth District, under Purchase Order DACA63-96-P-0614, and under the authority of the National Environmental Policy Act and Section 106 of the National Historic Preservation Act as amended through 1992. Buildings 107, 289, and 291 were visited on June 10 and 11, 1996. The buildings were evaluated on the basis of National Register Criteria A and C for significance.

The three structures are presently owned and occupied by the United States Air Force, Air Combat Command, Holloman Air Force Base, New Mexico. They are located on the Holloman, New Mexico, USGS 7.5-minute topographic map, in Township 17 South, Range 8 East, Sections 12 and 13, within the HAFB Cantonment (Figures 2 and 3).

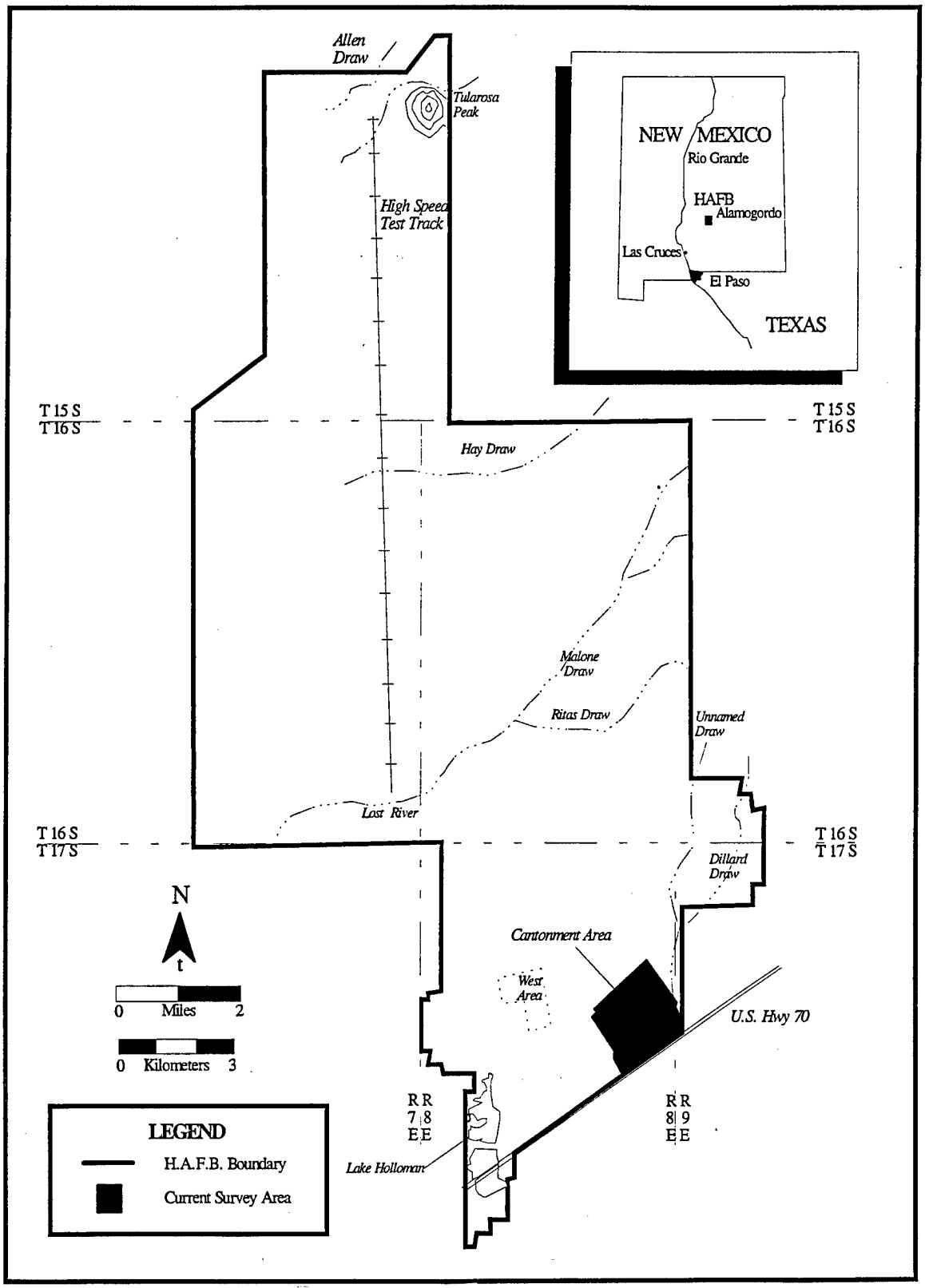


Figure 1. Location of the project area.

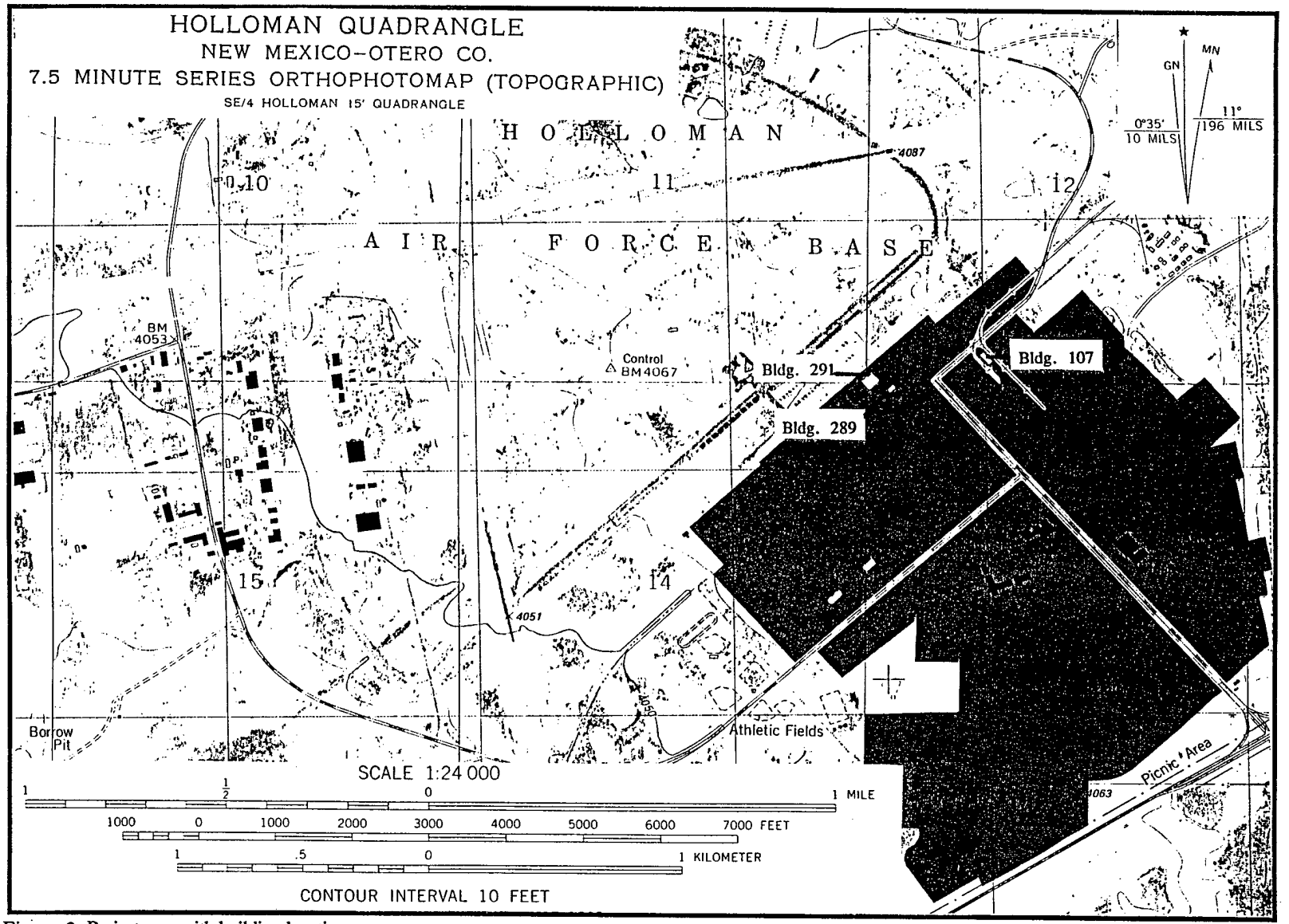


Figure 2. Project area with building locations.

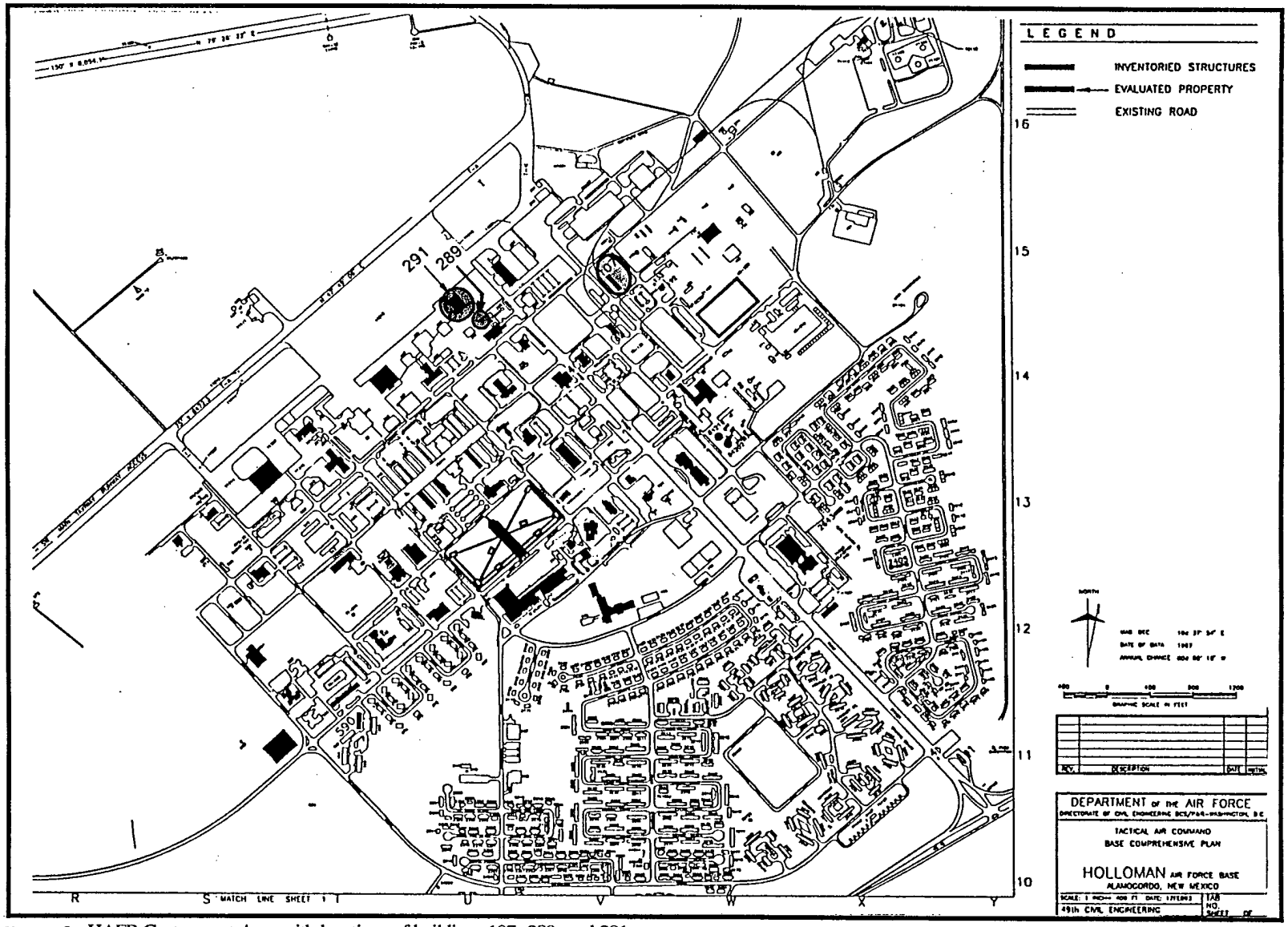


Figure 3. HAFB Cantonment Area with locations of buildings 107, 289, and 291.

CHAPTER 2
CULTURAL SETTING

LOCAL SETTING

The first non-native inhabitants in the Tularosa Basin were refugees from the flooded Rio Grande Valley. Over one hundred Hispanic families left the valley in 1862, and located at the foot of the Sacramento Mountains on the Rio Tularosa. A year after Tularosa was founded, another group of refugees settled the town of La Luz (Hawthorne 1994:14). These early settlers grew vegetables, grain, and fruit, and raised cattle, sheep, and horses. Water for irrigation and domestic use was supplied by community ditches the settlers had dug themselves (Sonnichsen 1980:12).

During the early years, the Mescalero Apache periodically raided these villages, but there was little bloodshed until the Battle of Round Mountain occurred in April 1868. The battle started when soldiers from nearby Fort Stanton encountered a band of Apache and asked the people of Tularosa for help. When the battle was over, only one Tularosa resident had been injured, and for the most part, the Apache threat to the settlers was ended (Sonnichsen 1980:14). With the signing of an Executive Order establishing the Mescalero Apache Indian Reservation in May 1873, the Apache threat was over (Sonnichsen 1980:15).

With the Apache threat ended, Anglos began to settle the basin. These early settlers came from Texas to escape droughts, overstocking, and in some cases, the law. Stories of plentiful rainfall and free land, along with a ready market for beef products at Fort Stanton, made the area an attractive place to settle (Anonymous 1981:35). With the arrival of this wave of new immigrants, fights and murders became common on the streets of La Luz and Tularosa. By the late 1880s, the range was seriously overgrazed, and Texans "elbowed each other on the Tularosa flats and squatted in the mountain canyons" (Sonnichsen 1980:20).

Before 1898, the south-central region of the Territory relied solely on wagons to bring people in or take products out (Hawthorne 1994:19). Charles B. Eddy, a local entrepreneur backed by eastern capitalists, had promoted the idea of a railroad. In anticipation of the railroad's arrival, Charles' brother John Eddy bought land and water rights and had the town of Alamogordo laid out. In 1898, the El Paso and Northeastern Railway reached its headquarters at the newly established town of Alamogordo. In reaction to this, the Territorial Legislature created Otero County in 1899 (Wilson et al. 1989:44). The arrival of the railroad meant the end of economic isolation for the area, and opened the region to even more settlement. The population of Otero County nearly doubled from 1900 to 1910. In Alamogordo, the population was almost 3,500 by the end of 1907, and the settlers continued to arrive (Hawthorne 1994:19-20).

From the early 1900s until the 1940s, people living outside the towns of Alamogordo, La Luz, and Tularosa depended on ranching for their livelihoods. These ranchers found the best water source and filed homestead or desert land entries around a water hole in order to block settlers from getting in the way of open range (Hawthorne 1994:21). Passage of the Stock Raising Homestead Act allowed any individual who met age and citizenship requirements to claim up to 640 acres, although many preferred to make use of Public Domain instead of paying taxes and incurring the cost of fencing their property (Hawthorne 1994:21). In reaction to overgrazing on the Public Domain, the Taylor Grazing Act was passed in 1934, and the open range system ended. Settlers and ranchers were required to apply for 10 year leases on federal land that had been divided into grazing districts. State lease permits while not a new policy, had been largely ignored by ranchers until then (Hawthorne 1994:22).

This was not the first occasion in which the influence of the government was felt in the Tularosa Basin. In 1907, the U.S. Forest Service established a reserve over most of the Sacramento Mountain timberlands, which put them in control of the basin's best summer grazing lands. Again in 1933, the establishment of White Sands National Monument resulted in the withdrawal of large tracts of the gypsum dunes from private ownership (Sale et al. 1996:22). These events set the stage for the government takeover of over a million acres of land in the Tularosa Basin during 1941 and 1942, and the establishment of the Alamogordo Bombing and Gunnery Range (ABGR) and the Alamogordo Army Air Field (now HAFB).

WORLD WAR II AND ALAMOGORDO ARMY AIR FIELD

While World War II raged on in Europe, strong isolationist sentiments gripped the United States. These feelings were exacerbated in June 1940 when President Roosevelt announced that the U.S. could not remain a "lone island in a world dominated by the philosophy of force" (Maddox 1992:75). In response to pleas from Winston Churchill for help against German U-boats, Roosevelt turned 50 World War I destroyers over

to Great Britain in return for 99 year leases to naval and air bases in British possessions. These actions, along with the passage of the selective service act, convinced many people that the president was leading the country into war. In spite of these sentiments, Roosevelt was reelected to another term that year. The victory was seen by Roosevelt as a sign of support for his foreign policies and encouraged him to go further. In December, he sent the lend-lease bill to Congress. The bill would allow the president to "lease, lend, or otherwise dispose of" equipment and supplies to those nations whose defense was determined to be vital to national security (Maddox 1992:76). Roosevelt's critics immediately declared that the bill was a step toward full involvement in the war, but polls indicated strong public support and the bill was passed and signed into law on March 11, 1941 (Maddox 1992:77).

During this same period, the U.S. was also escalating military construction at home (Welsh 1987:78). On the local front, in January of 1941 New Mexico announced that it was leasing 25,000 acres to the federal government for establishment of a bombing range (Vandiver 1996:1). On April 13, 1941, a meeting between the Chief of the Army Air Corps and the Royal Air Force Chief of training resulted in the establishment of the British Training Program and the beginnings of Alamogordo Army Air Field (AAAF) (Mattson and Tagg 1995:8). In October 1941, ranchers in the Tularosa Basin and adjacent areas were ordered to dispose of their livestock and be prepared to evacuate their land. Local protests proved futile and in December, ranchers were notified that leases to public lands for grazing were canceled (Mattson and Tagg 1995:8). The withdrawal included 1,243,000 acres of Grazing Service and private land for establishment of the ABGR (Hawthorne 1994:23). Protests of this government takeover of lands were overshadowed by the bombing of Pearl Harbor on December 7.

The attack on Pearl Harbor shook the confidence of the entire country. Many people expected Japanese bombing attacks on the U.S. mainland to follow, and blackouts became a common occurrence. In 1941, the U.S. had only 45 fighters, 10 heavy bombers, and 75 medium bombers on the Pacific Coast, and the situation on the Atlantic Coast was even more critical (ATC Pamphlet 1961). With U.S. entry into the war, aircraft production and aircrew training facilities were greatly expanded, and in February 1942, construction of the base began. Shortly after, it was named AAAF.

Although it was originally established for the purpose of training British Royal Air Force bomber crews, after the U.S. entered the war, the AAAF's mission was changed to the training of American crews for duty in B-17, B-24, and B-29 bombers. Throughout World War II, the ABGR served as a practice bombing site for crews from throughout the U.S., and with the AAAF formed "one of the most unique and important bomber training facilities in the United States" (Vandiver 1996:1) (Table 1). At the same time the mission changed, it was placed under the control of the U.S. Army Air Corps (Vandiver 1996:1).

Table 1. Wartime units at Alamogordo Army Air Field, 1942 - 1945 (Maurer 1959:17).

Organization	Aircraft	Dates Assigned
301st Bombardment Group	B - 17	May 1942 - June 1942
303rd Bombardment Group	B - 17	June 1942 - August 1942
330th Bombardment Group	B - 24	August 1942 - April 1943
392nd Bombardment Group	B - 24	April 1943 - July 1943
454th Bombardment Group	B - 24	June 1943 - July 1943
455th Bombardment Group	B - 24	June 1943 - September 1943
459th Bombardment Group	B - 24	July 1943 - August 1943
460th Bombardment Group	B - 24	July 1943 - August 1943
449th Bombardment Group	B - 24	July 1943 - September 1943
450th Bombardment Group	B - 24	July 1943 - November 1943
465th Bombardment Group	B - 24	August 1943 - September 1943
466th Bombardment Group	B - 24	August 1943
36st Fighter Group	P - 47	September 1943
400th Bombardment Group	B - 24	September 1943 - December 1943
492nd Bombardment Group	B - 24	October 1943 - April 1944
466th Bombardment Group	B - 24	November 1943 - February 1944
487th Bombardment Group	B - 24	December 1943 - March 1944
418th Bombardment Group	None	March 1944 - April 1944
25th Bombardment Group	B - 17	April 1944 - June 1944
467th Bombardment Group	B - 29	August 1945 - September 1945

On April 10, 1942, the first military personnel arrived at AAAF. These troops, the 56th Materiel Squadron from Davis-Monthan Field in Tucson, Arizona, began the initial construction work on the base (Vandiver 1996:2). Although the base mission had changed, the triangular runway design and three part cantonment area typical of Royal Air Force base design were retained (833rd Air Division 1989:5) (Figure 4). Three runways running south-north, northeast-southeast, and east-west form a triangle with the west area, main base, and north area situated along the legs of the triangle. By June of 1943, the cantonment area contained a Women's Army Auxiliary Corps (WAAC) area, hospital area, utility yard, colored area, motor pool, hutment area, barracks, civilian area (sub-depot), and a parking apron and three aircraft hangars (49 CES/CEV 1943). The three buildings documented for this project are among the original structures built to accommodate the base mission with Building 107 operating as an academic classroom; Building 289 functioning as a base warehouse for storage of hazardous and flammable materials; and Building 291 serving as a field maintenance hangar for B-17 and B-24 bombers.

