Full Moral and Material Strength

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The Early Cold War Architectural Legacy at Holloman Air Force Base, New Mexico (ca. 1950-1960)

by
Jean Fulton
and
Sonya Cooper

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Cultural Resources Publication No. 3

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Legacy Resource Management Program

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

Holloman Air Force Base
New Mexico

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Proclamation 2914:
Proclaiming the Existence of a National Emergency

"WHEREAS recent events in Korea and elsewhere constitute a grave threat to the peace of the world and imperil the efforts of this country and those of the United Nations to prevent aggression and armed conflict; and WHEREAS world conquest by communist imperialism is the goal of the forces of aggression...

NOW, THEREFORE, I, HARRY S. TRUMAN,

President of the United States of America, do proclaim the existence of a national emergency, which requires that the military, naval, air, and civilian defenses of this country be strengthened as speedily as possible to the end that we may be able to repel any and all threats against our national security and to fulfill our responsibilities in the efforts being made through the United Nations and otherwise to bring about lasting peace.

I summon all citizens to make a united effort for the security and well-being of our beloved country and to place its needs foremost in thought and action that the *full moral and material strength* of the Nation may be readied for the dangers which threaten us."

--16 December 1950.

Preface

Martyn D. Tagg
Holloman AFB Archaeologist

The cultural resources program on Holloman Air Force Base (HAFB) was established in 1992 with a focus on proactive, rather than reactive, management of the resources. Although the majority of early work on the base involved the cultural resources inventory of HAFB administered land, an effort was also made to compile a comprehensive history of the base through a series of research projects. These research projects, and thus the proactive cultural resources program, were made possible due largely to the Department of Defense (DoD) Legacy Resource Management Program (LRMP).

The DoD is the steward of about 25 million acres of land in the United States and is responsible for the management and protection of a wide variety and large number of irreplaceable natural and cultural resources. Established by the 1991 Defense Appropriations Act Congress (Public Law 101-511, Section 8120), the LRMP fulfills the Congressional mandate to "determine how to better integrate the conservation of [these] . . . resources with the dynamic requirements of military missions" (DoD 1991, 1992; US Air Force [USAF] 1994).

The LRMP purpose is to "promote, manage, research, conserve, and restore the priceless biological, geophysical, and historical resources which exist on public lands, facilities, or property held by the DoD." The functions of the LRMP are divided into Program Development tasks for biological, cultural, and geophysical resources. These are further divided into Specific Task Areas for project management, survey of current programs, data management, decision frameworks, earth resources, biological resources, cultural resources, the Cold War, education, public awareness and recreation, Native American and settler communities, and stewardship education and training (DoD 1992, USAF 1992). Demonstration projects are currently being conducted at more than 90 DoD installations throughout the continental United States and overseas.

HAFB, an Air Combat Command (ACC) base of over 59,000 acres in southern New Mexico, is one of the installations conducting LRMP projects. Prior to Fiscal Year (FY) 1993, only 3.5% of this acreage had been inventoried for cultural resources, and four archaeological sites had been documented. Because of the limited nature of the archaeological work and the small size of most surveys, little was known about the cultural resources on base-administered properties. The LRMP became a method to advance this knowledge, providing the means to complete projects not eligible for compliance-driven funds. In FY93, HAFB became involved in the LRMP with the funding of three cultural resources projects. These projects were identified as "milestones and priorities for National Register Surveys" in the HAFB Historic Preservation Plan and included an historic architectural assessment; a thematic survey of early missile, instrumentation, and test object sites; and a thematic survey of historic ranches and ranch sites (Eidenbach 1994: 50). Two additional projects were funded in FY94, consisting of a cultural resources sample survey and the architectural assessment documented in this report. The projects fulfill the FY93 LRMP Topical Theme of "WWII and Cold War research topics and stewardship projects, and development of other contemporary history themes which contribute to stewardship" (USAF 1992).

As a means to facilitate the completion of the LRMP projects, an Interagency Agreement (IA) was created between HAFB and the New Mexico State Historic Division (HPD). This cooperative agreement allowed the HPD to become more actively involved in the Legacy Program, and it gave HAFB access to qualified archaeologists, historians, historic architects, and certified staff. The HPD

managed the logistical aspects of the projects and issued grants to organizations and individuals with the experience to provide the best possible final products. The HAFB Archaeologist was the technical manager, ensuring the results would provide the information necessary for managing resources on HAFB, complement the base mission, and meet the LRMP guidelines.

The Historic Architectural Assessment (DoD Legacy No. 9401214) was funded under the LRMP Task Area of the Cold War, with the objective to "inventory, protect, and conserve the physical and literary property and relics of the Department of Defense connected with the origins and development of the Cold War" (USAF 1992). The project was designed as a demonstration project to begin the documentation and assessment of all Cold War buildings and structures on HAFB-administered lands. This first architectural project focused primarily on facilities constructed during the early Cold War, between 1950-1960. A few facilities built prior to, and after, these dates were also investigated if they were closely associated with other properties on the list. The project was a complete success. A HAFB building inventory form was created and field tested during field inspection of 73 buildings, and an assessment format was established which will be used for future architectural work.

HAFB played an important role as a development and testing facility for missile and rocket research during the early Cold War. The identification and documentation of many of the buildings and structures used during this time period has provided valuable insight on a variety of Cold War construction techniques, as well as initiating steps to document, protect, and preserve this legacy of the USAF. This is extremely important since of the original early Cold War-era facilities that still exist, few retain historic integrity. The final project report can also be used to promote this demonstration project so that the forms and field methods can be used successfully on other DoD installations.