In late May of 1942, AAAF's first tactical unit arrived; the 301st Bombardment Group (Maurer 1959:17). Originally equipped with B-17s, by December 1942 the bombardment groups had switched to B-24 heavy bombers (Vandiver 1996:2) Later in the war, the B-17s and B-24s would be replaced by the B-29 very heavy bomber (Maurer 1959:343).

On June 1, 1942, the base became operational under the command structure of the Second Air Force. The Second Air Force handled the operational training for bombers (ATC Pamphlet 1961). By the latter half of the year, aircraft and troops began to arrive and training began at the air field (Vandiver 1996:2). By the beginning of 1943, bomber crew training increased, with 4,649 personnel at AAAF (Vandiver 1996:2). From late 1942 through March 1944, bomber groups and squadrons completed their training at AAAF prior to receiving combat assignments in the Pacific and Europe. By 1944, aircraft production was fourteen times that of 1940 levels and air and ground training of airmen had increased fourfold (Purdom 1970:189). During this period AAAF had functioned as an Overseas Training Unit (OTU) (Vandiver 1996:2-3). OTUs were established to provide cadres and supervise training of newly established units (ATC Pamphlet 1961). In March 1944, AAAF's official designation was changed to the 231st Combat Crew Training Station (CCTS) (Vandiver 1996:2-3).

During March 1944, the last B-24 bombardment group finished its training and the first of the new B-29 very heavy bombers began to arrive at AAAF. Until the end of the war, AAAF's mission was to train replacement crews to man B-29s for duty in the Pacific theater (Vandiver 1996:3). The B-29 would lead the final air assault on Japan (Greer 1970:131). Along with the B-29s, B-17s were brought in as trainers for pilots with little experience flying four-engined bombers (Vandiver 1996:3).

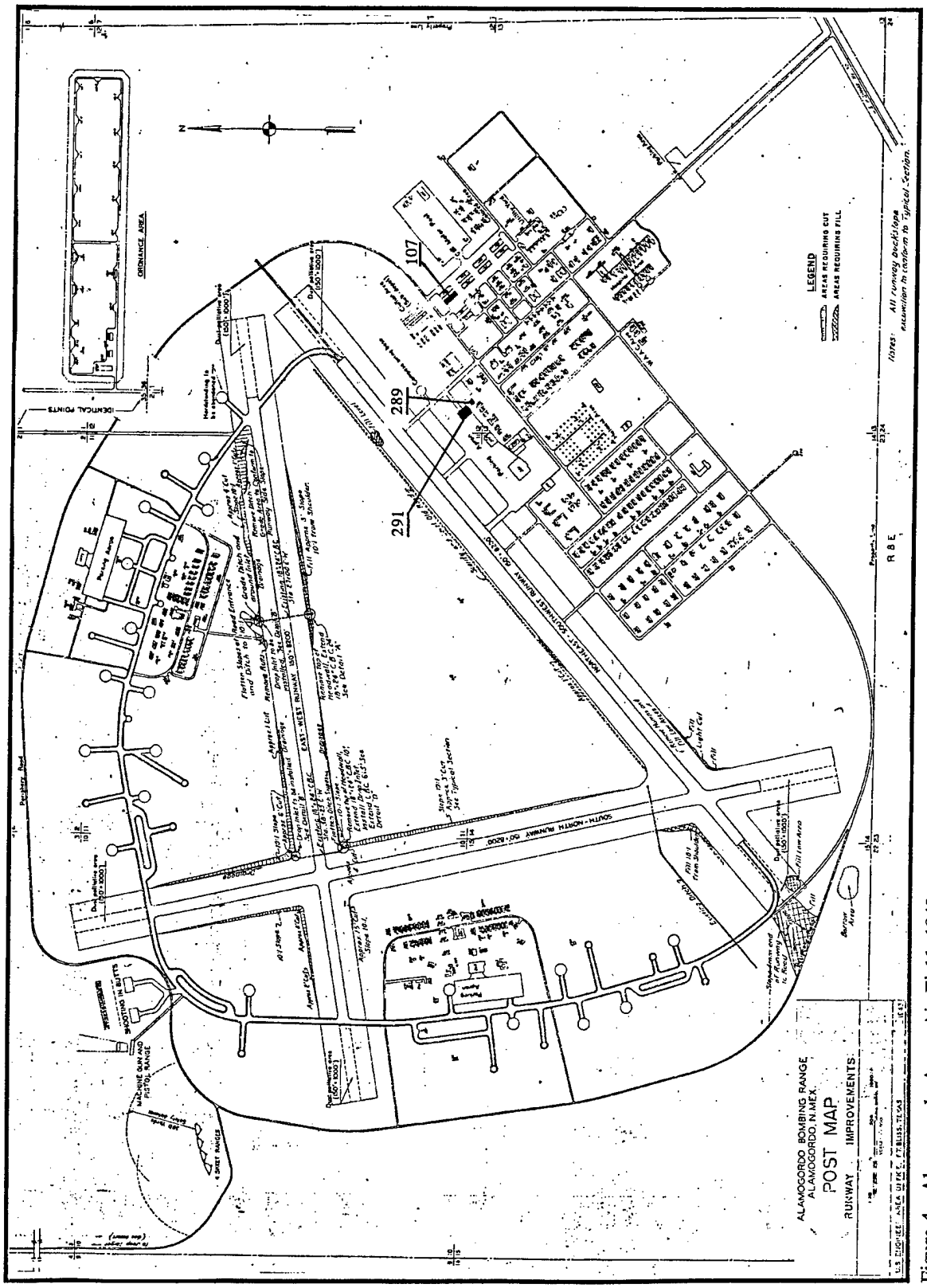


Figure 4. Alamogordo Army Air Field, 1943.

In July 1945, an officer from the AAAF's Tularosa Base Camp on the ABGR was instructed to remove any civilians who had remained on the range after the evacuation orders of 1941 and 1942 (Vandiver 1996:3). On July 16, 1945, the first atomic bomb was detonated on the old Bar Cross Range, a secluded area of the Jornada del Muerto (Sonnichsen 1980:276). The bomb was exploded at the Trinity Site, located in the northwest corner of the ABGR, and currently administered by White Sands Missile Range (833rd Air Division 1989:8). Shortly after, bombs were dropped on Hiroshima and Nagasaki and World War II came to an end. The detonation of atomic bombs, along with hastening Japan's decision to surrender, represented a giant leap in strategic air capabilities (Futrell 1964:333).

During World War II, air power had become more than just a supporting agent of land and sea operations. From the beginning of the war in September 1939 to the end in 1945, all of the nations involved made a tremendous use of aircraft (Futrell 1967:137). In the U.S., B-17, B-24, and B-29 bombers became the mainstay of the strategic bombardment program and the P-47 and P-51 fighters established air superiority essential to the strategic bombing campaigns. Development of the jet aircraft provided an insight into future developments in aviation, and the atomic bomb changed the very nature of war itself. World War II firmly established the fundamental importance of air power (Purdom 1970:136). As World War II ended, its most significant new weapons, the V-2 rocket and the atomic bomb, ushered in a new age.

HOLLOMAN AIR FORCE BASE 1945-PRESENT

In October 1945, the 231st CCTS was redesignated the 16th Bombardment Operational Training Wing, but by November all training at the base had ended, and the 2,000 personnel remaining at the base were assigned jobs to prepare them for civilian life (Vandiver 1996:4). By the end of the year, only 20 officers, 38 enlisted men, and seven civilians remained at AAAF; by January 1946, all of the B-29s assigned to the base were in storage; and in February the base was officially deactivated (Vandiver 1996:4).

Just one month later in April of 1946, AAAF was reactivated as a missile testing and development center (Vandiver 1996:4). By late 1946, the area was chosen for the Air Force Guided Missile Test Range. These events marked the beginnings of great change in the Tularosa Basin. Sonnichsen (1980:276) claims, "The isolation and barrenness which made the place a haven for harried Apaches in prehistoric times and for discouraged Texans in the eighties now attracted another kind of pioneer—the scientist laboring to perfect new weapons for the defense of his country." In February of 1947, jurisdiction of the AAAF was transferred to the Air Materiel Command. Guided missile programs, along with 1,200 personnel, were moved from Wendover Army Air Field in Utah to HAFB (Culbertson 1972:25-26).

During this same period, the Army Ordnance Corps had established White Sands Proving Grounds (WSPG) with its range south of the AAAF range. The two installations worked together to efficiently schedule use of the combined range, which at that time was 100 miles long and 40 miles wide (Meeter 1967:186). On July 23, 1947, the first firing took place and a Boeing Ground-to-Air-Pilotless-Aircraft (GAPA) was launched (Alamogordo News, 24 July 1947:1). This initial GAPA launch marked the beginning of over 10 years of missile and rocket launches at the installation. Over 40 types of missiles and rockets were tested on the base including the Jet Bomb 2, North American Test Instrument Vehicle, Aerobee, Matador, and Mace. To support these tests, several launch complexes and instrumentation stations were constructed on the base (Mattson and Tagg 1995:136-138).

In September of 1947, the Air Force and Army became separate entities and AAAF's name was changed to Alamogordo Air Force Base (AAFB). The name was short-lived however, and in January of 1948, the base was renamed Holloman Air Force Base after Col. George V. Holloman. Col. Holloman was an early pioneer in the field of guided missiles who had been killed in a B-17 crash in 1946 (Alamogordo Daily News, 1961:7).

By 1951, the base had became part of the Air Research and Development Command and was designated the 6540th Missile Test Wing. In September of 1952, HAFB became a separate center with the designation 6580th Missile Test Wing. Operation of the HAFB Range and the WSPG Range was officially integrated into the Integrated White Sands Range and placed under the management of the Army (Alamogordo Daily News, 1961:1). On October 10, 1952, the base was declared a permanent installation and it became Holloman Air Test Wing Development Center; still a part of Air Research and Development Command. In November of 1956, the Secretary of Defense assigned operational responsibility for all missiles, except ship-based weapons with ranges greater than 200 miles, to the Air Force. By September 1, 1957, the Holloman Air Development Center was redesignated the Air Force Missile Development Center (AFMDC), and in September 1959, the Air Force was charged with the development, production, and launching of all military space vehicles, along with full responsibility for military operations in outer space (Hanrahan 1959:iii). On April 1, 1961, the Air Research and Development Command was redesignated the Air Force Systems Command (Meeter 1967:186).

During the changes in organization, personnel at HAFB were making strides in research regarding space biology and biodynamics. Bushnell (1958a:1) argues that space biology as a field of research was defined in southern New Mexico. In 1946, a series of rocket flights carrying fruit flies, fungus spores, and small mammals to the extreme upper atmosphere were initiated. In 1950, HAFB became a launch site for research balloon flights designed to study the biological effects of cosmic radiation and during 1951 and 1952, the

Aerobee research rocket was launched three times to study the effects of weightlessness on mice and monkeys (Bushnell 1958a:3).

The balloon flights and rocket firings were projects of the Aeromedical Laboratory at Wright Field. The Aeromedical Field Laboratory was established as a support facility for the Wright Field projects in 1951, but by 1953, it had became a regularly assigned unit at HAFB as part of the AFMDC (Bushnell 1958b:91). The laboratory also included the Holloman Zoo, which was used to house research animals. Two of the more prominent residents were HAM and Enos, chimpanzees who preceded the Mercury astronauts into space in 1961 (Mattson and Tagg 1995:140). The laboratory was disbanded after almost 10 years (Mattson and Tagg 1995:97-98). In 1980, the Holloman Zoo became the Primate Research Facility, and it is currently under the management of The Coulston Foundation.

Another prominent feature on Holloman is the High Speed Test Track. The 3,550 ft Holloman track was constructed in 1949-50 as a launch facility, but soon grew into one of the country's major research tracks (Bushnell 1959:9). On June 23, 1950, the first run took place (Bushnell 1959:25). This run was the first of many conducted for the testing of military hardware. A wide range of programs were conducted on the track including drone testing, flight control and guidance system research, aerodynamic tests, ejection seat research, and speed tests (Mattson and Tagg 1995:141). In 1955, groundbreaking for a 1,521 ft extension to the track took place, and in March of 1956, a contract was awarded for an extension which brought the track to its current length of 35,000 ft.

The AFMDC was phased out during 1970 and missile testing and development slowed. On January 1, 1971, HAFB became part of the Tactical Air Command (TAC) and its mission changed from missile testing to fighter pilot training under the 49th Fighter Wing (Mattson and Tagg 1995:141). In 1992, HAFB, and most other TAC bases, became part of Air Combat Command.

The changes of mission over the years are reflected in the base's architecture and layout. Numerous support installations, support systems, and training, development, and intelligence facilities dot the base landscape far beyond the original cantonment area. As the base mission changed, existing buildings and structures were modified or demolished and new facilities were built. Very few World War II-era buildings survive, and few of these have escaped extensive modification. Buildings 107, 289, and 291, constructed in 1943 to accommodate the original base mission, are among the few surviving World War II-era buildings on HAFB. As the base mission changed, their function may have been changed, and in some cases the buildings themselves were modified, but all three have continued to support operations at HAFB to this day. Additionally, the Stealth Fighter has replaced missiles and rockets of the Cold War-era, the instrumentation

stations have been abandoned, aeromedical research has been replaced with other types of primate research, and the remains of launch complexes and photo facilities are now archaeological sites, but sled runs on the High Speed Test Track continue to set new speed records and to test aircraft aerodynamics and ejection seats (Mattson and Tagg 1995:142,146).

CHAPTER 3
PREVIOUS RESEARCH

Until recently, very little cultural resources work has been conducted on HAFB's buildings. In 1994, a Historic Preservation Plan (HPP) was produced for HAFB, which included a list of 'potentially historic military real property' (Eidenbach 1994:Appendix G). This list was based on visual impressions, without formal assessment, and included most World War II and selected Cold War facilities. Buildings 107, 289, and 291 were included on the list. Building 107 was determined to have been so modernized that it was lacking integrity and therefore not eligible for inclusion on the NRHP. Building 289 was determined to be the only known example of its kind on Holloman and was considered eligible for listing on the National Register. Building 291 was found to be structurally intact and was also determined to be eligible for inclusion to the NRHP (Eidenbach 1994:Appendix G).

Later that same year, Human Systems Research was contracted to conduct formal assessments and to evaluate the historic significance of World War II and early Cold War properties listed in the HPP as part of a Department of Defense Legacy Resource Management Program demonstration project. Formal assessments and evaluations of buildings 107, 289, and 291 produced the same recommendations as those in the HPP (Eidenbach and Wessel 1994:165-166). The project was never completed, and the report and recommendations were not accepted by the State Historic Preservation Officer (SHPO) (Taylor 1995), or HAFB (Tagg 1995). To date, acceptable architectural assessments of the three buildings have not been completed, and the project is currently being redone by Geo-Marine, Inc. This report is the result of Geo-Marine, Inc.'s research and documentation.

In 1995, Legacy Resource Management Program funding was provided to assess and document 75 Cold War-era properties constructed before 1957. An assessment form was developed specifically for HAFB, a field survey was conducted using HABS/HAER standards, and HABS/HAER Level IV documentation was

completed for each of the buildings and structures (Fulton and Cooper 1996). Fulton and Cooper's (1996) HAFB-specific forms were also used for the current project.

CHAPTER 4

METHODOLOGY

Prior to fieldwork, all existing Holloman Real Property Accountable records were examined in order to obtain information regarding the construction and function of each building. These records also provided information concerning any correspondence regarding these buildings and changes in function. Drawings of each building, where available, were studied to determine modifications made after the building's original construction.

Fieldwork was completed in June 1996. Using construction drawings and the blueprint index, when available, each building was inspected to determine the degree of alteration from the original construction date. Each building was photographed and visually inspected for integrity and condition. The current placement of exterior doors and window openings, interior and exterior finishes, floor plan, layout, and room use, where applicable, were documented. HABS/HAER Level IV documentation was completed for each building. A file containing HABS/HAER forms, copies of original blueprints (when available), photographs, and any archival materials available was prepared for each building.

The buildings were evaluated for potential eligibility according to National Register of Historic Places (NRHP) criteria based on historic integrity and historic significance. If a building was determined eligible for inclusion on the NRHP, measurements were taken and architectural drawings were completed. If blueprints were not available, large-format photographs of the exterior and interior were taken, and a written history and description of the property was produced in order to satisfy HABS/HAER Level I documentation requirements.

Documenting the historic context for these properties involved a review of available literature. Results of this research were used to provide an overview of events leading to the establishment of Holloman Air Force Base and the role it played during World War II.

CHAPTER 5
RESULTS OF INVESTIGATIONS

Architectural assessments were conducted on Buildings 107, 289, and 291. All are associated with World War II Army Air Corps bomber training and are located in the HAFB Cantonment Area (see Figure 2). A narrative description accompanied by photographs follows. Sources of information for the building descriptions include: field site visits; personal communications with building personnel; Real Property Accountable Record/107, 289, and 291; 49 CES/CERR CE File Numbers 96, 107, 289, and 291; 49 CES/CECNC CE File Numbers IE 146 and 288, and all available construction drawings. HABS/HAER documentation forms, location maps, floor plan drawings, and a copy of the Real Property Accountable Record for each building are included in Appendix A.

BUILDING 107: GERMAN AIR FORCE ADMINSTRATION

Building 107 is currently functioning as an administrative building for the German Air Force (Figure 5). Real Property Accountable Record/107 gives a construction completion date of c1943, making it one of the oldest standing structures on the base. Although neither the original architect nor builder is known, W.C. Kruger and Associates, Santa Fe, New Mexico, prepared the plans for the March 1969 improvements.

Real Property Accountable Record/107 indicates that Building 107 originally functioned as an academic classroom. The earliest blue-prints, "as-built" drawings dated 1969, indicate that Building 107 was subsequently improved for use as administrative offices. The remaining functions include Security Police Operations (c1974), and Social Activity Facility (c1988).

The building is located along the remnants of a railroad spur. Building 107 appears to have been historically associated with at least six similarly constructed buildings, which were also located along the railroad spur,

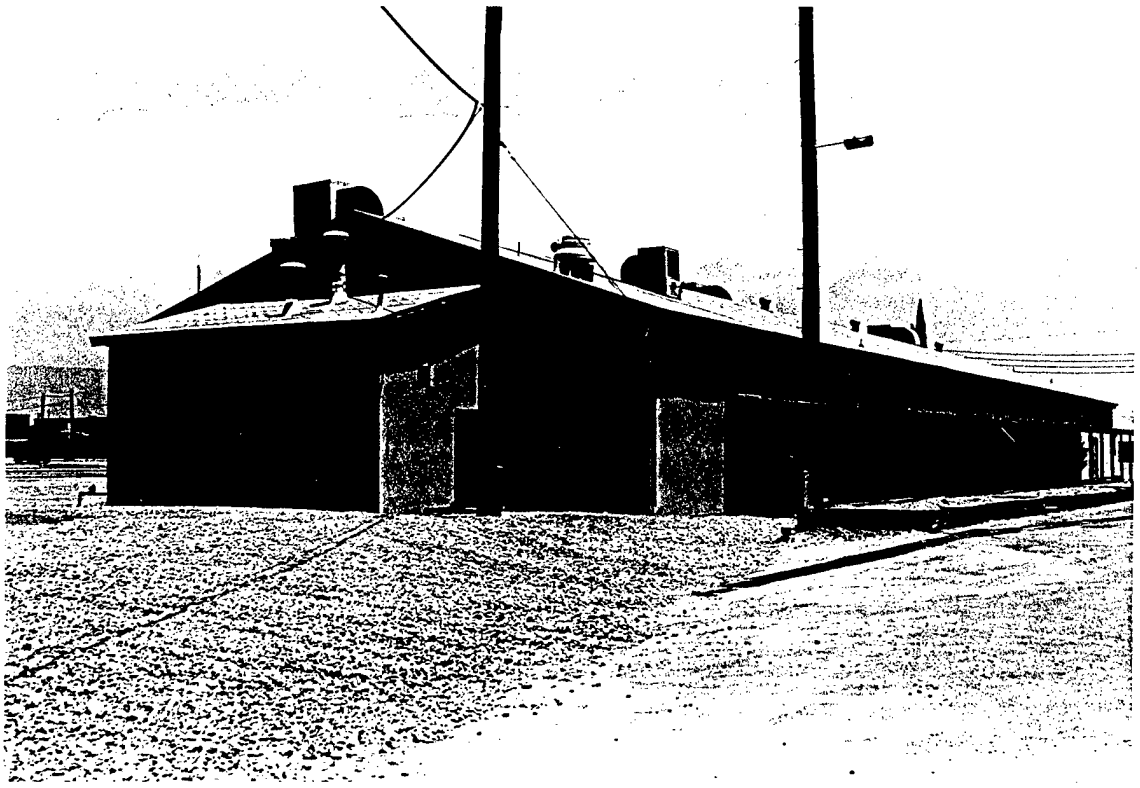


Figure 5. Building 107, facade.

including buildings 96, 97, 100, 101, 103, and 105 (see Figure 4). The only remaining visible sign of the railroad spur that once accessed the buildings is the grade.

The main building is 50 x 191 ft, with two offsets of 5 x 5 ft each, and an 11 x 24 ft wing (see Figure 5). The additions are located at the south end and to the north and west (Figures 6 and 7). The building is a one-story, gable-roofed structure with a concrete foundation and 9,914 sq ft of interior space. It has metal gutters and downspouts. New aluminum windows have replaced the original wood sash and the original doors have been replaced with aluminum and flush metal doors (Figure 8). The exterior was originally asbestos shingle siding on wood framing with 90-lb. gable-roll roofing. Currently, the exterior is stucco over the existing wood frame and the roof is clad with asphalt shingles. Eaves and gable ends have small overhangs trimmed in wood (Figure 9).

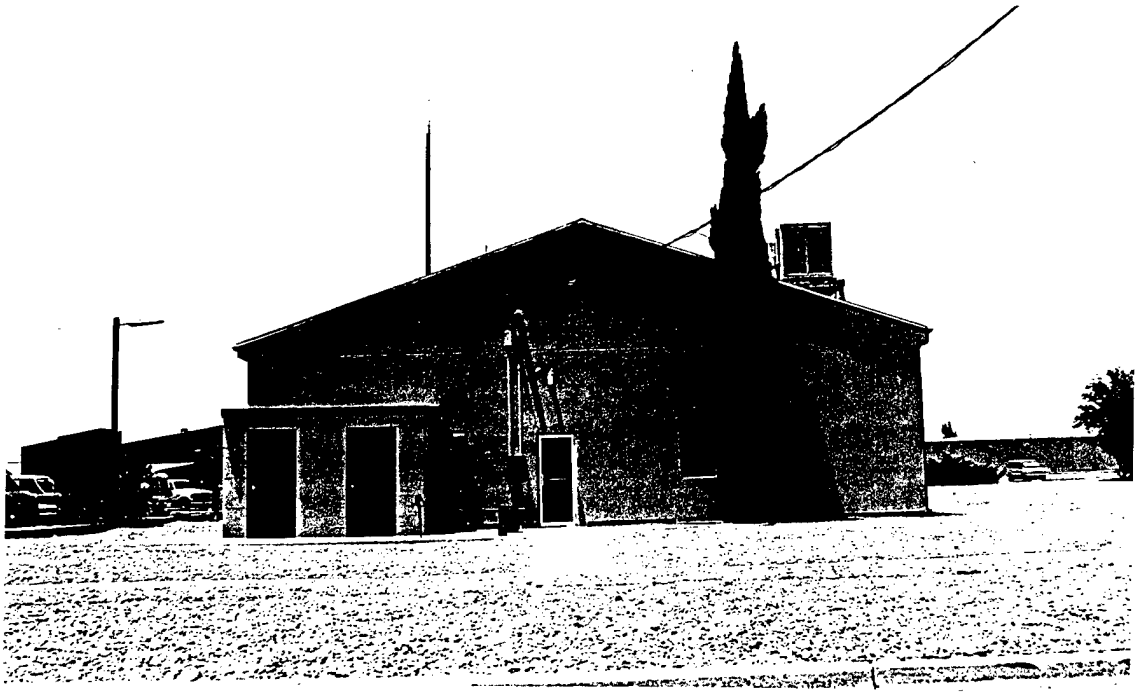


Figure 6. Building 107, east elevation.

Figure 7. Building 107, north elevation.

Figure 8. Building 107, northeast elevation.

Figure 9. Building 107, southeast elevation.

Original drawings for Building 107 were not located, although it is recorded as having a construction completion date of c1943. Since that time the building has undergone much alteration. There are 19 construction drawings on file: the earliest are dated 1969. Several improvements to the building were made during 1957, including the addition of 264 sq ft of interior space; in 1966, the interior of the building was rewired; and in 1969, there were three substantial modifications to the structure. The building was also altered in 1986 and 1989. Both the earliest and most recent floorplans show a central corridor with rooms off each side. The room layout, finishes, and door/window schedules have been extensively altered with each renovation.

Although the basic footprint of Building 107 is unchanged, other architectural, mechanical, electrical, and decorative features have changed. Nearly all original elements have been removed or are obscured and additions at the north, south, and west partially obscure the original elevations. An open porch, constructed using posts supporting a plywood, shed-type roof, extends along most of the principal (west) facade, altering the original appearance. Building 107 retains only its original scale and profile. In addition, the area around the building has been altered by demolition of the adjacent buildings and the construction of new buildings to the north. While the building remains in sound structural condition, it no longer retains historic integrity and its character-defining features have been so changed as to render the building ineligible for inclusion on the NRHP.

BUILDING 289: HAZARDOUS AND FLAMMABLE MATERIALS STORAGE

Building 289 is currently designated as a Nitrogen Liquid and Gaseous Oxygen Storage building (Figure 10). Real Property Accountable Record/289 indicates that it was completed in 1943 and has continuously functioned as a storage facility; it has been assigned as a Hazardous and Flammable Materials Storage Building (c1943) and Oil and Grease Storage (c1958). The building is one of the oldest, continuously used structures on the base. Neither the architect nor the builder is known.

Measured on a perpendicular axis, the structure is situated approximately 1,000 ft southeast of what was the main NE-SW runway (now the main taxiway runway access [Taxiway A]) near aircraft hangars and the taxiway/flightline. A large, five-bay aircraft hangar (Building 291) is located between the taxiway and Building 289, and may have been associated with the storage building. An early map of the base dated c1943 shows that at least five buildings historically situated between Building 289 and Building 291 have been demolished (see Figure 4).

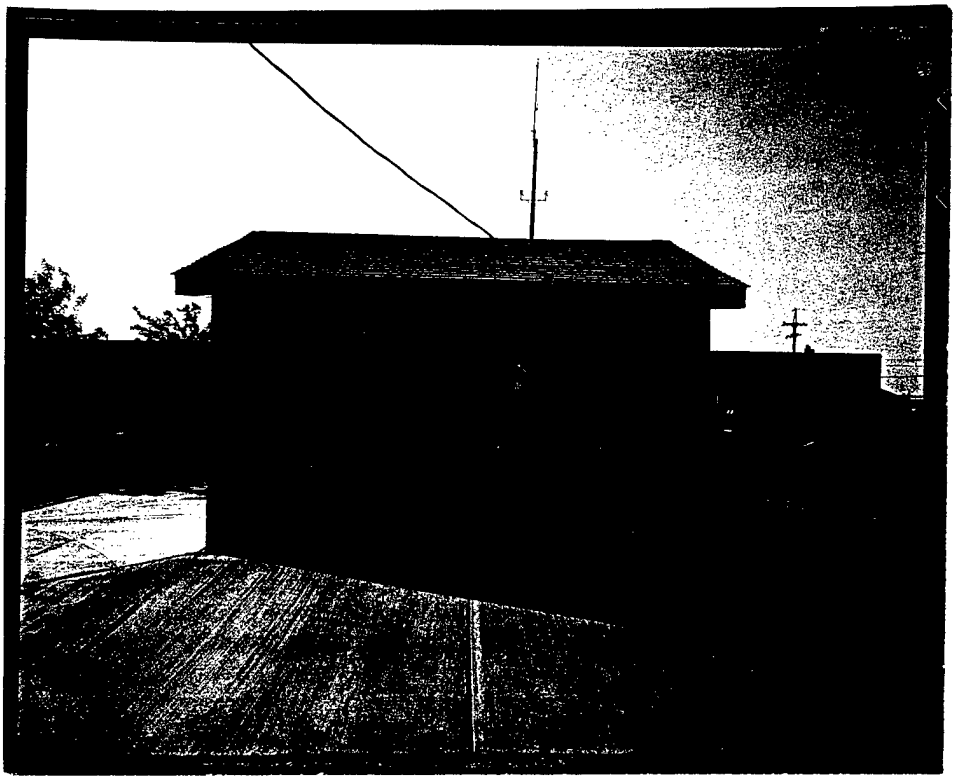


Figure 10. Building 289, entrance at northwest facade.

Building 289 is a small, one-story, gable-roofed structure. The outside dimensions of measure 14 ft- 7 inches x 16 ft- 4 inches, with 240 sq ft of interior space (see Figure 10). A concrete apron extends beyond the building footprint on all four sides, sloping away from the building to divert spills (Figure 11). The long dimension runs parallel to the NE-SW runway access, with the principal facade facing the runway. A chain link fence encloses both the building and the concrete apron (Figure 12). The walls are constructed of hollow structural clay tile on top of which sits a 10-inch concrete bond beam supporting the roof rafter loads. The original 1-inch wood sheathing supported by rafters has been replaced by asphalt shingles on what is thought to be the original wood frame. The roof rafters are 2 x 4-inch wood lumber spaced 2 ft on center along the northwest and southeast walls.

The rafters are joined at the ridge, forming the gable roof and showing a slight overhang at the walls. A concrete stem wall footing is cast directly below the structural clay walls, supporting the roof loads and wall weight. The floor is a cast-in-place concrete slab sloped from all four walls to a center floor drain. Liquid nitrogen and gaseous oxygen tanks are stored inside.

Building 289 is utilitarian in design, with no architectural or design embellishments (see Figure 10). Common construction materials and techniques were utilized. A single door is centrally placed at the principal (northwest) elevation. This door is left hand, ¾-inch thick, hollow metal, and shows an outward

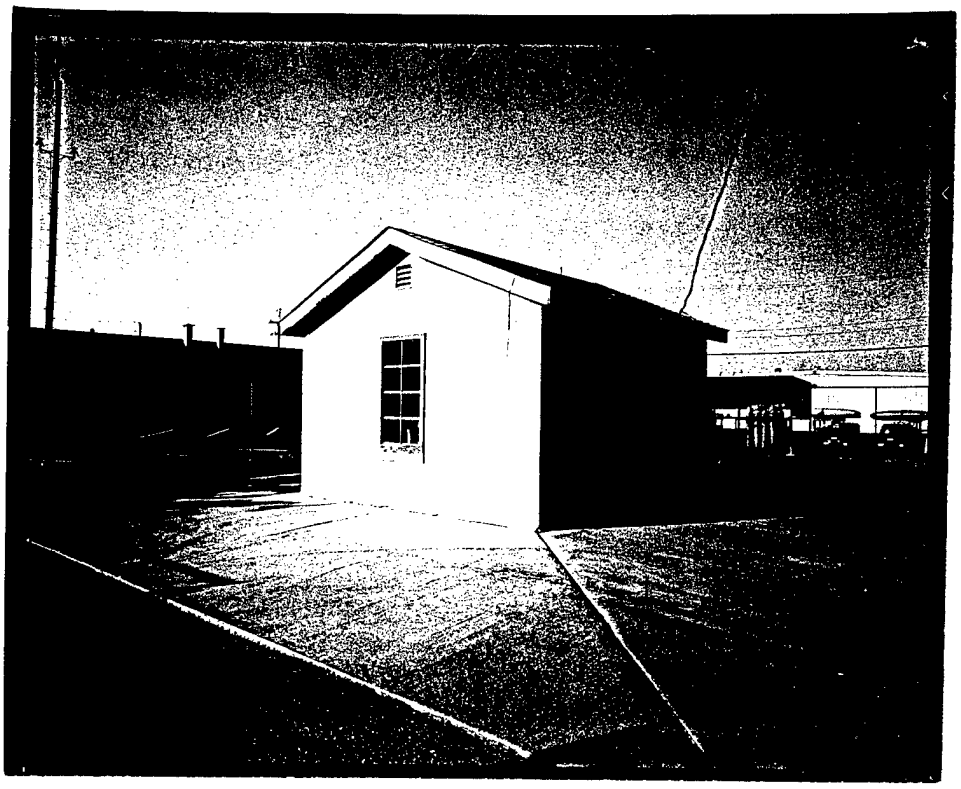


Figure 11. Building 289, concrete apron.

Figure 12. Building 289 fence, north elevation.

swing. The structural clay tile walls are exposed at both the interior and the exterior (Figure 13). Each tile is 12- (length) x 5- (height) x 7¼-inches (depth). The walls are one 7¼-inch tile thick. The interior and exterior surfaces have been recently painted. It could not be determined if the walls were originally painted. Fenestration is symmetrical. Framed wood louvers are located just below the eaveline on both sides of the northwest elevation door.

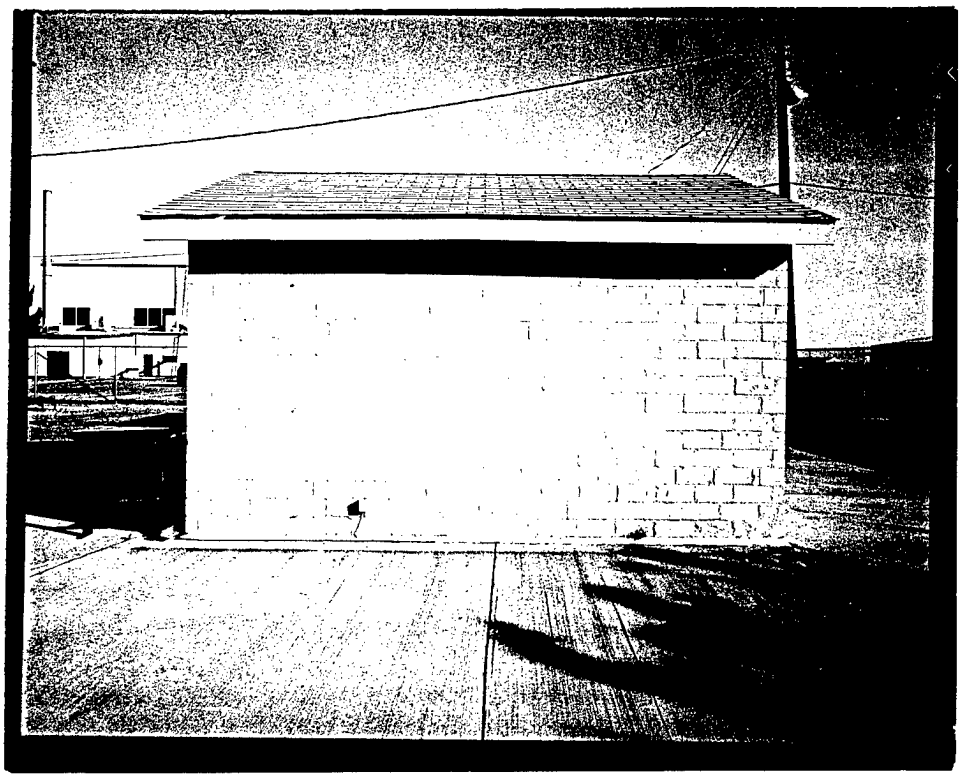


Figure 13. Building 289 rear, exterior clay tiles.

Two windows are centrally located, one each at the southwest and northeast elevations. Each window has been replaced with Plexiglass, due to storm damage to the original wooden windows in 1995 (Tagg, 1996 personal communication). A painted wood muntin grid is attached to 1 x 4-inch wood trim. A row of bricks on edge forms the sill. Framed wood louvers are centrally located above each of the two windows, just below the gable (Figures 14 and 15). The southeast elevation has no openings.

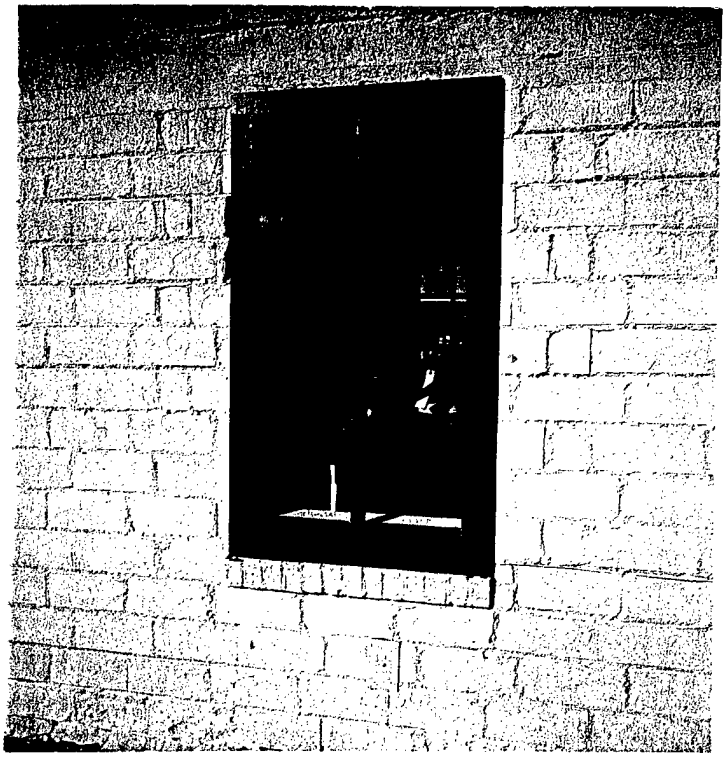


Figure 14. Building 289 window detail, northeast elevation.

Figure 15. Building 289 window with framed wood louver, northeast elevation.

The interior of Building 289 is a single room with a sloped concrete floor, painted masonry walls, and a recently installed, unfinished gypsum board ceiling. The floor to ceiling height is approximately 8 ft. The interior is designed to contain hazardous materials by means of a continuous concrete curb and a floor drain. The building is not heated or cooled. Electrical service is from an overhead line that feeds an exterior, surface-mounted, distribution panel and main breaker located immediately to the right of the door. The building has a lightning protection system consisting of grounding rods.

No original blueprints were located for Building 289, although Real Property Accountable Record/289 indicates that at least one drawing was prepared. According to an early map of the base, the building number was apparently changed from No. 286 to No. 289, although the date of the change was not recorded. No structural modifications to the building were noted.

Real Property Accountable Record/289 indicates that Building 289 was not necessarily associated with any particular hangar or building, but provided storage for the base, in general. However, Building 289 may have been historically associated with Building 291, an aircraft hangar just 200 ft to the northwest (Figure 16).