This report is the third in the HAFB Cultural Resources Publication series, which was created to showcase the wide variety of projects made possible by the LRMP on HAFB. The publication series will ensure quality reporting of LRMP and other types of research projects conducted on HAFB, and will allow the data to be distributed to local professionals and other DoD cultural resource managers. The publications have also begun to illustrate the results of the initial goal set forth in 1992 of compiling a comprehensive base history. The first report, *I Never Left A Place That I Didn't Clean Up*, covered the pre-military historic use of HAFB-administered lands from the early European settlement of the area up until the base was established (Hawthorne 1994). The second in the report series, "*We Develop Missiles, Not Air!*" illustrates HAFB's role as an early missile, rocket, instrumentation, and aeromedical research development facility in the early Cold War (Mattson and Tagg 1995).

The results of this architectural assessment, as well as the other projects conducted on HAFB, are useful far beyond the boundaries of this base. It is hoped that these projects will encourage other bases to begin the process of documenting and reporting on the many unique architectural and archaeological resources located on DoD installations, thus providing a better understanding of the USAF during these important periods of United States history.

The completion of this project would not have been possible without the support and cooperation of a number of people. The HAFB cultural resources program functions efficiently because of the support of John R. Poland (Environmental Flight Chief) and Dr. Paul Green (ACC Headquarters Archaeologist). Others whose cooperation was invaluable include Michael Taylor and Mary Ann Anders from the New Mexico State Historic Preservation Division, and of course the authors Jean Fulton and Sonya Cooper.

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Foreword

Recognizing that many properties eligible for the National Register of Historic Places remain in active military use, or at least within the control of the Department of Defense (DoD), a study was recently conducted by the Advisory Council on Historic Preservation to assess how well the DoD was complying with the National Historic Preservation Act, and with the goals of the Legacy Resource Management Program (Appendix II).

The Council found that DoD compliance was "inconsistent," and felt that management of the majority of the historic properties within DoD jurisdiction has been, aside from a few shining examples, "mediocre" (Advisory Council 1994: *ix*).

The Advisory Council found that most DoD agencies have been unwilling or simply unable to dedicate trained personnel to assess and care for historic resources within their jurisdiction. For their part, preservationists have until recently been unable to widely promulgate consistent goals or easily understood standards for managers to comply with.

The cultural resource management program at Holloman Air Force Base (HAFB), New Mexico, under the direction of archaeologist Martyn D. Tagg, represents one of the few successful programs acknowledged by the Advisory Council on Historic Preservation.

This project represents one in a series of important cultural resource studies currently underway or already completed at HAFB. Using funds requested from and granted by the Legacy Resource Management Program, this publication provides a Level IV Historic American Buildings Survey/Historic American Engineering Record (HABS/HAER) architectural assessment of 73 Cold War-era properties owned and/or managed by HAFB.

The National Historic Preservation Act of 1966, as amended, mandates that any Federally owned or managed property deemed eligible for the National Register of Historic Places requires special management considerations.

In order to comply with this mandate, each HAFB Cold War-era property in this study has been assessed in terms of National Register criteria in order to (1) determine whether or not each property is historically significant, and to (2) determine whether or not each property retains historic integrity. Based on this assessment, a determination of eligibility for the National Register has been made for each property.

Both a national and a local historic context is provided at the beginning of the report to provide a framework within which to view the HAFB properties. The remainder of the report addresses each property. The properties are organized into five broad property types, with an historic context for each property type provided as necessary. Completed field forms for each of the buildings and structures convey information regarding the determination of eligibility for the National Register. Recommended maintenance actions are given for each property.

The documentation provided in this report will be used by building managers and the Base Archaeologist for the proper stewardship of historic HAFB properties, particularly those cultural resources deemed eligible for the National Register. It is also hoped that this publication will serve as a guide for other architectural inventories in an effort to provide a consistent data base of eligible Cold War-era properties on a regional and eventually national scale.

Introduction

Managers at Federal agencies are currently challenged with deciding how to care for buildings and structures constructed in response to the Cold War. The daunting task of deciding what to preserve from the built legacy of the Cold War, and how to preserve it, provides an ideal opportunity for Federal resource managers and the preservation community to strengthen what has at times been a tenuous relationship.

Although the National Historic Preservation Act of 1966 was enacted thirty years ago, the preservation goals and methods embodied in that legislation have only recently been refined and widely promulgated. The Legacy Resource Management Program (legislated 5 November 1990) was created to ensure that this nation's Cold War heritage is not neglected. Both the National Historic Preservation Act and the Legacy Resource Management Program assist in the effective stewardship of our nation's cultural resources. The architectural legacy and the documentary heritage borne as a result of the Cold War, if cared for properly, will provide the grist for future primary research into a unique and often perilous phase of world history.

Military bases, testing facilities, innumerable corporations, and sprawling communications networks developed nationwide and overseas after World War II in order to attain twin national objectives: (1) to contain the perceived threat of communism, and (2) to physically conquer the realm of outer space.

The construction of 42,795 miles of "Interstate and Defense Highways" was initiated during President Dwight D. Eisenhower's administration with the enactment of the Federal-Aid Highway Act of 1956. "If the need arose, [Eisenhower] knew that such a system would provide invaluable mobility for the national defense" (Federal Highway Administration 1993: 1).