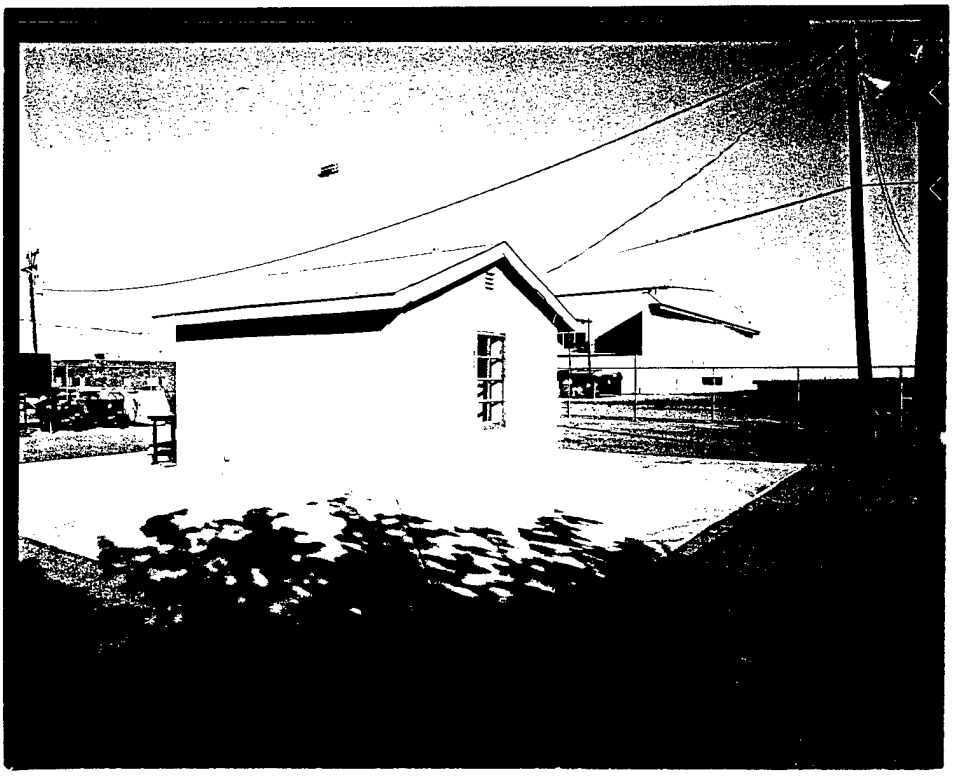


Figure 16. Building 289, east elevation, Building 291 in background.

Although Building 289 does retain historic integrity, it does not represent a distinctive style of design or workmanship, it is not directly associated with significant persons, and it is unlikely that further research into the structure would add considerable knowledge to our understanding of national, regional, or local involvement in World War II. Therefore, it does not meet National Register criteria for historic significance as an individual property and is considered ineligible for inclusion on the NRHP. However, it could be considered a potential contributing feature as part of either a district or multiple property nomination.

BUILDING 291: SMALL AIRCRAFT MAINTENANCE DOCK

Building 291, completed c1943, is one of the earliest World War II-era aircraft hangars constructed at HAFB (Figure 17). Originally designated a Maintenance Field Hangar, Real Property Accountable Record/291 indicates the building has had various designations over the years. These include: Ground Support Equipment Shop/Aircraft Ground Equipment Shop (c1963); Small Aircraft Maintenance Dock (c1970); Base Support & Equipment Warehouse (c1972); Aircraft Ground Equipment Shop/Storage Facility (c1975); and Maintenance Hangar (c1983). It is currently designated as a Small Aircraft Maintenance Dock for F-4 aircraft, and continues to function adjacent to an active airfield (Figure 18). Neither the architect nor the builder is known.

Building 291 is situated on what was the main NE-SW base runway, which is currently used as a main taxiway runway access (Taxiway A). The building shared the same parking apron with two other aircraft hangars (buildings 300 and 301), when it was constructed. According to a map of the base dated 1943, the hangars were not constructed to house a particular aircraft, but were for general use (see Figure 4). According to *Air Force Combat Units of World War II* (Maurer 1959:17), Building 291 could have housed B-17s, B-24s, P-47s, or B-29s. Although the principal elevation of the building continues to face the NE-SW runway access, several nearby buildings have been demolished, and several buildings have been added.

Building 291 is a steel-framed structure, eight bays wide and five bays deep. The overall dimensions of the building are 126 x 170 ft with 17,195 sq ft of interior space. Originally rectangular in shape, a boiler room offset at the south elevation and additions to the west elevation give Building 291 its irregular footprint. The main building is 102 x 151.5 ft, with a 20 x 20 ft and a 22 x 61 ft offset (Figure 19). Six large, exposed quadrangular trusses span approximately 110 ft in a north-south direction, creating five bays of uninterrupted hangar floor space. Offices flank the sides of the steel bays.

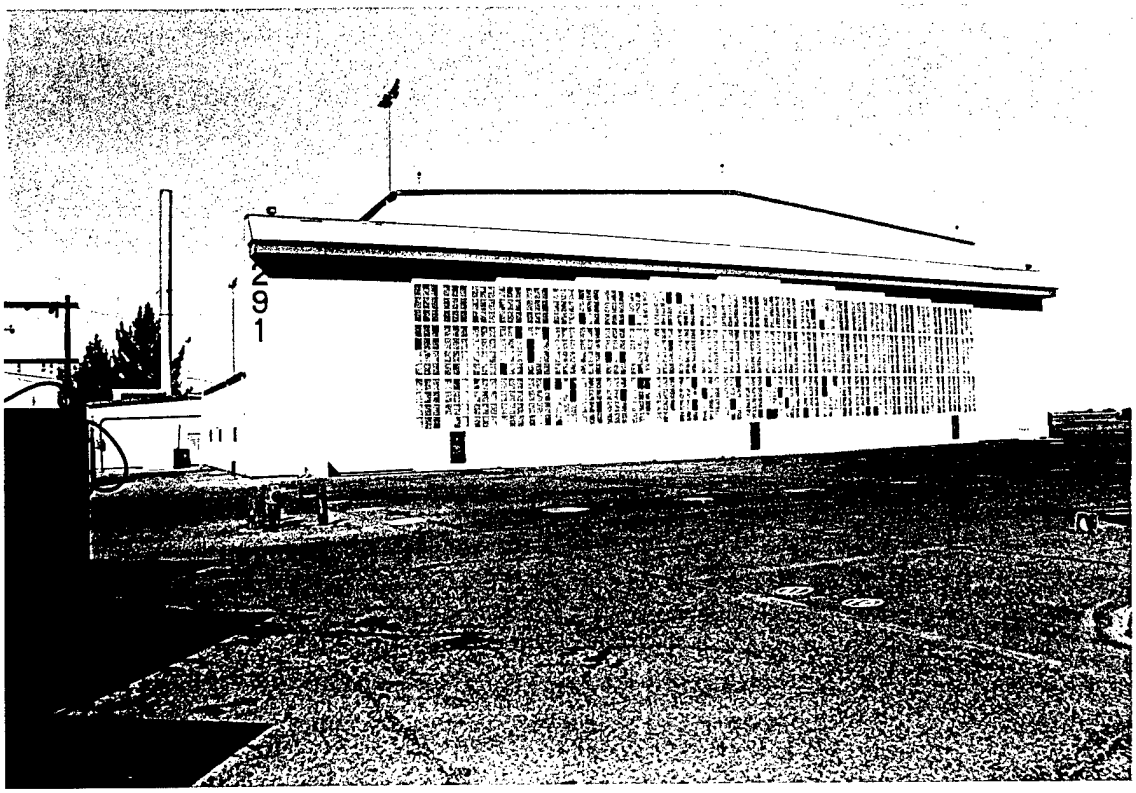


Figure 17. Building 291, east elevation.

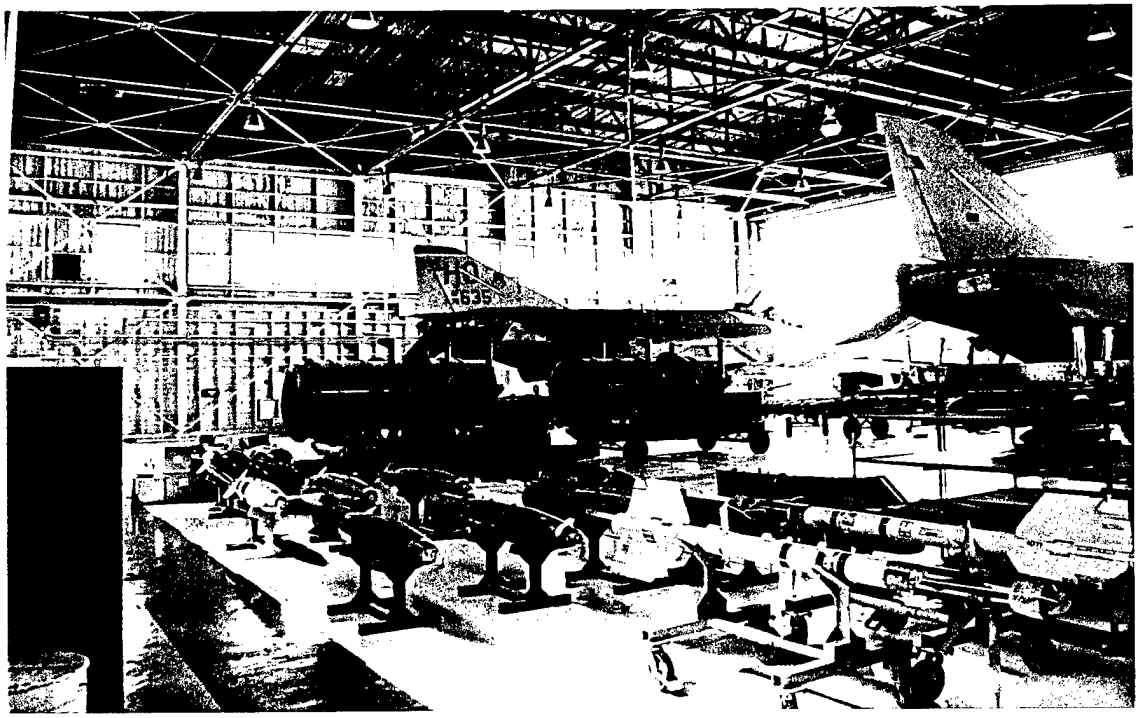


Figure 18. Building 291 interior view, bombs, missiles, and F-4 aircraft.

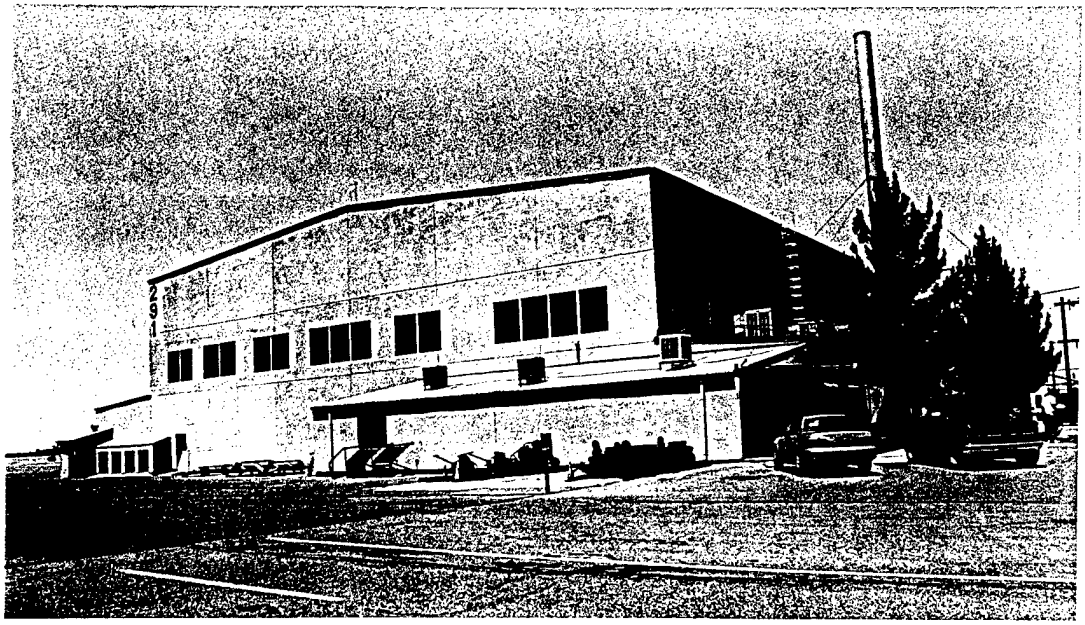


Figure 19. Building 291 offset, southwest elevation.

Built on a 6-inch concrete slab foundation with concrete piers, the clear floor width is approximately 100 ft. The steel trusses of the roof structure are supported by 'H' columns that are diagonally braced and support intermediate spandrels (Figure 20). The clear height to the bottom chord of the truss system is approximately 29 ft. The quadrangle shape of the trusses forms the slightly pitched, gable roof. The roof is felt roofing material on wood deck, supported by steel purlins. The exterior walls are covered with an insulation and siding system.

The most prominent features of Building 291 are the nine large, sliding steel doors at the east elevation and the extensive use of 1-inch dimensioned lumber wall and ceiling sheathing (Figure 21). The existing doors are original and show nine panels of lights (panes) (Figure 22). Three panels at the top of each door show nine lights each, three panels at the middle and lower sections show twelve lights each, totaling 99 lights per door. Pilot doors are cut into the middle and two end doors.

Since its construction, Building 291 has undergone extensive alterations. There are 59 construction drawings on file, with dates ranging from 1943 to 1992. With the exception of the east elevation, which remains as it was originally constructed, original door and window openings have been altered or obscured. The original wood personnel doors have been replaced with metal doors, and 166 double-hung, 16 light, wood sash

Figure 20. Building 291 interior, braced 'H' columns and spandrels.

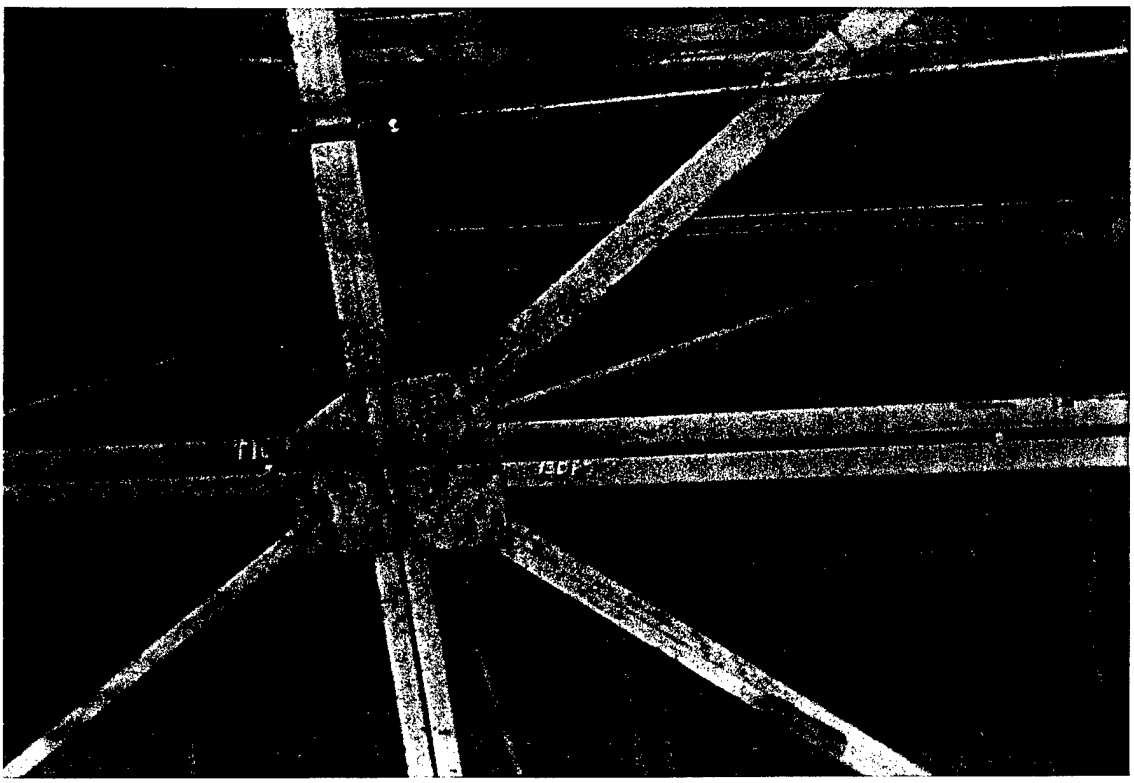


Figure 21. Building 291 interior, wood sheathing and metal truss.

Figure 22. Building 291 interior, nine-panel doors.

windows from the north, south, and west elevation have been removed. The original fenestration consisted of three rows of 6-ft- 6-inch (height) x 4-ft- 6-inch (width) windows, installed adjacent to one another and extending the entire length of the facade. Additionally, installation of the exterior insulation and siding system has replaced the original asbestos siding of the exterior walls. According to unnumbered CE File drawings and communication with building personnel, renovations in c1992 and c1996 resulted in the partitioning and other design changes to interior offices. These renovations to interior offices have obscured the original finishes.

The original structural and architectural elements of Building 291, such as the wood sheathing and decking, steel trusses, open bays, and large aircraft doors, remain intact. These elements allow it to maintain some elements of feeling and association with its construction and use as a World War II aircraft hangar. However, due to the extensive architectural modifications to the building, it no longer retains historic integrity. Building 291 is considered ineligible for inclusion on the NRHP.

CHAPTER 6

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

Buildings 107, 289, and 291 were all constructed in c1943 and are, thus, among the oldest standing structures on HAFB. All three buildings are scheduled for demolition as part of the German Air Force Beddown project. Architectural assessments of buildings 107, 289, and 291 indicate that all three are ineligible for listing on the National Register of Historic Places. Buildings 107 and 291 were determined to no longer retain historic integrity, and Building 289, while retaining historic integrity, does not satisfy the criteria for significance as an individual property.

BUILDING 107: GERMAN AIR FORCE ADMINISTRATION

Building 107 was constructed in c1943 for use as an academic classroom. It is currently functioning as an administrative building for the German Air Force. The building is stable and in good condition, although it has undergone extensive exterior alterations and several interior renovations since it was originally constructed. The room layout, finishes, and door/window schedules have been extensively altered with each renovation. While the building remains in sound structural condition, its historic integrity has been lost, and the building is considered ineligible for inclusion on the NRHP.

BUILDING 289: HAZARDOUS AND FLAMMABLE MATERIALS STRORAGE

Building 289 was constructed in c1943 to house hazardous and flammable materials needed for aircraft operations and maintenance. Built as a permanent structure, Building 289 has been continuously used as a support building since its original construction. The building remains intact, in good condition, and retains sufficient architectural character and original materials to retain its historic integrity; however, the building

does not satisfy the criterion for significance as an individual property described in National Park Service Bulletin 16A (1991:37). As a result, Building 289 is considered ineligible for inclusion on the NRHP.

BUILDING 291: SMALL AIRCRAFT MAINTENANCE DOCK

Completed in c1943, Building 291 is one of the earliest World War II-era aircraft hangars constructed at HAFB. It continues to function as a small aircraft maintenance dock. Nine large slider doors at the east elevation, the extensive use of wood sheathing and decking, the exposed steel trusses, and the resulting bays allow Building 291 to retain some elements of feeling and association with its construction and use as a World War II aircraft hangar. However, although the original core of the hangar remains intact, modifications and numerous additions have diminished the architectural integrity of the building. Because of the extensive architectural modifications, the building no longer retains historic integrity and is considered ineligible for inclusion on the NRHP.

CONCLUSIONS AND RECOMMENDATIONS

With the exception of a brief period after World War II, HAFB has continuously played a role in the country's defense. From bomber training in World War II, the testing of the atomic bomb, development and research of Cold War technology, to its current mission of training fighter pilots, the base has been the location of many ground-breaking events. Buildings 107, 289, and 291, as three of the oldest, continuously used structures on the base, have played a supporting role during these events.

In order to be deemed eligible for the NRHP properties must retain historic integrity and must demonstrate historic significance. A property that lacks either integrity or significance is not eligible for the National Register. Buildings 107 and 291 have been extensively modified since their original construction and, therefore, have not retained historic integrity. As a result, buildings 107 and 291 are considered ineligible for inclusion on the NRHP and HABS/HAER Level IV documentation was completed for each building.

Building 289, although it retains historic integrity, is considered ineligible for inclusion on the NRHP as an individual property. Unlike properties such as aircraft hangars and/or guided missile blockhouses, this hazardous materials storage structure was only indirectly involved with activities associated with World War II. It does not represent a distinctive style of design or workmanship, it is not directly associated with significant persons, and it is unlikely that further research into the structure itself would add considerable knowledge to our understanding of national, regional, or local involvement in World War II.

Although ancillary structures and buildings are generally not listed on the National Register as individual properties, Building 289 could potentially be considered a contributing element in a basewide World War II Multiple Property or District nomination. For this reason, HABS/HAER Level I documentation was completed for this building.