One unforeseen outgrowth of these Cold War initiatives, particularly the construction of the interstate and defense highway system, was the destruction of rural landscapes and historic inner-city neighborhoods (Stipes 1987: 53).

Background: Preservation Legislation

The National Historic Preservation Act (NHPA) was signed into law by President Lyndon B. Johnson in 1966, as a direct response to the rampant destruction of urban and rural landscapes wrought largely by the nation's new highway system.

"Historic properties significant to the Nation's heritage," wrote Congress, "are being lost or substantially altered, often inadvertently, with increasing frequency" (NHPA 1966: 1). Section 1 (16 U.S.C. 470) of the Act declared that the preservation of this nation's irreplaceable heritage was in the public's best interest, and advocated that the public's "...vital legacy of cultural, educational, esthetic, inspirational, economic, and energy benefits..." be "...maintained and enriched for future generations of Americans" (NHPA 1966: 1).

To accomplish this aim, Congress created an Advisiory Council on Historic Preservation, and directed the Secretary of the Interior to create and maintain a federal listing of historic properties known as the National Register of Historic Places.

The National Register of Historic Places

The National Historic Preservation Act of 1966, created to end the thoughtless destruction of our nation's cultural heritage, mandated that the Secretary of the Interior be charged with creating and maintaining a National Register of Historic Places. This Act also created the Advisory Council on Historic Preservation to help mediate projects which might affect cultural resources qualifying for the National Register.

Determining Eligibility

Nearly sixty thousand properties nationwide are currently documented for future generations by being listed on the National Register of Historic Places. Created by the National Historic Preservation Act, the National Register has evolved, though, from being simply a list of historic resources, to providing the most widely used standards for evaluating whether or not a property warrants special consideration.

Following the survey phase of any cultural resource project, undertaken to identify properties potentially eligible for inclusion on the National Register, an evaluation process ensues. Laws, guidelines, and regulations written to clarify the intent of the National Historic Preservation Act stipulate that properties need not be actually *listed* on the National Register of Historic Places to be considered "historic," but need only be determined *eligible* for listing. To be eligible for inclusion on the National Register of Historic Places, properties must be deemed "significant," and they must exhibit historic "integrity" (see Appendix I).

Historic Significance

In order to be deemed historically "significant," properties must meet at least one of the following criteria established in *National Park Service Bulletin 16A*. A property must:

(A) Be associated with events that have made a significant contribution to the broad patterns of our history, or

(B) Be associated with the lives of persons significant in our past, or

(C) Embody the distinctive characteristics of a type, period, or method of construction or represent the work of a master, or possess high artistic values, or represent a significant and distinguishable entity whose components lack individual distinction, and/or

(D) Have yielded, or be likely to yield, information important in prehistory or history.

Historic Integrity

In order to be eligible for inclusion on the National Register, properties must also meet criteria defining the quality of historic "integrity."

Historic integrity refers to the presence of physical characteristics which continue to reflect the property's association with its period of significance. A determination of a property's "integrity" is comprised of an evaluation of seven qualities, including: location, design, setting, materials, workmanship, feeling, and association. All seven aspects need not be present for a property to retain integrity, but an "overall sense of past time and place" must be evident (U.S. Department of the Interior, *Bulletin 16A* 1991: 4).

Eligible Properties

Once a determination is made that a property eligible for the National Register may be adversely impacted by a Federal undertaking, property managers are responsible for initiating consultation with either their State Historic Preservation Officer, or directly with the Advisory Council on Historic Preservation. Many agencies have implemented written programmatic agreements with preservation officials to help tailor and expedite this consultation process (Advisory Council 1995: II-95).

Mitigation

A range of activities pursued to mitigate the adverse effects of a proposed undertaking might include seeking other alternatives to the proposed project, limiting the magnitude of the undertaking, or relocating the endangered historic property. Another viable alternative is to provide documentation for the property through photographs, measured drawings, and/or archaeological inquiry prior to irreparable damage or destruction (Advisory Council 1995: II-71).

It is important to note that this process is a consultation with, and an agreement between, federal resource managers and preservation officials. Preservation legislation is based on the premise that compromise is the key, and asks only for caution in proceeding with undertakings affecting cultural resources.

Cold War Properties

As an added incentive to conserve historic properties under Federal jurisdiction, on 5 November 1990 President Bush signed the Defense Appropriations Act of 1991 (Public Law 101-511). This Act, sponsored by Senators Daniel Inouye (D-HI), and Robert Kasten, Jr. (R-WI), mandated that the Secretary of Defense establish a nationwide "Legacy Resource Management Program."

Section 8120 of this legislation stipulates that the program cooperate "...with other Federal departments, agencies and entities [in] a project to inventory, protect and conserve the physical and literary property and relics of the Department of Defense, in the United States and overseas, connected with the origins and development of the Cold War..." A complete transcript of Section 8120 of the Defense Appropriations Act is compiled in Appendix II.

Summary

The National Historic Preservation Act and the Legacy Resource Management Program both serve as vital mechanisms for securing proper stewardship of this nation's cultural legacy. Since 1966, federal regulations and preservation bulletins have explicitly defined terms and standards for assessing the importance and the condition of both prehistoric and historic cultural resources. The National Historic Preservation Act of 1966 itself has undergone revisions. As a result, a viable and consistent framework for assessing and caring for cultural resources currently exists.

HABS/HAER Documentation, Holloman AFB

Legacy Resource Management Program funding was provided upon request to Holloman AFB to assess and document seventy-three Cold War-era properties. Under the authority of the National Environmental Policy Act and Section 110 of the National Historic Preservation Act of 1966, as amended, an agreement was signed between Sonya Cooper, assistant professor of Engineering Technology at New Mexico State University, and Michael Romero Taylor, then the New Mexico State Historic Preservation Officer.

The agreement, signed 10 July 1995, stipulated that Level IV Historic American Buildings Survey (HABS)/Historic American Engineering Record (HAER) documentation be provided for the 73 HAFB properties. Jean Fulton assisted in the fieldwork, researched Holloman's historic context, and prepared this written report.

Background: HABS/HAER Program

The impetus for the formation of the Historic American Buildings survey was provided by a detailed National Park Service memorandum issued on 13 November 1933.

Written by Charles E. Peterson, former National Park Service Supervisor for Historic Structures, this memo was immediately implemented by the National Park Service as the charter for the Historic American Buildings Survey. This program continues to provide documentation at a national level for threatened historic structures.

Memorandum Excerpt:

> ***The plan I propose is to enlist a qualified group of architects and draftsmen to study, measure and draw up the plans, elevations and details of the important antique buildings of the United States. Our architectural heritage of buildings from the last four centuries diminishes daily at an alarming rate. The ravages of fire and the natural elements together with the demolition and alterations caused by real estate 'improvements' form an inexorable tide of destruction destined to wipe out the great majority of the buildings which knew the beginning and first flourish of the nation...It is the responsibility of the American people that if the great number of our antique buildings must disappear through economic causes, they should not pass into unrecorded oblivion...***
>
> ***(Peterson quoted in Burns 1989: 2).***

HABS Program Implemented

Preservationists continue to feel strongly that the documentation of America's architectural legacy through measured drawings, photographs, and written research is important because it often provides the only evidence of a building that has physically vanished. As artifacts, historic structures "...are frequently the only tangible evidence..." of historic trends or events. The documentation of historic structures "...broadens our experience of American history...[and may] open new doors to understanding the past" (Burns 1989: 8).

Since the founding of HABS in 1933, "...more than 3,000 men and women have worked...to

'preserve' approximately 22,000 historic structures throughout the United States..." (Burns 1989: *xi*). It is estimated that more than one-third of the structures documented by the program have physically vanished from the landscape. Photographs, measured drawings, and written documentation for each building, however, safely reside in the Library of Congress.

Currently, the International Business Machines Corporation (IBM) and the Library of Congress are cooperating in an effort to make the survey collection available over the Internet in the near future (Personal communication, IBM Systems Engineer Mary P. Henry, Fall 1995).

Historic American Engineering Program

Gail Hathaway, past president of the American Society of Civil Engineers (ASCE), approached the National Park Service in 1969 "...with the idea of setting up a companion program to HABS..." (Burns 1989: 4). The Historic American Engineering Record (HAER) was established that same year as a counterpart to the HABS program to provide documentation for historic engineering and industrial properties.

Documentation

With the passage of the National Preservation Act of 1966, it became imperative that a standardized method for recording historic sites be established.

HABS/HAER documentation through measured drawings, photographs, and archival research has largely been adopted as the nationwide standard for providing comprehensive and consistent historic documentation. In general, only those sites considered to be eligible for the National Register of Historic Places are considered for inclusion in the HABS/HAER collection.

Standards promulgated by the National Park Service HABS/HAER program dictate that documentation "...adequately explicate and illustrate what is significant or valuable about the historic building, site, structure, building or object being documented" (Burns 1989: 234). In addition, HABS/HAER provides standards guidance for varying levels of documentation.

Levels of HABS/HAER Documentation

HABS/HAER criteria ensure that structures are documented in a cohesive and consistent manner. There are four levels of HABS/HAER documentation, with Level I providing the most information and detail:

Level I documentation requires a full set of measured drawings depicting existing and/or historic conditions. Large-format photographs showing the exterior and the interior are also provided. Written history and description of the property is mandatory.

Level II documentation consists of copies of selected existing drawings, large-format photographs, and a written description and history.

Level III documentation requires that only a sketch plan of the building be provided. Large-format photographs of exterior and interior views are furnished, as is a written history and description.

Level IV documentation consists of a completed field form for each building. This level of documentation, unlike the other three levels, is rarely considered adequate documentation for the HABS/HAER Library of Congress collection, but is undertaken to identify historic resources in a given area prior to additional, more comprehensive documentation (Burns 1989: 236).

Field Survey: Holloman AFB

A survey form was developed by the authors for the HAFB Cold War-era survey to satisfy HABS/HAER Level IV criteria. This field form uses National Register criteria to assist in making a preliminary assessment concerning whether or not a particular building is eligible for the National Register, and will be used as the standard field form for all future HAFB architectural assessments.

Real Property Accountable Records

Holloman Air Force Base Real Property Accountable Records (USAF Form 1430) on file at the Civil Engineering building (550 Tabosa Avenue) were reproduced for each facility. These property records provided details related to the construction and function of each building.

Related correspondence, equipment change-outs, and miscellaneous information accompanied each Real Property Accountable Record, providing an invaluable source of data for each property.

Drawings

Working construction drawings located in the drawing vault at the Civil Engineering building (550 Tabosa Avenue) were studied. An index of all drawings available for each building was prepared. Each index is annotated, noting structural and architectural alterations to the original plans. Both the earliest and the most recent blueprints were copied for each building. These architectural and structural drawings were then used during field visits to determine how each building has been altered since its original construction.