The photo-documentation, measured drawings, and research found in the survey forms and this report exhaust any future research potential of buildings 107, 289, and 291. This project complies with the National Historic Preservation Act of 1966 (as amended), and Air Force Instruction 32-7065. This undertaking will have no effect on any significant historic properties. Cultural resource clearance is recommended for all activities associated with this project.

REFERENCES CITED

Alamogordo News [Alamogordo, New Mexico]

1947 [Photograph and caption of GAPA missile], 24 July:1. Alamogordo, New Mexico. Quoted in Mattson and Tagg, *"We Develop Missiles, Not Air!":The Legacy of Early Missile, Rocket, Instrumentation, and Aeromedical Research Development at Holloman Air Force Base*. (Cultural Resources Publication No. 2:Holloman Air Force Base, 1995), 9.

Alamogordo Daily News [Alamogordo, New Mexico]

1961 [Article:All About Holloman], 1,7. Quoted in Mattson and Tagg, *"We Develop Missiles, Not Air!": The Legacy of Early Missile, Rocket, Instrumentation, and Aeromedical Research Development at Holloman Air Force Base*. (Cultural Resources Publication No. 2:Holloman Air Force Base, 1995), 9,11.

James Finis Briscoe

1981 In *Otero County Pioneer Family Histories*, Volume 2, 35. Quoted in Lori S. Hawthorne, *I Never Left a Place I Didn't Clean Up The Legacy of Historic Lands Administered by Holloman Air Force Base*. (Cultural Resources Publication No. 1: Holloman Air Force Base, New Mexico), 15.

ATC

1961 *History of the United States Air Force*, ATC Pamphlet 190-1, pp. 1-11. In *Readings in Growth and Development of Aerospace Power,* vol. 1, edited by P.C. Purdom, pp. 189-197. U.S. Air Force ROTC, Air University.

Bushnell, D.

1958a *Administrative History of the Aeromedical Field Laboratory 1951-1958 at the Air Force Missile Development Center, Holloman Air Force Base, New Mexico*. Historical Division, Office of Information Services, Air Force Missile Development Center, Air Research and Development Command. Holloman Air Force Base, New Mexico.

1958b *Major Achievements in Biodynamics: Escape Physiology at the Air Force Missile Development Center, Holloman Air Force Base, New Mexico, 1953-1958.* Historical Branch, Office of Information, Air Force Missile Development Center, Air Research and Development Command. Holloman Air Force Base, New Mexico.

1959 *AFMDC Origin and Operation of the First Holloman Track 1949-1956, Volume I, History of Tracks and Track Testing at the Air Force Missile Development Center.* Historical Branch, Office of Information, Air Force Missile Development Center, Air Research and Development Command. Holloman Air Force Base, New Mexico.

Culbertson, J.
1972 *The Effect of Holloman Air Force Base on Alamogordo.* Unpublished Master's thesis, Special Collections, New Mexico State University, Las Cruces.

Eidenbach, P.L.
1994 *Historic Preservation Plan for Holloman Air Force Base.* HAFB Report No. 1994-010. Human Systems Research, Inc., Tularosa, New Mexico.

Eidenbach, P.L., and R.L. Wessel
1994 *Reach for the Sky:The Military Architectural Legacy of Holloman Air Force Base, New Mexico, 1941 To 1961.* Draft. HAFB Report No. 1995-015. Human Systems Research, Inc., Tularosa, New Mexico.

Fulton, J., and S. Cooper
1996 *"Full Moral and Material Strength": The Early Cold War Architectural Legacy at Holloman Air Force Base c1950-1955.* Draft. Cultural Resources Publication No. 3. Holloman Air Force Base, New Mexico.

Futrell, R.F.
1964 Developments in Air Warfare. In *A Concise History of World War II*, edited by Brig. Gen. Vincent J. Esposito, pp. 324-333. Frederick A. Praeger, New York.

1967 Air Power in World War II. In *Readings in Growth and Development of Aerospace Power*, edited by P.C. Purdom, pp. 137-148. Originally published in *The United States Air Force*, edited by Monro McCloskey, pp. 37-60. Frederick A. Praeger, New York.

Greer, T.H.
1970 The Final Shaping of American Air Doctrine Prior to World War II. In *Readings in Growth and Development of Aerospace Power*, edited by P.C. Purdom, pp. 123-133. Originally published in *The Development of Air Doctrine in the Army Air Arm, 1917-1941*, pp. 101-103, 107-110, 115-126. USAF Historical Study No. 89. Maxwell Air Force Base, Alabama.

Hanrahan, J. S.
1959 Foreword. In *AFMDC: Origin and Operation of the First Holloman Track 1949 - 1956. Volume 1, History of Tracks and Track Testing at the Air Force Missile Development Center.* Historical Branch, Office of Information, Air Force Development Center. Holloman Air Force Base, New Mexico.

Hawthorne, L.S.
1994 *I Never Left a Place I Didn't Clean Up: The Legacy of Historic Lands Administered by Holloman Air Force Base.* Cultural Resources Publication No. 1. Holloman Air Force Base, New Mexico.

Maddox, R.J.
1992 *The United States and World War II.* Westview Press, Boulder, Colorado.

Mattson, W.O., and M.D. Tagg
1995 *"We Develop Missiles, Not Air!":The Legacy of Early Missile, Rocket, Instrumentation, and Aeromedical Research Development at Holloman Air Force Base.* Cultural Resources Publication No. 2. Holloman Air Force Base.

Maurer, M. (editor)
1959 *Air Force Combat Units of World War II*, 17,343. Quoted in Mattson and Tagg, *"We Develop Missiles, Not Air!": The Legacy of Early Missile, Rocket, Instrumentation, and Aeromedical Research Development at Holloman Air Force Base.* (Cultural Resources Publication No. 2:Holloman Air Force Base, 1995), 10.

Meeter, G. F.
1967 *The Holloman Story: Eyewitness Accounts of Space Age Research.* University of New Mexico Press, Albuquerque.

Purdom, P.C. (editor)
1970 *Readings in Growth and Development of Aerospace Power*, Volume 1. U.S. Air Force ROTC, Air University.

Sale, M., V. Gibbs, M. Landreth, M. Ernst, B. McCarson, and R. Giese
1996 *North Area Cultural Resources Inventory of 9,350 Acres, Holloman Air Force Base, Otero County, New Mexico.* HAFB Report No. 1995-019. Geo-Marine, Inc., El Paso, Texas.

Sonnichsen, C.L.
1980 *Tularosa: Last of the Frontier West.* University of New Mexico Press, Albuquerque.

Tagg, M.D.
1995 Letter to Mary Ann Anders, Historic Preservation Division, dated 1 Sept 95, regarding Historic Architecture Project (HPD Grant No. 35-93-HAFB-1).

Taylor, Michael R.
1995 Letter to Peter L. Eidenbach, Human Systems Research, dated 1 Dec 95, regarding HPD Grant No. 35-93-HAFB-1.

U.S. Department of the Interior
1981 *National Register Bulletin 16A: How to Complete the National Register Registration Form.* National Park Service, Washington, D.C.

Vandiver, M.
1996 Historical Background. In *Alamogordo Army Air Base, Alamogordo, New Mexico, 1942-1945*, pp. 1-4. Unpublished Master's thesis, Holloman Air Force Base, New Mexico.

Welsh, M.E.
1987 *U.S. Army Corps of Engineers: Albuquerque District 1935-1985.* University of New Mexico Press, Albuquerque.

Wilson, C., S. Hordes, and H. Walt
1989 *The South Central New Mexico Regional Overview*, 31. Quoted in *I Never Left a Place I Didn't Clean Up: The Legacy of Historic Lands Administered by Holloman Air Force Base.* (Cultural Resources Publication No. 1. Holloman Air Force Base, New Mexico), 19.

49 CES/CECNC

n.d. Maps and Drawings. 49 Civil Engineering, Engineering Flight map vault. Holloman Air Force Base.

49 CES/CERR

n.d. Real Property Accountable Records. 49 Civil Engineering, Real Property Office. Holloman Air Force Base.

49 CES/CEV

1943 Alamogordo Bombing Range Post Map Runway Improvements.

833rd Air Division

1989 *Historical Holloman Happenings*, 5,8. Quoted in Mattson and Tagg, *"We Develop Missiles, Not Air!": The Legacy of Early Missile, Rocket, Instrumentation, and Aeromedical Research Development at Holloman Air Force Base*. (Cultural Resources Publication No. 2:Holloman Air Force Base, 1995), 9-8.

APPENDIX A
HABS/HAER DOCUMENTATION

WORLD WAR II SURVEY: HOLLOMAN AIR FORCE BASE

NAME:
Current: GAF Administration.
Historic: Academic Classroom; Administrative.
Street Address: 950 Yucca Avenue, HAFB, 88330-7741.

Building Number: 107

I. GENERAL INFORMATION:

Current Condition: [ ] Intact [x] Needs maintenance [ ] Deteriorated [ ] Archaeological

Comments: Building 107 is in need of minor routine maintenance.

Degree of Alteration: [ ] None [ ] Minor [ ] Moderate [x] Major

Comments: Several renovations have altered both the exterior and interior.

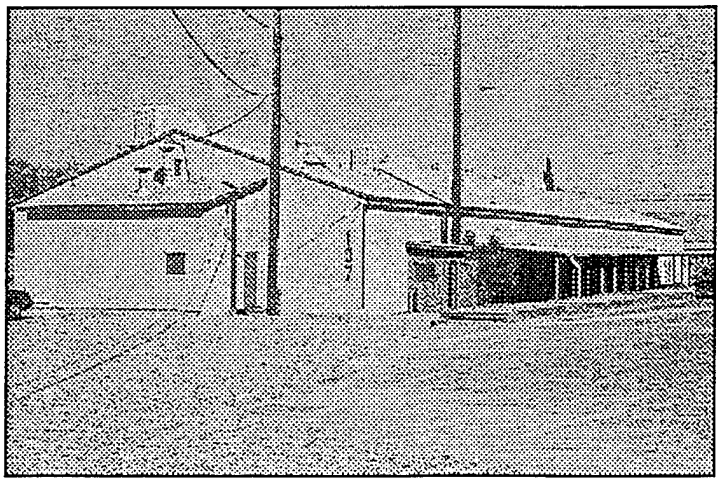
Preliminary Determination of National or State Register Eligibility:

[ ] Exceptional importance [ ] Further research recommended [x] Ineligible

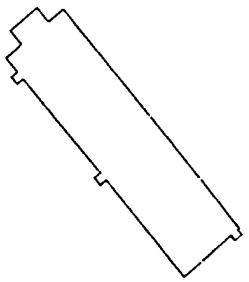
Comments: Building 107 has lost its historic integrity.

Legal: SW 1/4 SE 1/4 SW 1/4 T17S R8E Holloman, NM USGS 7.5'QUAD

Contact: Martyn Tagg, Archaeologist, 49 CES/CEV, 550 Tabosa Avenue, HAFB, NM 88330-8458.



BUILDING FOOTPRINT:
51' x 191'



Date of completion: c1943

II. ARCHITECTURAL DESCRIPTION:

(Give a visual description of the building. Include date of construction, whether actual or an estimate, and a discussion of any structural modifications to the building. List architect and builder, if known. Cite sources of information.)

Building 107 is a one story gable-roofed structure, exhibiting a rectangular footprint. The exterior has been stuccoed. Eaves and gable ends have small overhangs trimmed in wood. The roof is clad using asphalt shingles. The earliest construction drawings are dated 1969 (CE File #107-2, "*Alter Building 107*"). Real Property Accountable Record/107 gives a construction completion date of c1943. This record also states that subsequent improvements occurred throughout 1957, and refers to three substantial modifications in 1969. This building was also altered in 1986 (CE File #96-1) and 1989 (CE File #107-3). Both the early and most recent floorplans show a central corridor with rooms off of each side. The room layout, finishes, and door/window schedules have been extensively altered with each renovation. Although neither the original architect nor builder is known, W. C. Kruger and Associates, Santa Fe, NM prepared the plans for the March 1969 improvements (1969: CE File #107-2).

III. HISTORIC AND CURRENT USE:

Source: Original blueprints not located for Building 107. Information from Real Property Accountable Record/107.

Current Function: GAF Administration.

Original Function: Academic Classroom [?]. (See Section VIII).

Interim Functions: "Admin, Office" (c1962); "SP Operations" (c1974); "Social Act Fclty" (c1988).

IV. ORIGINAL ARCHITECTURAL AND STRUCTURAL FEATURES (IF KNOWN):

Source: Real Property Accountable Record/107.

Foundation: Concrete wall footings, concrete slab.

Exterior walls: Wood frame; cement asbestos shingle siding.

Roof: Slate.

Notable interior features, including machinery:

None noted.

V. CURRENT FEATURES IF DIFFERENT FROM ORIGINAL:

Source: 1986 CE File #96-1.

Foundation:

Exterior walls: Stucco over existing wood frame.

Roof: Asphalt rolled roofing.

Notable interior features, including machinery: N/A.

VI. BRIEF STATEMENT OF HISTORIC SIGNIFICANCE:

Constructed c1943, Building 107 may have originally provided storage for materials brought in by railroad. This building was subsequently improved during the 1960s for use as classroom and office space. Building 107 does not retain historic integrity. Building 107 is therefore ineligible for inclusion on the National Register of Historic Places.

VII. ASSOCIATED BUILDINGS:

Building 107 appears to have been historically associated with at least six similarly constructed buildings, including Buildings 100, 101, 103, 105, 96, and 97 (CE File #107-2). Each of these buildings, including Building 107 are (or were) located along a railroad spur. This railroad spur no longer exists.

VIII. ADDITIONAL COMMENTS AND MAINTENANCE RECOMMENDATIONS:

Original drawings for Building 107 were not located. Real Property Accountable Record/107 indicates that this building was completed c1943, making it one of the oldest standing structures on the Base. Building 107 was built on a railroad spur, situated near six other similarly constructed buildings. Due to its location on the railroad, Building 107 may have originally been used as a warehouse/storage facility. The earliest blueprints, "As-built" drawings dated 1969, indicate that Building 107 was subsequently improved for use as administrative offices. Real Property Accountable Record/107 indicates that Building 107 operated as an academic classroom, although no date is given. The railroad spur which once accessed these buildings has been abandoned. Only the railroad grade itself remains visible. An open porch constructed using posts supporting a shed plywood roof extends along most of the principal (west) facade, altering the original appearance. Building 107 has lost historic integrity due to extensive exterior alterations and several interior renovations. Building 107 is slated for demolition.

IX. ASSESSMENT OF HISTORIC INTEGRITY:

Location: Has any or all of the structure been moved from its original construction site?

[ ] Unable to determine [ ] Portions of the structure have been moved [x] Entire structure located at original site.

Comments:

Design: What percentage of the elements (structural, technological, architectural and decorative) remain intact?

[ ] Unable to determine [x] <25% intact [ ] 25% to 50% intact [ ] 50% to 75% intact [ ] >75% intact

Comments: Although the basic footprint for Building 107 remains unchanged, all other architectural, mechanical, electrical and decorative features have changed.

Setting: To what extent has the natural setting (i.e., topography, viewshed, and vegetation) been maintained?

[ ] Unable to determine [ ] Retains very little [x] Retains most [ ] Retains all or nearly all of its natural setting

To what extent does the cultural setting remain, including surrounding patterns of land use, and associated buildings?

[ ] Unable to determine [x] Retains very little [ ] Retains most [ ] Retains all or nearly all of its cultural setting

Comments: A railroad spur located adjacent to Building 107 has been removed. Only the grade remains visible. New buildings constructed to the north. Several nearby buildings have been demolished.

Materials: To what extent have the original materials used to construct this structure been retained?

Exterior: [ ] Unable to determine [x] <25% [ ] 25% to 50% [ ] 50% to 75% [ ] >75%

Interior: [ ] Unable to determine [x] <25% [ ] 25% to 50% [ ] 50% to 75% [ ] >75%

Comments: Interior finishes have changed several times. Aluminum windows replace original wood sashes. Aluminum and flush metal doors replace originals. Original roof and siding materials have been removed.

Workmanship: To what degree does the original structural and decorative craftsmanship remain visible?

Exterior: [ ] Unable to determine [x] <25% [ ] 25% to 50% [ ] 50% to 75% [ ] >75%

Interior: [ ] Unable to determine [x] <25% [ ] 25% to 50% [ ] 50% to 75% [ ] >75%

Comments: Nearly all original elements have been removed or are obscured. Additions at north, south, and west partially obscure original elevations. Building 107 retains original scale and profile only.

Feeling: To what extent does the building or structure retain its original natural, historic, and aesthetic character?

[ ] Unable to determine [x] Little or no integrity of feeling remains [ ] Some elements remain [ ] Retains integrity

Comments:

Association: Does this building or structure appear to retain a visible link with its historic period of significance?

[ ] Unable to determine [x] Little or no integrity remains [ ] Some elements remain [ ] Retains integrity

Comments:

X. SURVEYED BY:

Joe Freeman, AIA
101 West Sixth Street, Austin, TX 78701
for Geo-Marine, Inc., Plano, TX 75074
Sonya Cooper and Jean Fulton
2500 Jordan Road
Las Cruces, NM 88001

DATE: SUMMER 1996

HOLLOMAN AIR FORCE BASE 1947	1 Jul 57		1947	51045	T-107
INSTALLATION NAME AND NO.	DATE	DRAWING NO.	RP ACCOUNT NO.	CONTROL NO.	BUILDING NO.

DIMENSIONS *(Width x length)*

MAIN BUILDING	OFFSETS	WINGS	BASEMENTS
~~50x192'~~	2 ea 5x5'	11x24'	

MATERIALS

FOUNDATION	FLOOR	WALL	ROOF
Conc	Conc	Wood & Asb Sh.	Slate *Asph Roll Roofing*

HEATING

SOURCE	TYPE	FUEL
Furnace	Hot Air	Gas

NO. OF USABLE FLOORS	FIRE PROTECTION NO.	FIRE PROTECTION TYPE
1	4	EXTING

UTILITY CONNECTIONS

	BLDG EQPT	NO.	TOTAL CAPACITY
WATER 1-1½", 1-2" Galv.	AIR CONDITIONING		
SEWER ~~1-4"~~ 2 -4" VC	EVAPORATIVE COOLING	~~3~~ 6	46,000 cfm ~~2-9-10000 cfm 1-4500 cfm~~
ELECTRIC 4# 3/ 120/208V 225 Amps ~~3-#6~~ 110/220 V			
GAS 1-1"	MECHANICAL COOLING	~~2~~ 3	9 gph
STEAM			
CONDENSATE	HOT WATER FACILITIES	1	30 gal

CODE	
STATE	NEW MEXICO — ~~732~~35
ASSIGNMENT	~~AFSC~~ TAC — T ~~SYS~~
TYPE OF CONSTRUCTION	TEMPORARY — ~~3~~ T
CONDITION	Usable ~~USABLE-Class B-Force Use(S/Std) SUBSTANDARD In Use (Repl Rqrd)~~ — 3 1 ~~2 2 3~~
OCCUPANCY	AIR FORCE — AF
AIR FORCE INTEREST	OWNED — 1
UNIT OF MEASURE *(Other than area)*	
QUANTITY	
NOMENCLATURE	ACADEMIC, CLASSROOM — 171-153
CATEGORY	171-153