Site Survey

Using the construction drawings, the blueprint indexes, and the Real Property Records, a site visit was conducted at each building to determine its degree of alteration from the original construction completion date. The construction completion date was determined from the "As-Built" date (actual) stamped in the revision block of each original construction drawing. If original drawings were not located, or if the date was not properly stamped, a construction completion date (estimate) was determined using the Real Property Records. The site survey documented the current placement of all exterior door and window openings, interior and exterior finishes, floor plan, layout, and room use.

Any alterations to the most recent blueprints were noted. These marked-up recent blueprints were then compared to the earliest available drawings for each building. An assessment was made concerning the percentage of original design, materials, and workmanship remaining. One photograph of each building's principal elevation was taken. Suggested routine maintenance items were noted for each building.

Historic Context

A concurrent effort documented the historic context of the Holloman properties. "Historic context" is defined by National Park Service criteria as the relationship between the property and "...important themes in prehistory or history" (USDI *Bulletin 16A* 1991: 49).

Describing a property's historic context must include information about the surrounding community or larger geographical area, and must explain the importance of the properties by

demonstrating how the properties are unique, outstanding, or strongly representative of an important historic trend or theme rooted by place and time.

Providing an historic context for the HAFB properties involved personal interviews, and research at local libraries, the Rio Grande Historical Collections at New Mexico State University, the HAFB Historian's office, and the National Archives II in College Park, Maryland.

The results of this research were used to provide an overview of national and international events contributing to the beginnings of the national military and scientific build-up undertaken in the 1950s and 1960s commonly referred to as the "Cold War." The results of this research document Holloman's role in the early phases of the Cold War. This research also serves to document specific early Cold War-era projects conducted at Holloman Air Force Base.

Summary

A field survey conforming to HABS/HAER standards was conducted at Holloman AFB to determine whether or not 73 Cold War-era properties merit special management consideration by virtue of their eligibility for inclusion on the National Register of Historic Places.

Construction drawings, Real Property Accountable Records, and interviews with Holloman AFB personnel were used to determine each building's degree of alteration since its original construction. An assessment of each building was documented on a field form developed for this and all future HAFB architectural surveys. A concurrent effort documented the Cold War historic context within which these properties must be considered.

Folders containing available Real Property records, copies of blueprints, annotated blueprint indexes, field notes, and all other pertinent information were prepared for each property and will be permanently stored at the 49th Civil Engineer Environmental Flight (49 CES/CEV) office at 550 Tabosa Avenue.

This publication represents the culmination of the results of the architectural assessments and the historic context research. In addition to identifying those properties eligible for the National Register of Historic Places, information contained in this publication will assist future researchers in preparing nominations to the National Register.

This report exceeds the Level IV HABS/HAER requirements set forth in the enabling contract, and will be used to ensure that HAFB properties deemed eligible for inclusion on the National Register are not lost due to oversight or neglect.

Holloman Air Force Base

Holloman AFB is located approximately seven miles (11 km) southwest of Alamogordo in south-central New Mexico (see Map next page). The installation is bounded by the White Sands Missile Range to the north, south, and west, by the White Sands National Park Service Monument to the south, and by the Bureau of Land Management, private, and state lands to the south and east. The main Base covers approximately 52,000 acres, with another 7,400 acres located at the Boles Wells Water System Annex located between the main Base and the town of Alamogordo (Mattson and Tagg 1995: 5; Ernst 1996: 4).

Setting

Holloman's inland location, relatively sparse surrounding population, temperate climate, and long-range visibility make this an ideal setting for a variety of military missions.

Holloman Air Force Base is situated in the Tularosa Basin as part of the northernmost reaches of the Chihuahuan Desert environmental zone surrounded by the Organ and San Andres Mountains to the west, the Sacramento Mountains to the east, the Oscura Mountains to the north, and gypsum sand dunes to the west. Tularosa Peak rises above the basin north of the Main Base, and Lake Holloman occupies the region south of the Main Base. Area elevations range from 4,000 feet above sea level in the Tularosa Basin to a height of nearly 12,000 feet at the peak of Sierra Blanca in the Sacramento Mountains (Source: United States Geological Survey topographic maps available at Branson Library, New Mexico State University).

Brief History

Holloman Air Force Base was established in 1942 as the Alamogordo Army Air Field. Although originally intended to be used as a British Overseas Training base, plans for this mission never materialized. The Base was used, however, for the training of B-17, B-24, and B-29 aircrews during World War II (Mueller, 1985: 245; Strader 1995: 4).

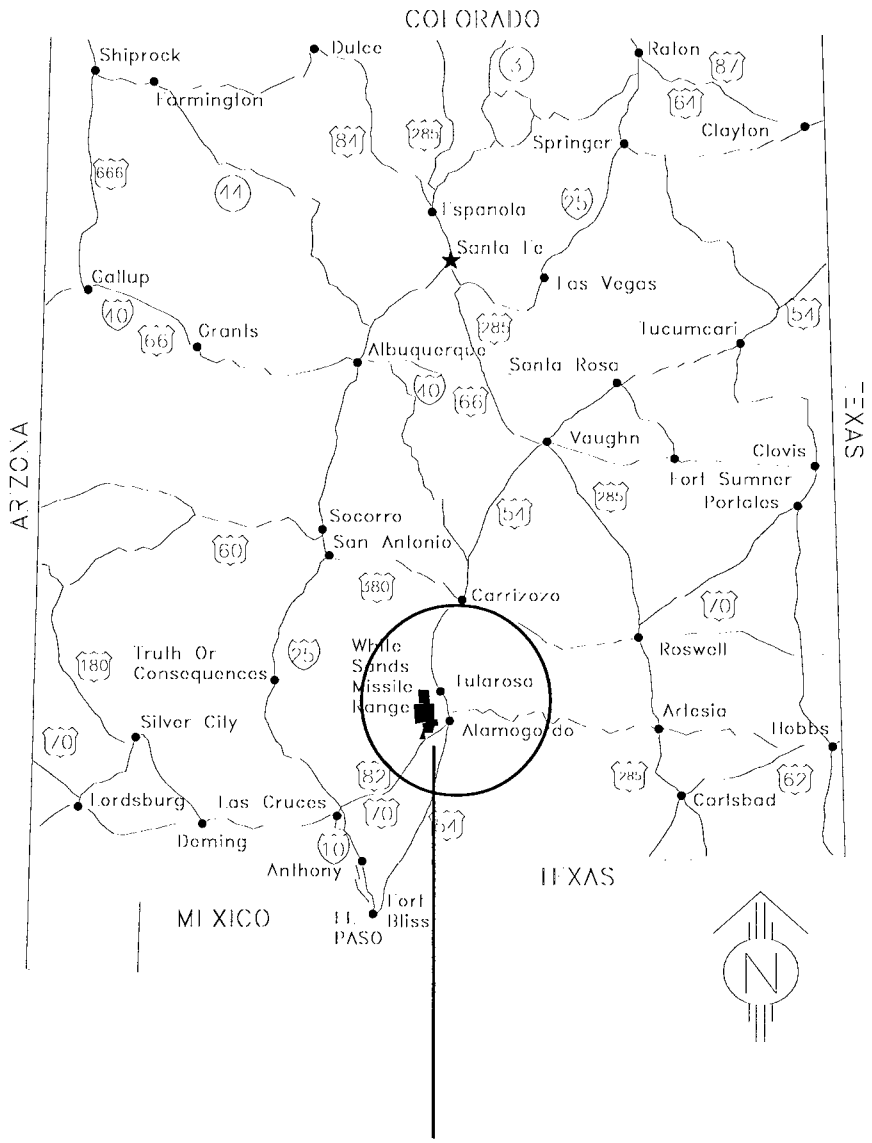
Strategic Air Command assumed control of the Base for one year until Air Materiel Command took over in 1947. The installation became the US Air Force guided missile range for the testing of pilotless aircraft, missiles, and associated equipment (Lewis, *et al* 1995: 31). The installation was renamed Holloman AFB in 1948 after the late Col. George V. Holloman, "...a pioneer in guided missile research" (Strader 1995: 4).

Air Research and Development Command took command of the base in 1951, and was replaced in 1961 by Air Force Systems Command. Although Tactical Air Command assumed command of HAFB in 1971, the Base continues to function as a test site for the High Speed Test Track and other experimental programs.

Primary Cold War missions at Holloman AFB included guided missile research/development, the testing of pilotless aircraft, and the maintenance of a primate colony for space-related research. HAFB also maintained an Air National Guard fighter alert facility during the Cold War (Lewis, *et al* 1995: 32).

Holloman AFB under Air Combat Command currently supports the operation and maintenance of the F-117A Stealth fighter by the 49th Fighter Wing. The 4th Space Warning Squadron provides missile warning and launch detection to the National Command Authority (Lewis, *et al* 1995: 31).