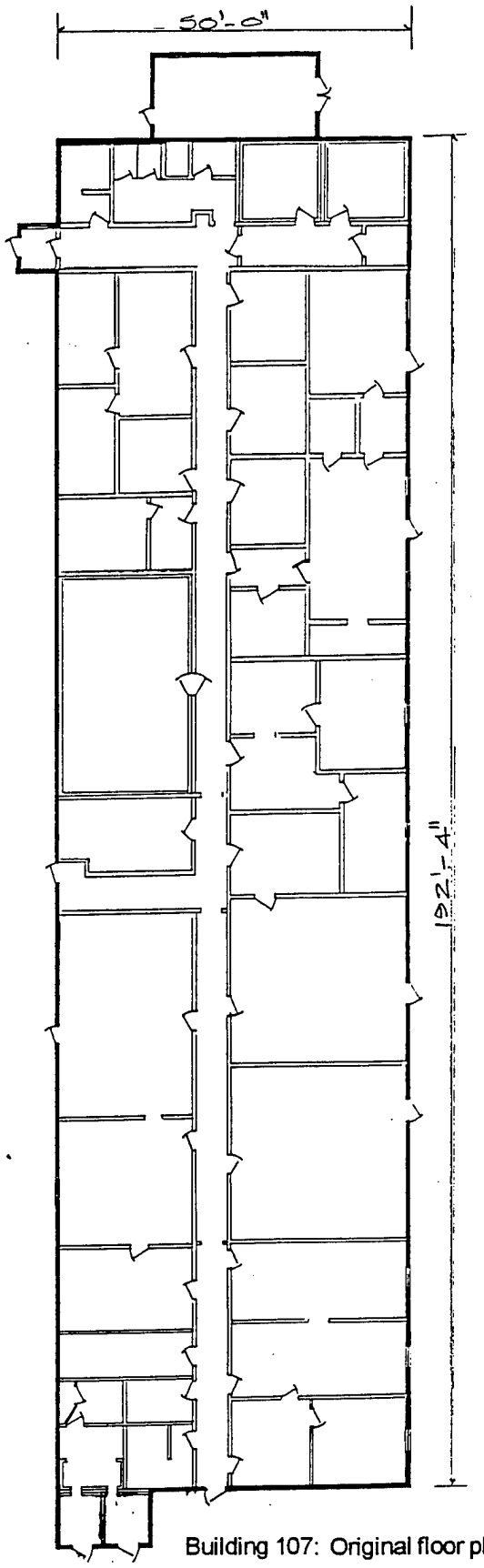
REMARKS

ADMIN, OFFICE	17 Sep 62	610-125
SP OPERATIONS	12 Mar 74	730-835
Social Act Fclty	7 Jun 88	610-911

VOUCHER NO.	DATE	DESCRIPTION	DATE COMPLETED	AREA UNIT AMOUNT	AREA UNIT TOTAL	COST		TOTAL COST	
1-58	1 Jul 57	Original Building	1943	9650 SF	9650 SF	~~8~~,961	00	8,961	00
		Subsequent Improvements thru May 57		264 SF	9914 SF	7,768	92	16,729	92
2-58	2 Jul 57	Transfer of "P" property				1,701	70	18,431	62
3-58	3 Jul 57	Acct No AF-8305-REF, as evidenced by Vo. 3-58, is transferred to ACct No 1947.							
4-58	16 Jul 57	Opening Balance entered on AF Form	1440						
		BALANCES FORWARDED			9,914			18,431	62

VOUCHER NO.	DATE	DESCRIPTION	DATE COMPLETED	AREA UNIT AMOUNT	AREA UNIT TOTAL	COST		TOTAL COST	
		BALANCES FORWARDED			9,914			18,431	62
214-58	19 Jun 58	Serv to instl lighting	1958			65	34	18,496	96
30-59	1 Oct 58	Inventory	1958						
286-60	22 Apr 60	Inventory	1960						
171-62	12 Feb 62	Inventory	1962						
68-63	17 Sep 62	Auth conv noted on heading	1962						
189-63	12 Mar 63	Inventory	1963						
1-65	1 Jul 64	Inventory	1964						
15-67	11 Aug 66	HO 31-6 Rewire interior	1966			3,000	00	21,496	96
282-69	22 Apr 69	16.1285 HO 113-8 Modifications&Rehab.	1969			37,739	50	59,236	46
282-69	22 Apr 69	Installation-Gen Set	1969			1,600	00	60,836	46
285-69	23 Apr 69	A/E Services HQ 113-8	1968			2,326	50	63,162	96
13-70	18 Jul 69	Auth Change in Condition Code	1969						
66-70	18 Nov 69	HO 113-8 Modifications	1969			3,649	61	66,812	57
67-70	18 Nov 69	WO 3758-8 Modifications	1969			17,549	96	84,362	53
170-70	19 Dec 69	Trfr Cost of Generator to 8115	1969			1,600 ~~1,600~~	00 ~~00~~	82,762	53
171-70	23 Dec 69	Authorized Change Noted	1969						
284-70	26 Jun 70	Condition Code Noted	1970						
72-0050	24 Sep 71	WO 2041 Install Cooler 4000 cfm	Aug 70			733	27	83,495	80
		BALANCES FORWARDED							

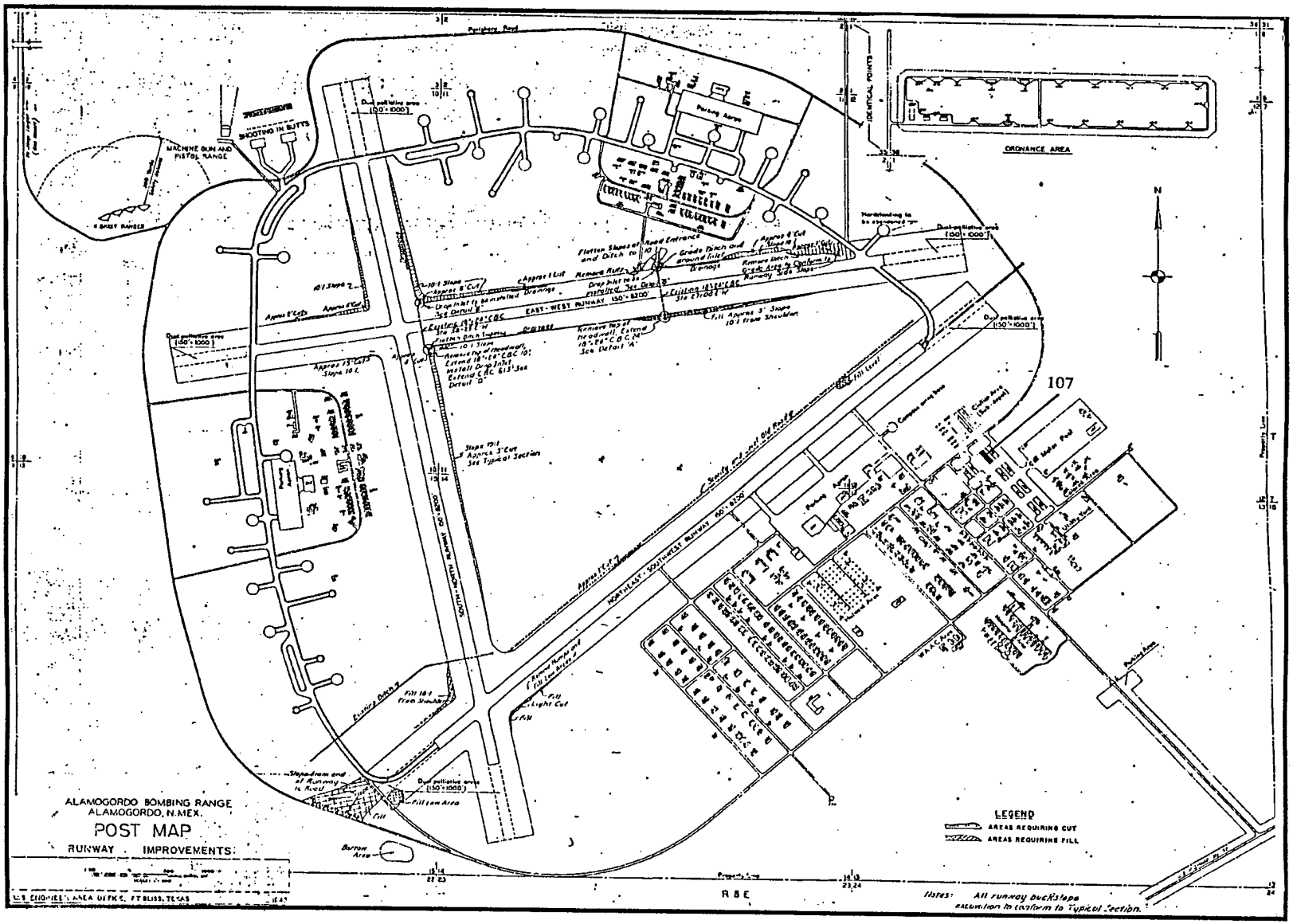
F



Not to scale.

Building 107: Original floor plan

State of New Mexico Office of Cultural Affairs Historic Preservation Division	**BUILDING 107** Holloman Air Force Base Alamogordo, New Mexico	Project No. 35-95-HAFB-4	Sources: 1989 CE File #107-3/3 of 8 1969 CE File #107-1/3 of 8 **Sheet 1 of 1**


ALAMOGORDO BOMBING RANGE
ALAMOGORDO, N.MEX.
POST MAP
RUNWAY IMPROVEMENTS:
LEGEND
AREAS REQUIRING CUT
AREAS REQUIRING FILL
ORDNANCE AREA
MACHINE GUN AND PISTOL RANGE
SHOOTING IN BUTTS
EAST-WEST RUNWAY 150' X 5200'
NORTHEAST-SOUTHWEST RUNWAY 150' X 5200'
R 8 E
Notes: All runway buckslope excavation in conform to typical section.

WORLD WAR II SURVEY: HOLLOMAN AFB

NAME: **Building Number:**
Current: Shop A/SE Storage Facility.
Historic: Warehouse, Hazard & Flammable Base.
Street Address: 560 Delaware Ave., HAFB, 88330-8010. **289**

I. GENERAL INFORMATION:

Current Condition: [x] Intact [ ] Needs maintenance [ ] Deteriorated [ ] Archaeological

Comments: Building 289 is in need of minor routine maintenance.

Degree of Alteration: [ ] None [ ] Minor [x] Moderate [ ] Major

Comments: Original door, windows, and roof have been replaced.

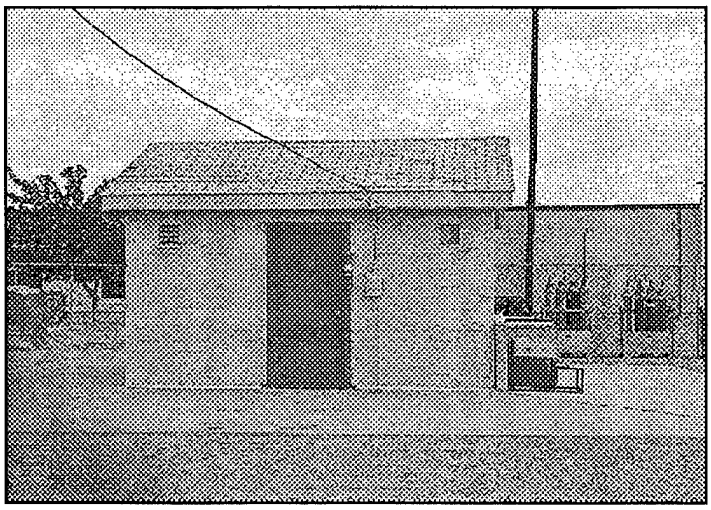
Preliminary Determination of National or State Register Eligibility:

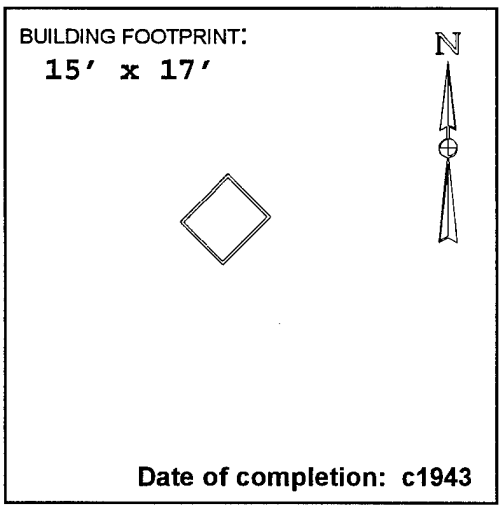
[ ] Exceptional importance [ ] Further research recommended [x] Ineligible

Comments: Does not meet National Register criteria for significance.

Legal: SW 1/4 SW 1/4 SW 1/4 T17S R8E Holloman, NM USGS 7.5'QUAD

Contact: Martyn Tagg, Archaeologist, 49 CES/CEV, 550 Tabosa Avenue, HAFB, NM 88330-8458.





II. ARCHITECTURAL DESCRIPTION:

(Give a visual description of the building. Include date of construction, whether actual or an estimate, and a discussion of any structural modifications to the building. List architect and builder, if known. Cite sources of information.)

Building 289 was constructed c1943, making it one of the oldest standing structures on Base (Real Property Accountable Record/289). Building 289 has been continuously used as a storage facility since its construction. No original blueprints were located for this building, although Real Property Record/289 indicates that at least one drawing, "CE File IE 146," was prepared.

Building 289 is a small, one-story, gable-roofed structure, constructed using structural clay tile walls atop a concrete foundation. Access is gained through a single door at the principal (north) elevation. The concrete slab floor slopes slightly to the center from all four walls. One window is located at the center of each of the east and west elevations. Wood louvered vents at the north elevation and the gable ends appear to be original. No structural modifications to the building were noted. Neither the architect nor the builder is known.

III. HISTORIC AND CURRENT USE:

Source: Real Property Accountable Record/289.

Current Function: Storage--Liquid and Gaseous Oxygen; Nitrogen.

Original Function: Storage--Hazardous and Flammable Materials.

Interim Functions: Storage--Oil and Grease (c1958).

IV. ORIGINAL ARCHITECTURAL AND STRUCTURAL FEATURES (IF KNOWN):

No original blueprints located for Building 289. Sources: Real Property Accountable Record/289; Field observations.

Foundation: Concrete slab; Concrete stem wall apparently supports clay tile.

Exterior walls: Hollow structural clay tile.

Roof: Slate on 1x wood sheathing supported by 2x4 wood rafters.

Notable interior features, including machinery:

None noted.

V. CURRENT FEATURES IF DIFFERENT FROM ORIGINAL:

Source: Summer 1996 site visit.

Foundation:

Exterior walls: Painted structural clay tiles.

Roof: Asphalt shingles on original [?] wood frame.

Notable interior features, including machinery: Liquid and gaseous oxygen tanks.

VI. BRIEF STATEMENT OF HISTORIC SIGNIFICANCE:

Building 289 has provided Base storage for volatile materials since its construction during World War II. This structure does not meet National Register criteria for historic significance. Building 289 does retain historic integrity, however, and could be considered a contributing element in either a District or Multiple Property nomination.

VII. ASSOCIATED BUILDINGS:

This building number has apparently changed from Building 286 to Building 289, according to an early map of the Base (CE Vault, IE 288 "Post Map"). Building 286/289 may have been associated with aircraft hangar Building 291. Several other surrounding buildings constructed c1943 have been demolished.

VIII. ADDITIONAL COMMENTS AND MAINTENANCE RECOMMENDATIONS:

Building 289 has served as a storage facility for volatile materials since it was constructed c1943. Although elements of materials and workmanship have been lost, Building 289 retains historic integrity in terms of location, design, setting, feeling, and association. Both original windows have been replaced with Plexiglass®. A removable painted wood muntin grid has been added, giving a multiple-light effect. New wood trim has also been added at each window. Unfinished drywall panels have been attached to an added plywood ceiling at the interior. The original door has been replaced with a metal door. Metal fascia wrap obscures the original wood fascia. Original window and door design, including trim, is unknown. Although retaining historic integrity, Building 289 does *not* meet National Register criteria for significance as an Individual Property (1991 *NPS Bulletin 16A*: 37). Building 289, however, could potentially be considered a contributing element in either a District or Multiple Property nomination. Because Building 289 is tentatively slated for demolition, further documentation will be provided.

IX. ASSESSMENT OF HISTORIC INTEGRITY:

Location: Has any or all of the structure been moved from its original construction site?

[ ] Unable to determine [ ] Portions of the structure have been moved [x] Entire structure located at original site.

Comments: Continues to be located near aircraft hangars and taxiway/flightline.

Design: What percentage of the elements (structural, technological, architectural and decorative) remain intact?

[ ] Unable to determine [ ] <25% intact [ ] 25% to 50% intact [ ] 50% to 75% intact [x] >75% intact

Comments: Both windows and one door have been replaced. Original ceiling obscured.

Setting: To what extent has the natural setting (i.e., topography, viewshed, and vegetation) been maintained?

[ ] Unable to determine [ ] Retains very little [x] Retains most [ ] Retains all or nearly all of its natural setting

To what extent does the cultural setting remain, including surrounding patterns of land use, and associated buildings?

[ ] Unable to determine [ ] Retains very little [x] Retains most [ ] Retains all or nearly all of its cultural setting

Comments: Viewshed has been altered due to the addition and demolition of several surrounding buildings (c1943 IE 288: "Base Map"). Continues to provide flightline support.

Materials: To what extent have the original materials used to construct this structure been retained?

Exterior: [ ] Unable to determine [ ] <25% [ ] 25% to 50% [ ] 50% to 75% [x] >75%

Interior: [x] Unable to determine [ ] <25% [ ] 25% to 50% [ ] 50% to 75% [ ] >75%

Comments: Gypsum board has been added at ceiling. Unable to determine whether or not rafters originally exposed. Windows and doors have been replaced.

Workmanship: To what degree does the original structural and decorative craftsmanship remain visible?

Exterior: [ ] Unable to determine [ ] <25% [ ] 25% to 50% [ ] 50% to 75% [x] >75%

Interior: [x] Unable to determine [ ] <25% [ ] 25% to 50% [ ] 50% to 75% [ ] >75%

Comments: Original blueprints not located. Due to the fact that Building 289 was constructed to store hazardous materials, interior and exterior finishes at ceiling and walls (paint) are probably not original.

Feeling: To what extent does the building or structure retain its original natural, historic, and aesthetic character?

[ ] Unable to determine [ ] Little or no integrity of feeling remains [x] Some elements remain [ ] Retains integrity

Comments: Continues to support flightline. Altered aesthetically by the replacement of original architectural elements.

Association: Does this building or structure appear to retain a visible link with its historic period of significance?

[ ] Unable to determine [ ] Little or no integrity remains [ ] Some elements remain [x] Retains integrity

Comments: Building 289 continues to operate as it was originally designed.