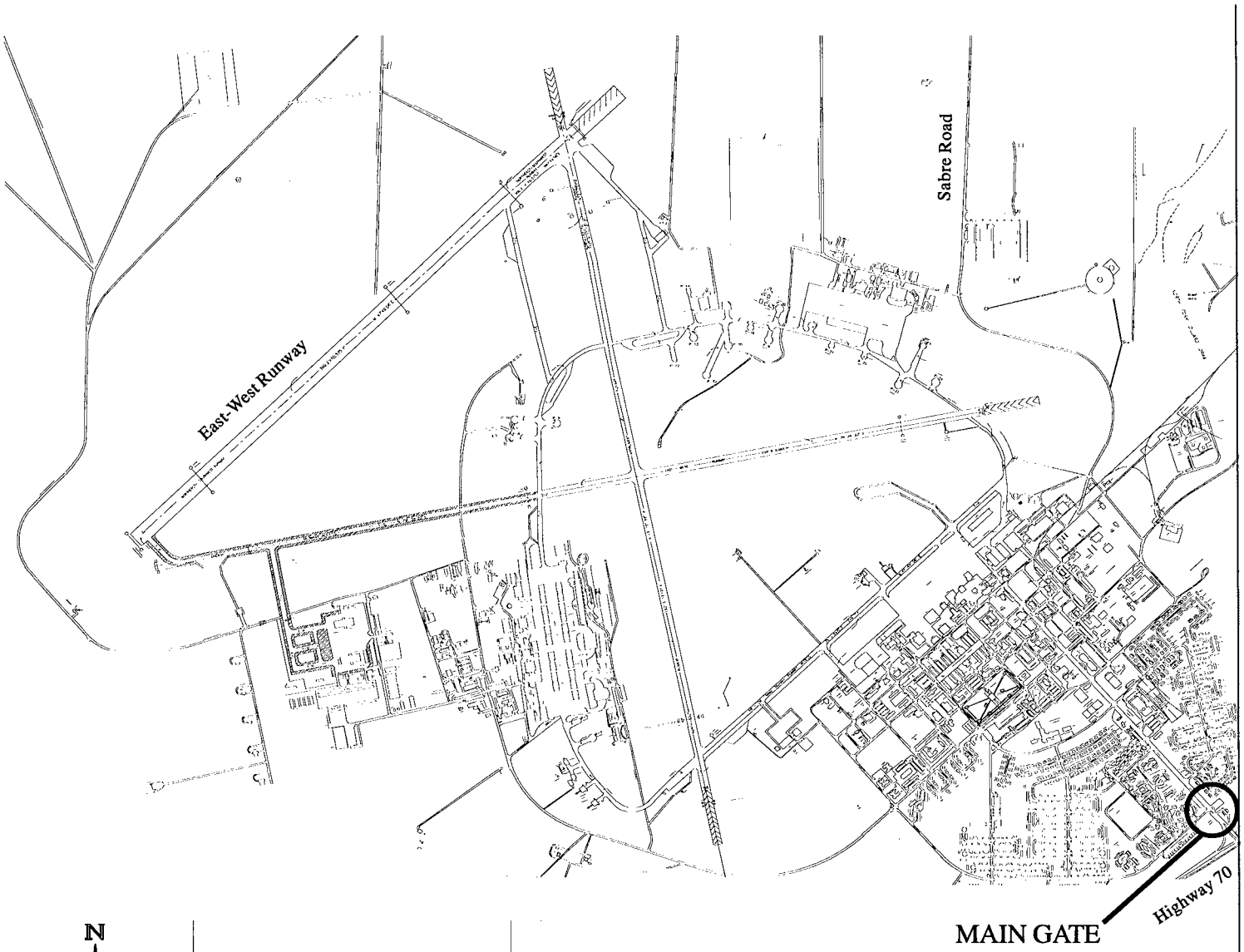
Location Map

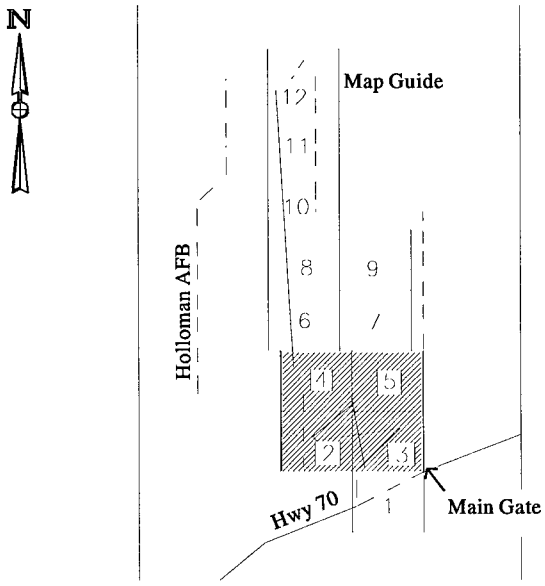


Holloman AFB, New Mexico

Map of New Mexico showing location of Holloman AFB. (Courtesy of 49 CES/CECNC Drafting.)

Main Base





Holloman AFB occupies an area demarcated on twelve maps prepared by the 49th Squadron Civil Engineering staff. The main Base is located on Maps 2 through 4. The section of Map 3 shown above is meant to orient the reader only. A complete set of Base maps is on file at the 49 CES/CECNC drafting and surveying office (550 Tabosa Avenue, HAFB). Please consult Appendix V for a series of maps locating each of the 73 buildings and structures included in this report.

Historic Context

For most of its modern history, the state of New Mexico languished in the shadow of the more populous and wealthy regions of the Northeast and Midwest. Unable to finance its own public works projects, and possessing too small a population base to create a thriving economy, New Mexico survived by means of tourism, federal social programs, and small amounts of agriculture. All this would change as the Japanese attack on Pearl Harbor stimulated a rapid expansion of military activities nationwide. The impoverished Southwest underwent an economic and social revolution of staggering proportions, and the Albuquerque [Corps of Engineers] District would operate as a prime mover in this new age of technology and militarization.

— Michael E. Welsh (1987: 77).

World War II: 1941

Although a strong isolationist, "American First," sentiment gripped much of the nation prior to 1941, the "...deteriorating fortunes of America's long-time allies in Europe, France, and Great Britain..." served to escalate the pace of military construction nationwide that same year (Welsh 1987: 78). In addition, "...the government realized that superior air power was the only way to negate the successes of Germany on the Continent or of the Japanese in the Pacific and Far East" (Welsh 1987: 78).

While officials from President Roosevelt on down debated with caution over how to assist in the war overseas, America was jolted out of complacency early one Sunday morning in December 1941.

7 December 1941

The loss of 2,397 Americans in a surprise Japanese assault on the U. S. Naval and Air Base at Pearl Harbor, Hawaii on 1 December, 1941 "...aroused a nation that had shown no taste for war" (Daniel 1995: 698).

Following the attack, "...most Americans believed the Japanese were planning to invade California next. All the major air bases in the West were located there—perfect sitting ducks for the enemy—and 60 percent of the country's military aviation production was situated near the coast" (Misrach 1990: 3).

The Army Air Corps consequently built several airfields in 1942, including the Alamogordo Bombing and Gunnery Range (now known as Holloman Air Force Base and White Sands Missile Range) as well as a bevy of small airfields for emergency use. "Tucked away some 300 to 400 miles from the Pacific, the bases [were] protected from maritime invasion" (Misrach 1990: 3).