X. SURVEYED BY:

Joe Freeman, AIA
101 West Sixth Street, Austin, TX 78701
for Geo-Marine, Inc., Plano, TX 75074

Sonya Cooper and Jean Fulton
2500 Jordan Road
Las Cruces, NM 88001

DATE: SUMMER 1996

INSTALLATION NAME AND NO.	DATE	DRAWING NO.	RP ACCOUNT NO.	CONTROL NO.	BUILDING NO.
HOLLOMAN AIR FORCE BASE 1947	1 Jul 57	IE 146	~~52010-19~~ 1947	~~1101-27~~ ~~2001-95~~ 1401-6	51015 289

DIMENSIONS (Width x length)			
MAIN BUILDING	OFFSETS	WINGS	BASEMENTS
15x16'			

MATERIALS			
FOUNDATION	FLOOR	WALL	ROOF
Conc	Conc	Hollow Tile	Slate

HEATING		
SOURCE	TYPE	FUEL

NO. OF USABLE FLOORS	FIRE PROTECTION	
	NO.	TYPE
1	1	EXTING

UTILITY CONNECTIONS	BLDG EQPT	NO.	TOTAL CAPACITY
WATER 1-3/4" Galv	AIR CONDITIONING		
SEWER	EVAPORATIVE COOLING	1	2700 cfm (used)
ELECTRIC 2-#8 110/220 V	MECHANICAL COOLING	1	9 GPH
GAS 1-1" black	HOT WATER FACILITIES		
STEAM			
CONDENSATE			

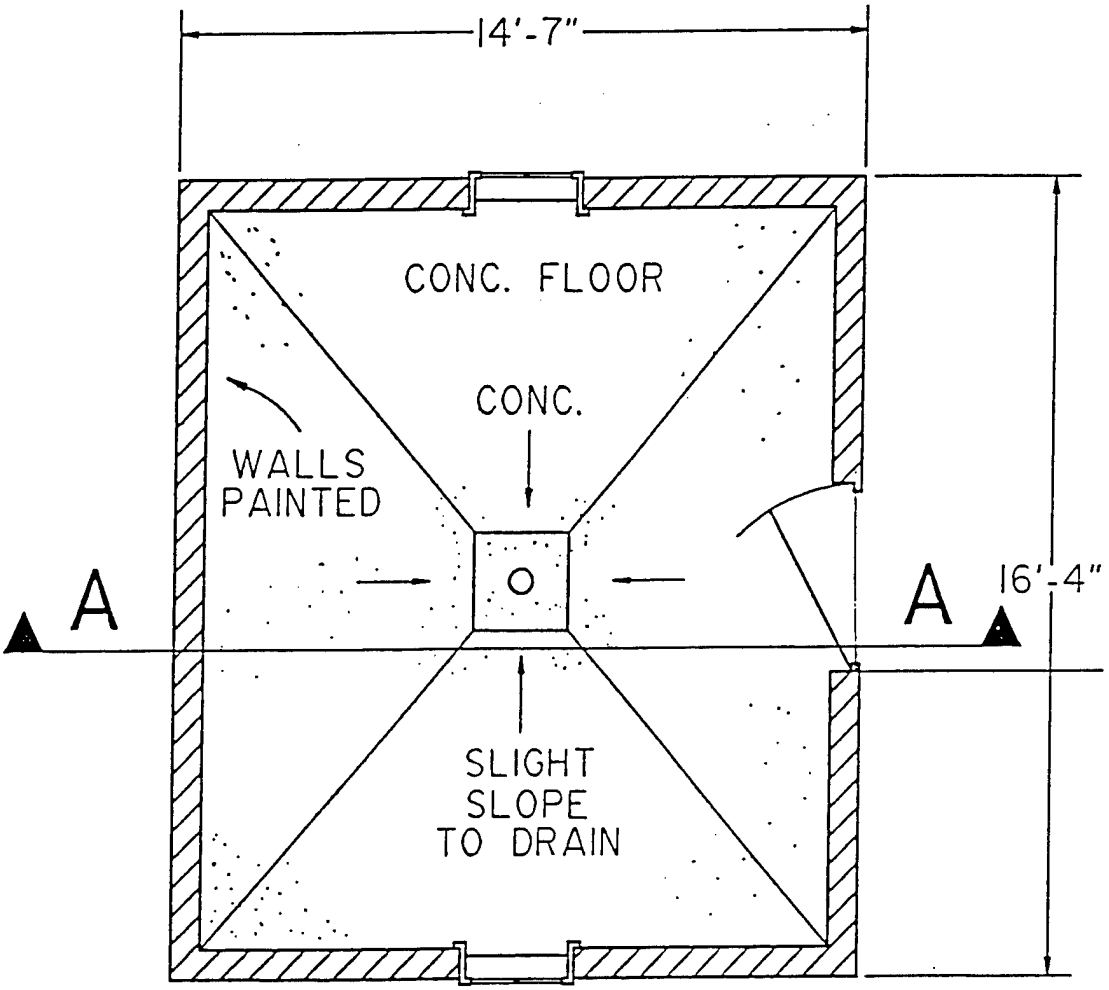
	CODE
STATE NEW MEXICO	35 ~~732~~
ASSIGNMENT ~~AFSO~~ TAC	T ~~SYS~~
TYPE OF CONSTRUCTION PERMANENT	~~3~~ P
CONDITION USABLE	1
OCCUPANCY AIR FORCE	AF
AIR FORCE INTEREST OWNED	1
UNIT OF MEASURE (Other than area)	
QUANTITY	
NOMENCLATURE WHSE, HAZARD & FLAM, BASE	442-243
CATEGORY	442-243

REMARKS

~~STOR, OIL & GREASE, BSE~~ 3 Nov 58 442-255
STOR OIL&GRSE BSE
SHP, AGE 218-712
SHP AGE/STOR FCLTY

VOUCHER NO.	DATE	DESCRIPTION	DATE COMPLETED	AREA UNIT AMOUNT	AREA UNIT TOTAL	COST		TOTAL COST	
1-58	1 Jul 57	Original Building	1943	240 SF	240 SF	360	00	360	00
		Subsequent Improvements thru May 57				6	00	366	00
3-58	3 Jul 57	Acct No AF-8305-REF, as evidenced by Vo 3-58, is transferred to Acct No 1947.							
4-58	16 Jul 57	Opening Balance entered on AF Form	1440						
30-59	1 Oct 58	Inventory	1958						
BALANCES FORWARDED					240			366	00

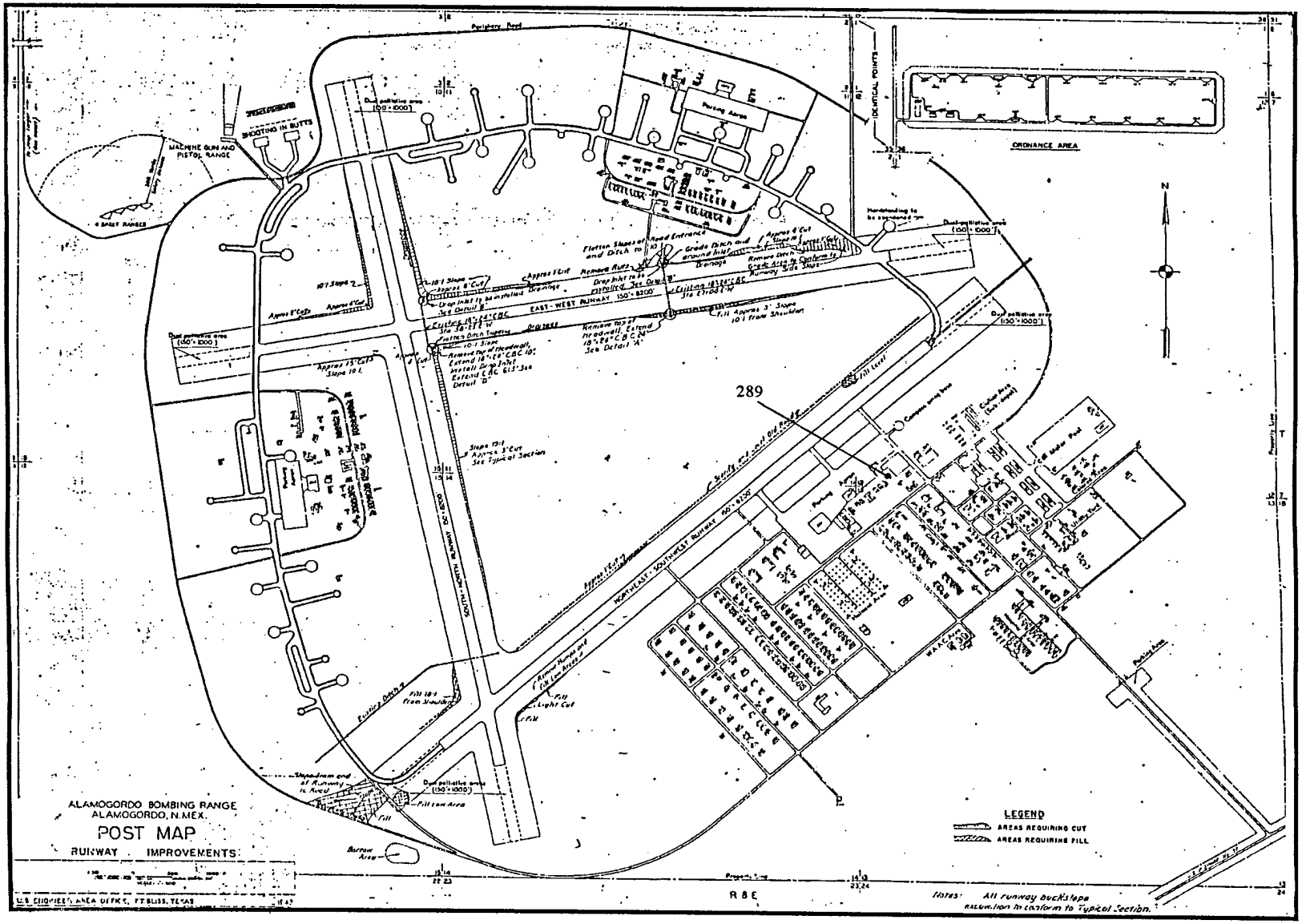
VOUCHER NO.	DATE	DESCRIPTION	DATE COMPLETED	AREA UNIT		COST		TOTAL COST	
				AMOUNT	TOTAL				
		BALANCES FORWARDED			240			366	00
84-59	3 Nov 58	Auth change in heading							
286-60	22 Apr 60	Inventory	1960						
171-62	12 Feb 62	Inventory	1962						
18-63	12 Mul 62	Serv to install heater	1962			82	98	448	98
189-63	12 Mar 63	Inventory	1963						
267-63	27 May 63	Remove heater	1963			82	98	366	00
1-65	1 Jul 64	Inventory	1964						
254-69	3 Apr 69	INVENTORY	1969						
72-0255	27 Dec 71	Authorized Change Noted in Heading	1971						
		BALANCES FORWARDED							



Building 289: Floor plan

Scale: ¼" = 1'

State of New Mexico Office of Cultural Affairs Historic Preservation Division	**BUILDING 289** Holloman Air Force Base Alamogordo, New Mexico	Project No. 35-95-HAFB-4	Source: Site visits June 10-11, 1996 **Sheet 1 of 1**


ALAMOGORDO BOMBING RANGE
ALAMOGORDO, N.MEX.
POST MAP
RUNWAY IMPROVEMENTS
289
LEGEND
AREAS REQUIRING CUT
AREAS REQUIRING FILL
ORDNANCE AREA
MACHINE GUN AND PISTOL RANGE
SHOOTING IN BUTTS
EAST - WEST RUNWAY 150' x 8200'
NORTHEAST - SOUTHWEST RUNWAY 150' x 8200'
NORTH - SOUTH RUNWAY 150' x 8200'
R 8 E
U.S. ENGINEER AREA OFFICE, FT BLISS, TEXAS

WORLD WAR II SURVEY: HOLLOMAN AIR FORCE BASE

NAME:
Current: Maintenance Dock, S/A.
Historic: Aircraft Hangar.
Street Address: 580 Delaware Ave., HAFB, 88330-8010.

Building Number: 291

I. GENERAL INFORMATION:

Current Condition: [ ] Intact [x] Needs maintenance [ ] Deteriorated [ ] Archaeological

Comments: Building 291 is in need of routine maintenance.

Degree of Alteration: [ ] None [ ] Minor [ ] Moderate [x] Major

Comments: All exterior elevations have changed. Interior offices renovated.

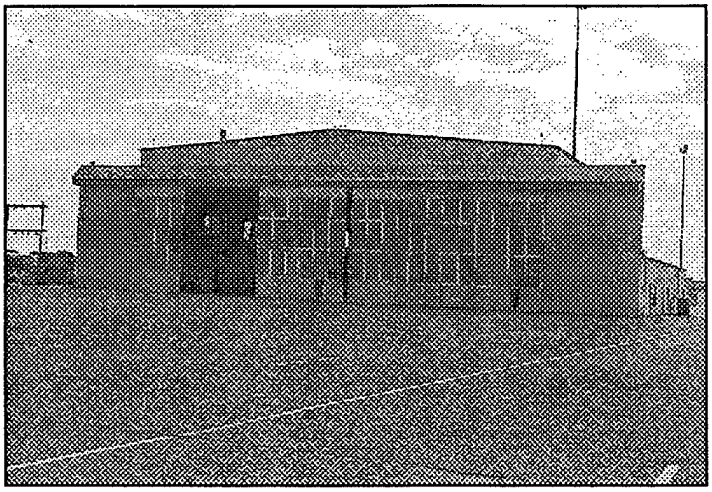
Preliminary Determination of National or State Register Eligibility:

[ ] Exceptional importance [ ] Further research recommended [x] Ineligible

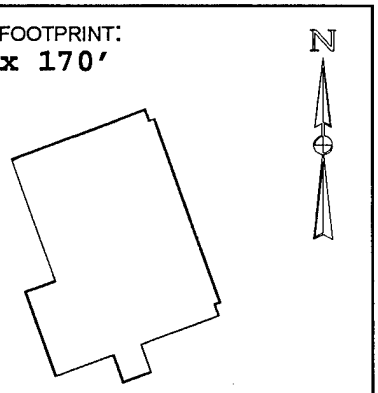
Comments: Building 291 no longer retains historic integrity.

Legal: SW 1/4 SW 1/4 SW 1/4 T17S R8E Holloman, NM USGS 7.5'QUAD

Contact: Martyn Tagg, Archaeologist, 49 CES/CEV, 550 Tabosa Avenue, HAFB, NM 88330-8458.



BUILDING FOOTPRINT:
126' x 170'



Date of completion: c1943

II. ARCHITECTURAL DESCRIPTION:

(Give a visual description of the building. Include date of construction, whether actual or an estimate, and a discussion of any structural modifications to the building. List architect and builder, if known. Cite sources of information.)

Building 291, completed c1943, is one of the oldest standing structures on Base (Real Property Accountable Record/291). Originally rectangular in shape, with a boiler room offset at the south elevation, additions to the west elevation give Building 291 its current irregular footprint. Six large, exposed quadrangular trusses span approximately 110' in the North-South direction, creating five bays of uninterrupted hangar floor space. The quadrangle shape forms the slightly pitched gable roof. Offices flank either side of the steel bays. The clear floor width is approximately 100'. The clear height to the bottom chord of the truss system is approximately 29'. The most prominent features of Building 291 consist of the nine large sliding steel doors at the east elevation, and the extensive use of wood wall and ceiling sheathing. The existing doors are the original doors, each showing nine panels of lights (panes). Three panels at the top of each door show nine lights each, three panels at the middle and lower show twelve lights each. Each door thus shows a total of 99 lights per door. Pilot doors are cut into the two end doors and the middle door. Neither the architect nor the builder is known.

III. HISTORIC AND CURRENT USE:

Source: Real Property Accountable Record/291.

Current Function: Maintenance Dock S/A.

Original Function: Hangar, Maintenance, Field.

Interim Functions: "Shop, Ground Supp Equip" (c1963); "Maint Dock, SA"(c1970); "Warehouse Supp & Equip Base" (c1972); "Shp Age/Stor Facility" (c1975); "HG, Maint" (c1983).

IV. ORIGINAL ARCHITECTURAL AND STRUCTURAL FEATURES (IF KNOWN):

Source: Real Property Accountable Record/291; 1942: CE File #291-1.

Foundation: Isolated concrete footings supporting steel columns. 6" slab.

Exterior walls: Asbestos shingles on 1" thick wood sheathing & wood frame.

Roof: Felt roofing on wood deck supported by steel purlins.

Notable interior features, including machinery:

Large open space. 1" thick wood wall sheathing and roof decking.

V. CURRENT FEATURES IF DIFFERENT FROM ORIGINAL:

Source: Field visit. Summer 1996.

Foundation:

Exterior walls: Insulation and finish siding system replaces original asbestos shingles.

Roof:

Notable interior features, including machinery:

VI. BRIEF STATEMENT OF HISTORIC SIGNIFICANCE:

Building 291 is one of the earliest World War II-era aircraft hangars constructed at Holloman AFB. Due to extensive architectural modifications, Building 291 no longer retains historic integrity.

VII. ASSOCIATED BUILDINGS:

Building 291 shared the same parking apron with two other aircraft hangars (Buildings 300 and 301) when it was constructed (Source: CE Files. IE Number 288 "Post Map" 1943). Buildings 291, 300, and 301 continue to be located along what was the Northeast-Southwest Runway (now used as a taxiway).

VIII. ADDITIONAL COMMENTS AND MAINTENANCE RECOMMENDATIONS:

Nine large slider doors at the east elevation, the extensive use of wood sheathing and decking, the exposed steel trusses and the resulting open interior bays allow Building 291 to retain some elements of feeling and association with its construction and use as a World War II aircraft hangar.

Building 291 no longer retains historic integrity, however, due to extensive renovations since its completion. Some 166 original double-hung, wood sash, 16-light windows have been removed at the south, north, and west elevations (1961: CE File #291-1; 1996: Field Visit). Original fenestration consisted of 3 rows of 6'-6" high x 4'-6" wide windows installed adjacent to one another, extending the entire length of the facade. Installation of the exterior insulation and finish system replaced the original asbestos siding (1989: CE File #291-9). With the exception of the east elevation, which remains essentially as it was originally constructed, original door and window openings have been altered or obscured. Original wood personnel doors have been replaced with metal doors. Renovations in c1992 and c1996 (according to unnumbered CE File drawings and communication with Building 291 personnel) resulted in partitioning and other design changes to the interior offices.

IX. ASSESSMENT OF HISTORIC INTEGRITY:

Location: Has any or all of the structure been moved from its original construction site?

[ ] Unable to determine [ ] Portions of the structure have been moved [x] Entire structure located at original site.

Comments: Continues to be situated on the Northeast-Southwest Base Runway, although this runway is currently used as a taxiway.

Design: What percentage of the elements (structural, technological, architectural and decorative) remain intact?

[ ] Unable to determine [ ] <25% intact [x] 25% to 50% intact [ ] 50% to 75% intact [ ] >75% intact

Comments: Some original structural and architectural elements remain intact, including wood sheathing and decking, steel trusses, open bays, and large aircraft doors.

Setting: To what extent has the natural setting (i.e., topography, viewshed, and vegetation) been maintained?

[ ] Unable to determine [ ] Retains very little [x] Retains most [ ] Retains all or nearly all of its natural setting

To what extent does the cultural setting remain, including surrounding patterns of land use, and associated buildings?

[ ] Unable to determine [ ] Retains very little [x] Retains most [ ] Retains all or nearly all of its cultural setting

Comments: Although principal elevations continues to face NE-SW runway access, several buildings in the nearby vicinity have been demolished, and several have been added. Continues to support runway operations.

Materials: To what extent have the original materials used to construct this structure been retained?

Exterior: [ ] Unable to determine [x] <25% [ ] 25% to 50% [ ] 50% to 75% [ ] >75%

Interior: [ ] Unable to determine [ ] <25% [x] 25% to 50% [ ] 50% to 75% [ ] >75%

Comments: Some 166 original twelve-light windows have been removed. Original siding replaced. Original doors replaced and openings altered.

Workmanship: To what degree does the original structural and decorative craftsmanship remain visible?

Exterior: [ ] Unable to determine [x] <25% [ ] 25% to 50% [ ] 50% to 75% [ ] >75%

Interior: [ ] Unable to determine [ ] <25% [x] 25% to 50% [ ] 50% to 75% [ ] >75%

Comments: Renovations to interior offices obscure original finishes. Exterior insulation and finish system alters exterior.

Feeling: To what extent does the building or structure retain its original natural, historic, and aesthetic character?

[ ] Unable to determine [ ] Little or no integrity of feeling remains [x] Some elements remain [ ] Retains integrity

Comments: Continues to operate as an aircraft maintenance facility adjacent to an active airfield. The loss of some 166 windows alters hangar aesthetically.

Association: Does this building or structure appear to retain a visible link with its historic period of significance?

[ ] Unable to determine [ ] Little or no integrity remains [ ] Some elements remain [x] Retains integrity

Comments: Although aircraft equipment and technology has evolved, Building 291 continues to function in the same capacity for which it was designed.

X. SURVEYED BY:

Joe Freeman, AIA
101 West Sixth Street, Austin, TX 78701
for Geo-Marine, Inc., Plano, TX 75074
Sonya Cooper and Jean Fulton
2500 Jordan Road
Las Cruces, NM 88001

DATE: SUMMER 1996

HOLLOMAN AIR FORCE BASE	1947	1 Jul 57		1947	51015	S-291
INSTALLATION NAME AND NO.		DATE	DRAWING NO.	RP ACCOUNT NO.	CONTROL NO.	BUILDING NO.

DIMENSIONS (Width x length)				CODE
MAIN BUILDING	OFFSETS	WINGS	BASEMENTS	
~~100' x 150'~~ 102'x151'6"	20'x20' ~~22' x 61'~~ 22'x61'			

MATERIALS			
FOUNDATION	FLOOR	WALL	ROOF
conc	conc	Metal Frame Asb Shingles	Metal Frame Tar Paper

HEATING		
SOURCE	TYPE	FUEL
Boiler	Steam, Unit Heaters	gas

NO. OF USABLE FLOORS	FIRE PROTECTION	
	NO.	TYPE
1	6	EXTING

UTILITY CONNECTIONS	BLDG EQPT	NO.	TOTAL CAPACITY
WATER 2-1"	AIR CONDITIONING	~~1~~	~~4000 CFM~~
SEWER 1-~~4~~"	EVAPORATIVE COOLING	~~10~~ 9	~~7-10000 efm 2-5000 efm 1-4000 efm-7500~~
ELECTRIC 4-#2 (250,000MM) 110/220 V 440V			
GAS 1-1"	MECHANICAL COOLING	~~N~~ 2	9 gph
STEAM			
CONDENSATE	HOT WATER FACILITIES	1	30 Gal

	CODE
STATE: NEW MEXICO	35 ~~732~~
ASSIGNMENT: ~~AFSC~~ TAC	~~SYS~~ T
TYPE OF CONSTRUCTION: Mobilization	~~2~~ S
CONDITION: Usable ~~Class B Repl Reqrd~~	~~1 2~~ ~~3~~ 1
OCCUPANCY: AIR FORCE	AF
AIR FORCE INTEREST: Owned	1
UNIT OF MEASURE (Other than area)	~~EA~~
QUANTITY	~~3~~
NOMENCLATURE: ~~HANGAR, MAINT, FIELD~~	~~211-111~~
CATEGORY	~~211-111~~

REMARKS

~~SHOP, GRND SUPP EQP 14 Jun 63 218-712~~
~~SHP GSE AGE SHP AGE 218-712~~
~~MAINT DOCK, S/A 20 Apr 70 211-177~~
~~WHSE SUP&EQUIP BSE 4 Apr 72 442-758~~
~~SHP AGE/STOR FCLTY 7 May 75 218-712~~
~~HG, MAINT 23 May 83 211-111~~
Maint Dock S/A 10 Aug 92 211-177

VOUCHER NO.	DATE	DESCRIPTION	DATE COMPLETED	AREA UNIT AMOUNT	AREA UNIT TOTAL	COST	TOTAL COST
1-58	1 Jul 57	Original Building	1943	15000 SF	15000 SF	61,575 00	61575 00
		Subsequent Improvements thru May 57		1764 SF	16764 SF	79,341 52	140,916 52
2-58	2 Jul 57	Transfer of "P" property				6,658 20	147,574 72
3-58	3 Jul 57	Acct No AF-8305-REF, as evidenced by Bo. 3-58, is transfeered to Acct No. 1947					
4-58	16 Jul 57	Opening Balance entered on AF Form 1440					
		BALANCES FORWARDED			16,764		147,574 72

VOUCHER NO.	DATE	DESCRIPTION	DATE COMPLETED	AREA UNIT AMOUNT	AREA UNIT TOTAL	COST		TOTAL COST	
		BALANCES FORWARDED			16,764			147,574	72
215-58	19 Jun 58	Serv to instl lights				112	18	147,686	90
30-59	1 Oct								
83-	10 Oct 58	Inventory	1958						
143-59	13 Feb 59	Install Air Conditioner	1959			809	52	148,496	42
286-60	22 Apr 60	Inventory	1960						
171-62	12 Feb 62	Inventory	1960						
171-62	12 Feb 62	Inventory	1962						
225-62	24 May 62	Serv-Install cooler HO 52-2	1962			6,300	00	154,796	42
189-63	12 Mar 63	Inventory	1963						
283-63	14 Jun 63	Auth Change in Heading noted	1963						
1-65	1 Jul 64	Inventory Removed Heating Plant				2,700	00	152,096	42
61-66	15 Sep 65	Heating Plant	1965			2,700	00	154,796	42
166-66	3 May 66	Inventory	1966						
136-67	8 Feb 67	Replace Boiler	1966			1,442	00	156,238	42
200-68	29 May 68	Authorized Change Noted in Heading	1968						
4-69	2 Jul 68	Transfer of Equipment (Air Compressor)	1968			2,030	00	158,268	42
17-69	19 Jul 68	Removal of Heat Plant	1968			4,142	00	154,126	42
254-69	3 Apr 69	INVENTORY	1969						
290-69	24 Apr 69	Installation-Exh Sys WO 1150-69	1969			1,234	44	155,360	86
26-70	5 Sep 69	Auth Change in Condition Code	Sep 69						
		BALANCES FORWARDED							

GPO : 1956 O - 405198

Holloman AFB, N. Mex.	1947	20 Apr 70	AF-1947	31003	HG,=MAINT=(211-111)	291
INSTALLATION NAME AND NUMBER		DATE	RP ACCOUNT NO.	CONTI	ILITY NOMENCLATURE AND NO.	Maint Dock S/A

VOUCHER NO.	DATE	DESCRIPTION	DATE COMPLETED	AREA UNIT AMOUNT	AREA UNIT TOTAL	COST		211-177 TOTAL COST	
		Balance Carried Forward.....	Apr 1970		16,764 SF			$ 155,360	86
218-70	20 Apr 70	Authorized Change Noted in Heading	Apr 70						
71-3009	15 Apr 71	Auth Change in Condition Code	Apr 71						
72-0378	4 Apr 72	Authorized Change Noted in Heading	Apr 72						
73-0074	20 Sep 72	WO 5741 242' Chain-Link Fence inside Bldg.	1972		17,195	1,134	22	156,495	08
83-0143	23 May 83	Auth chg in nomenclature	23 May 83						
		BALANCES FORWARDED							

HOLLOMAN AFB
INSTALLATION NAME AND NUMBER

DATE

218-712
RP ACCOUNT NO.

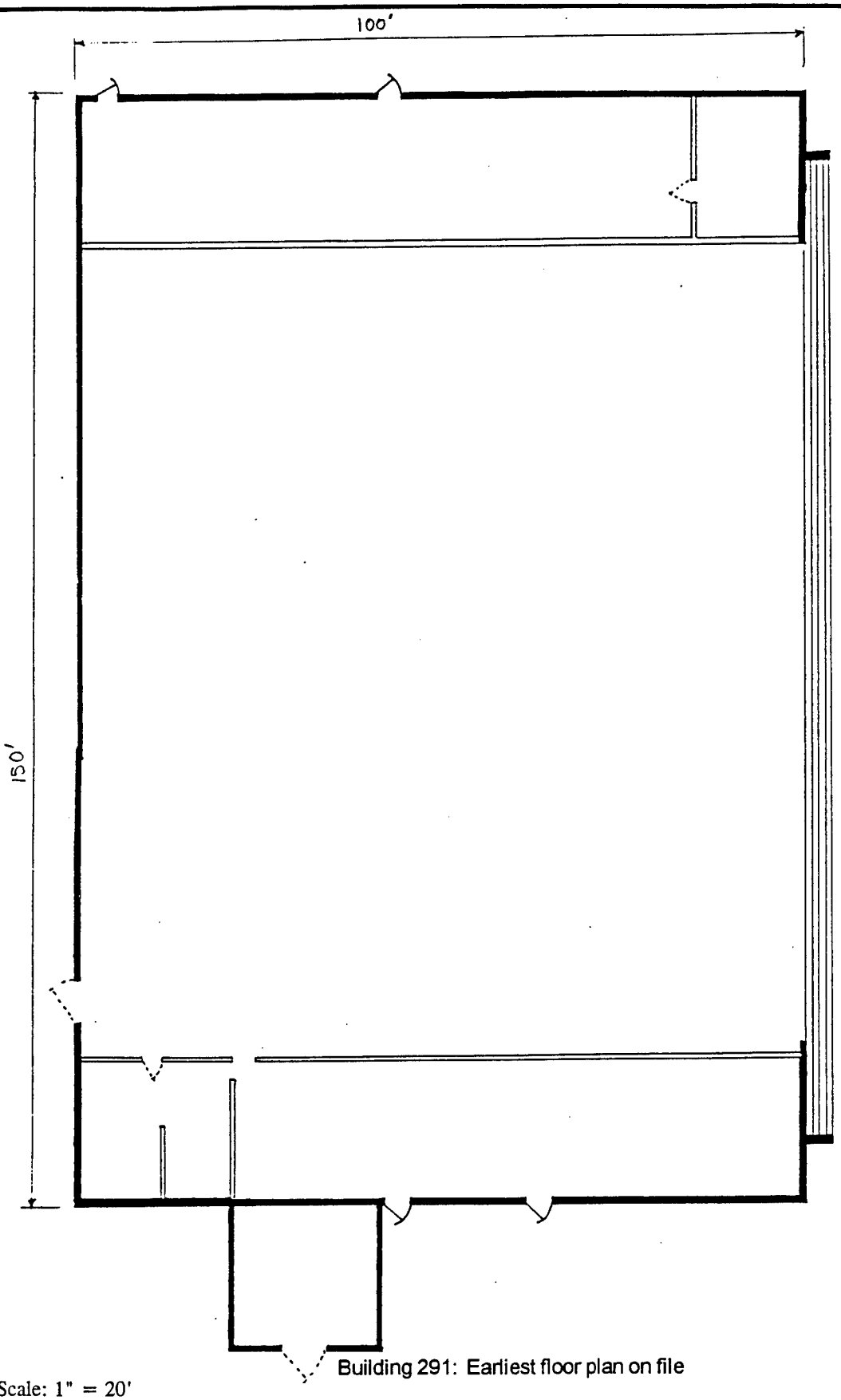
-52010 51015
CONTROL NO.

SHP AGE/STOR FCLTY HG MAINT (211-111)
FACILITY NOMENCLATURE AND NO.

Maint Dock S/A 291 211-177

B

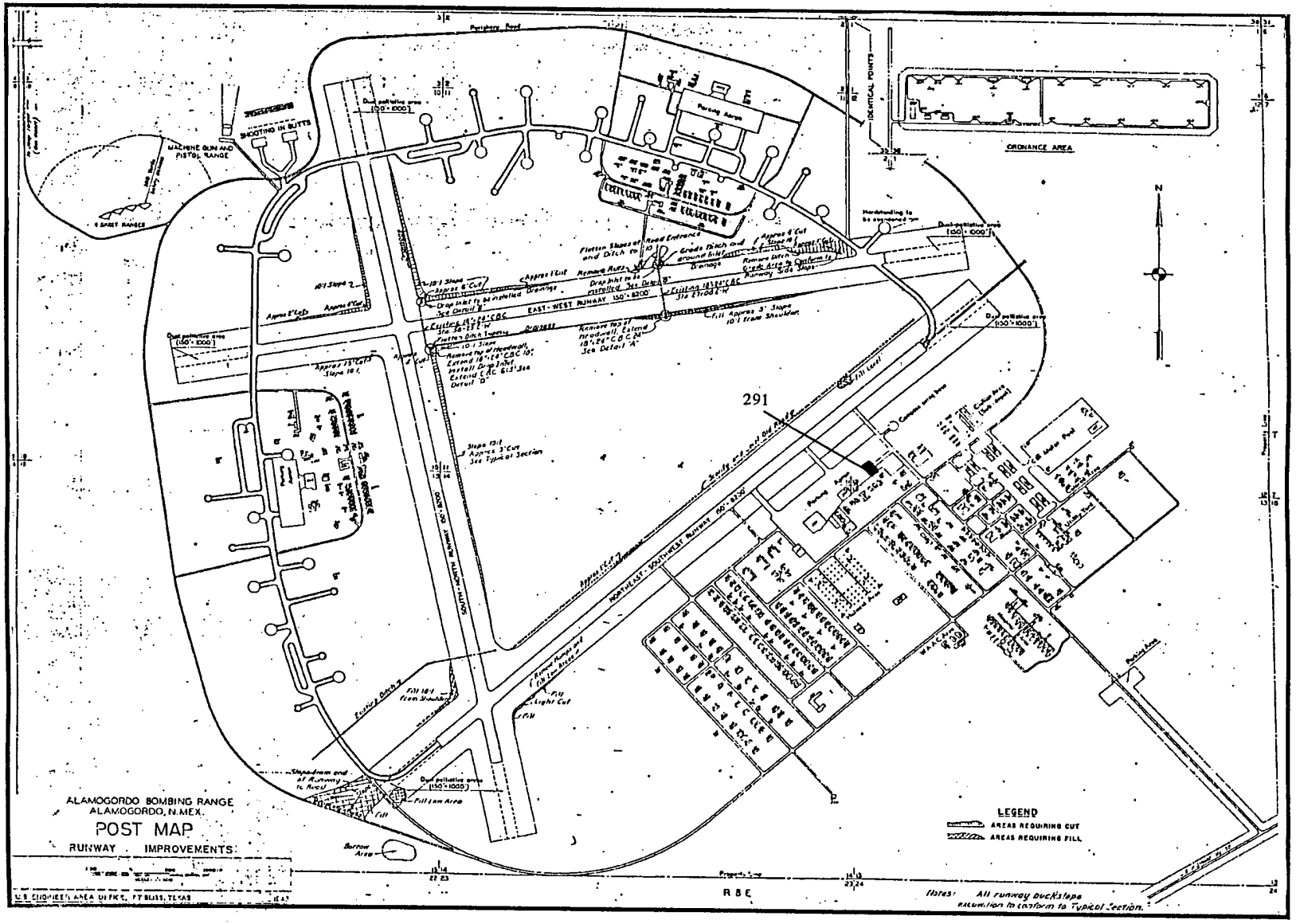
VOUCHER NO.	DATE	DESCRIPTION	DATE COMPLETED	AREA UNIT 51070 AMOUNT	AREA UNIT TOTAL	COST	TOTAL COST
		BALANCE BROUGHT FORWARD			16,764 SF		156,495 08
74-0226		W/O 7831 Remove A/Comp(to Bldg 30)				- 2,030 00	154.465 08
75-0167		Adjust SF From remeasured dimensions		+ 431	17,195		
75-0177		Auth Change in CAC & Space Use					
77-0051	10 Nov 76	WO 08551 Replace Coolers				- 2,483 84	151,981 24
78-0103	23 Mar 78	WO 4562 Relocate Generator MD-1				+ 2,582.97	154,564 21
78-0163	23 Aug 78	HO 255C-6 (WO 54735) Convert to R&D Construction 21 X 28 Apx 78	Fac 12 Jul 77	*		+32,800 00	187,364 21
79-0011	31 Oct 78	WO 5093 Modify Bldg (Replacements)					
& 79-0095	10 Jul 79	HO 45-8 Alter Bldg 291	28 Feb 79			+ 8,990.00	196,354 21
81-0062	12 Feb 81	HO 44B-9 Alter Bldg 1080 for Pave Deuce	12 Aug 80			- 7,854 00	188,500 21
82-0235	15 Sep 82	Transfer Generator to Orgl Equip	15 Sep 82			-1,860.00	186,640.21
83-0143	23 May 83	Auth chg in nomenclature	23 May 83				
86-0024	24 Oct 85	Inventory.	22 Oct 85			-149.66	186,490.55
88-0175	6 Jun 88	Authorized Change-in-Use and Cost Account Code					
89-0057	24 FEb 89	FACILITY INVENTORY	15 Feb 89				
92-0102	2 Apr 92	Change of Condition Code (3 to 1)	2 Apr 92				
92-0152	10 Aug 92	Adjustment to Facilities with Hangar Category Codes	10 Aug 92	EA	2		
93-0122	1 Jun 93	FACILITY INVENTORY	24 May 93				
		BALANCES FORWARDED					



Building 291: Earliest floor plan on file

Scale: 1" = 20'

State of New Mexico Office of Cultural Affairs Historic Preservation Division	**BUILDING 291** Holloman Air Force Base Alamogordo, New Mexico	Project No. 35-95-HAFB-4	Source: n.d. CE File #291-1/2.1of 3 **Sheet 1 of 1**


ORDNANCE AREA
MACHINE GUN AND PISTOL RANGE
SHOOTING IN BUTTS
291
EAST - WEST RUNWAY 150' x 8200'
NORTHEAST - SOUTHWEST RUNWAY 150' x 8200'
LEGEND
AREAS REQUIRING CUT
AREAS REQUIRING FILL
ALAMOGORDO BOMBING RANGE
ALAMOGORDO, N.MEX.
POST MAP
RUNWAY IMPROVEMENTS
Notes: All runway buckslope excavation to conform to Typical Section.

APPENDIX B
LABORATORY OF ANTHROPOLOGY
ACTIVITY RECORD FORM

LABORATORY OF ANTHROPOLOGY PROJECT/ACTIVITY RECORD

1. PROJECT DATA

NMCRIS Project Number: 54330 Parent Project Number: _____
Sponsoring Agency: DOD, Holloman Air Force Base Project ID: KWRD 973200 B
Project Name: Historic Architecture Documentation
Project Dates (dd-mmm-yyyy): 10-JUN-1996 to 11-JUN-1996
Project Type (choose one): [X]cultural resource management [ ]regional or topical overview [ ]research project [ ]other project type: _____
Project Description (optional): assess the significance of three military structures
Proposed Action:
[ ]transmission line [ ]materials pit/stockpile
[ ]reservoir/dam [ ]military target site
[ ]railroad [ ]research project
[ ]water system [ ]land exchange
[ ]drill hole [ ]seismic line
[ ]fence line [ ]road/highway
[ ]mining [ ]land management project
[ ]trail [ ]buried pipeline/cable
[X] other action building demolition [ ]building/facility
Other Permitting Agencies: _____

2. ACTIVITY DATA

NMCRIS Activity Number: 54330
Performing Agency: Geo-Marine, Inc.
Activity ID: _____ Activity Name: _____
Activity Dates (dd-mmm-yyyy): 10-JUN-1996 to 11-JUN-1996
Activity Type:
[ ]archeological excavation [ ]research design preparation
[ ]cult. res. overview/lit. review (Class 1) [ ]monitoring or damage assessment
[ ]archeological survey(Class 2 or 3 Surv.) [ ]ethnographic study
[ ]archeological testing [ ]collections and non-field studies
[X] other activity: HABS/HAER documentation
Activity Description (optional): _____
Studies and Analyses Performed:
[ ]lithic tool typology [ ]lithic technology
[ ]ceramic typology [ ]ceramic technology
[ ]human osteology [ ]faunal analyses
[ ]obsidian hydration dating [ ]archeomagnetic dating
[ ]tree ring dating [ ]radiocarbon dating
[ ]macrobotanical analysis [ ]pollen, phytolith analysis
[ ]isolated artifact distribution [ ]site distribution
[ ]historic artifact analyses [X]architectural studies
[ ]soils, stratigraphy, geomorphology [X]historic records studies
[ ]ethnographic interviews/oral history studies [ ]geology, lithic materials sourcing
[ ]other studies: _____

3. SURVEY ACTIVITIES

Total Area Surveyed: N/A acres Total Activity Area (if < 100% coverage): _____ acres
Survey Intensity (choose one): [ ]intensive (BLM Class 3; 100%)[ ]reconnaissance (BLM Class 2; < 100%)
Survey Configuration: number of survey units: ___ [ ]block survey units [ ]linear survey units
[ ]other survey units: _____
Survey Scope (choose one): [ ]non-selective [ ]selective/thematic
Survey Coverage (choose one): [ ]systematic pedestrian coverage [ ]other coverage method
Standard Survey Interval: _____ Standard Crew Size: _____

3. SURVEY ACTIVITIES (CONT.)

NMCRIS Activity Number: 54330

Source Graphics: [X]copies in report
[X]USGS 7.5' topographic maps
[ ]other topographic maps (Scale:_____)
[ ]GPS Unit
[ ]copies attached to report or form
[ ]rectified aerial photos (Scale:_____)
[ ]unrectified aerial photos (Scale:_____)
[ ]other source:_____

Survey Results: Sites Discovered and Registered:_____ Total Number of Sites Visited:_____
Sites Discovered and Not Registered:_____ Total Isolated Occurrences:_____
Previously Recorded Sites Revisited:_____ [ ]Non-Selective IO Recording?

Land Ownership:	State	Acres Surveyed
Holloman Air Force Base	NM	____

Counties/States Surveyed: Otero, New Mexico

USGS Quadrangles Included in Surveyed Area:

Quadrangle Name/Date: Holloman	Quadrangle Code: 32106-G1
Quadrangle Name/Date:_____	Quadrangle Code:_____
Quadrangle Name/Date:_____	Quadrangle Code:_____
Quadrangle Name/Date:_____	Quadrangle Code:_____
Quadrangle Name/Date:_____	Quadrangle Code:_____

Previously Registered Sites (LA nos.): _____ (others-see report)
New Sites (LA nos.):_____

4. NON-SURVEY ACTIVITIES

Investigated Sites (LA nos.): Buildings 107, 289, and 291

5. REPORT INFORMATION

Document Type (choose one):
[X]report, monograph, or book
[ ]title in an edited collection
[ ]other document type:_____
[ ]manuscript
[ ]volume in a report series
[ ]article in a journal
[ ]article in a magazine
[ ]dissertation or thesis
[ ]paper presented at meeting

Year Issued: 1996 [ ]no date [ ]draft?: Main Author: Moira Ernst

Additional Authors: Jean Fulton, Sonya Cooper, Joe C. Freeman

Title #1: Buildings 107, 289, and 291 Demolition HABS/HAER Architectural Assessment Holloman Air Force Base, Otero County, New Mexico

Title #2 (additional citation data):_____

Prepared By: Geo-Marine, Inc.

Preparing Agency Report No.: 120EP

Published By (publisher, city, state): Geo-Marine, Inc.

Report Recipient: Holloman Air Force Base

Other Agency Report Nos.: HAFB1996-006