U. S. Army Corps of Engineers, Albuquerque District

Although the anticipated mainland Japanese attack never materialized, the U. S. Corps of Engineers was galvanized into action by the War Department as a defensive measure. The role of the Corps of Engineers in the history of the Southwest cannot be overstated. "In many ways, analysis of the Albuquerque District, U. S. Army Corps of Engineers is central to an understanding of life in the modern Southwest" (Welsh 1987: Preface). The critical mandate to construct wartime airstrips in the Southwest desert proved to be only one of many tasks the Albuquerque Army Corps of Engineering District encountered within its military mission.

Southwest Appeal

Thousands of workers and their families descended upon small towns in the region, creating overnight pressures for housing, schools, health care, sanitation, and other social amenities. In addition to this growth, the District also faced critical shortages of labor, violations of the "no-strike" agreements sought by the Roosevelt administration, and a lack of building materials. Then the old nemesis of sparse rainfall forced the District to design imaginative methods of supplying water to desert locations that tripled and quadrupled in size, with no appreciable increase in their sources of water (Welsh 1987: 80).

Aside from the problem of scarce water resources, the Southwest region proved to be particularly appealing for military and military-related employment. Much of the land was already federally owned, minimizing the possibility of problems concerning jurisdiction. Sunny days, clear skies, long-range visibility, and large regions of sparse population also appealed to prospective military clientele. The Southwest had a "...strong reputation as a non-union area..." which the federal government relied upon when channeling contracts to the Albuquerque District (Welsh 1987: 81).

National Defense as Top Priority

Employees from nearly every technical and academic field were successfully garnered to meet the new wartime demands. "The competition for trained engineers, scientists, and support personnel increased as all regions of the country sought the best minds and workers to meet wartime obligations" (Welsh 1987: 79). Providing for the military became the nation's top priority.

Parcels of land and prospective employees became highly-sought commodities. In their quest to meet construction deadlines, and to provide service workers for menial tasks in the defense boomtowns, Southwestern contractors "...lured hundreds of black men and women..." to the region, with subsequent community pressure forcing the Albuquerque District to provide separate housing for the new jobseekers (Welsh 1987: 82).

White project managers at military construction sites were further unnerved by the penchant of the recently-hired Pueblo Indians to leave the work site to attend traditional ceremonies. "No sooner would one group return from the Corn Dance than it would be time for the Antelope Dance of another group" (John Sundt quoted in Welsh 1987: 88).

Ranchers region-wide were displaced from their homes as the federal government exercised condemnation rights to buy land for emergency military use. Many contend that the ranchers and their families have yet to be fairly compensated for their belongings.

Cultural and political tensions notwithstanding, the early and mid-1940s became a time in our nation's history when "...all social and economic considerations deferred to military construction and defense work..." (Welsh 1987: 79).

Nuclear Warfare

Most provocative was the venture into the unknown realm of nuclear warfare. "Engineers joined with world-renowned physicists, scientists, as well as construction workers to usher in what proved to be the most dramatic and forbidding

age of United States history: the development and proliferation of nuclear weapons" (Welsh 1987: 86).

The Bomb

In September 1944, the Albuquerque District joined with the Manhattan District engineers for "...the final phase of the atomic mission: Construction of the test site for the nuclear weapon at the Alamogordo Bombing Range" (Welsh 1987: 88)*.

Testing of the atomic bomb in New Mexico was "...shrouded in such secrecy that even Vice President Truman knew nothing of it until President Roosevelt's death" (Daniel 1995: 728). President Roosevelt had given the go-ahead to the Manhattan Project on 9 October 1941, believing that the German Nazis had developed an atomic program of their own (Daniel 1995: 728). Successfully tested first on 16 July 1945, a second atomic weapon was loaded aboard the B-29 bomber *Enola Gay,* named after its commander's mother. On 5 August 1945, the bomadier let loose the 10,000 pound bomb from a height of 31,000 feet:

Exactly 43 seconds later the plane filled with a bright light and the B-29 began to rock as if hit by flak. Below, there was '...a fiery red core,' then a huge mushroom cloud. In his mission book, the co-pilot, Robert Lewis wrote, "My God, what have we done?"

At Hiroshima the bomb exploded 1,850 feet above Shima Hospital, vaporizing the hospital and all its patients instantly. Of all the people within 1,500 feet, 88 percent died in the first moment. Temperatures at the center reached 5,432 degrees Fahrenheit at once.

Near the hospital was the three-story Honkaua Elementary School. As Miss Horibe, a teacher, emerged from the basement, she saw another teacher, naked and covered with terrible burns. "Mother, Mother," the woman shouted to her, "this is hell on earth"...

The bomb destroyed 80 percent of the buildings in Hiroshima and severely damaged the rest. Between 70,000 and 80,000 people were killed, with some estimates ranging much higher. Japan did not respond to Truman's demand for surrender. Two days later, Nagasaki suffered the same fate...Some 35,000 people were killed, 60,000 injured, and more than 5,000 vanished.

— Clifton Daniel 1995: 726.

On 2 September 1945, two Japanese officials signed surrender documents aboard the battleship *Missouri* as Supreme Allied Commander Douglas MacArthur looked on.

World War II was over.

*The Alamogordo Bombing and Gunnery Range had been established on 14 May 1942, and was upgraded to the Alamogordo Field Training Station later that same month. One month later still, the Alamogordo Field Training Station was re-named the Alamogordo Army Air Base. On 21 November 1942, the Alamogordo Army Air Base became the Alamogordo Army Air Field.

The Alamogordo Army Air Field was renamed Holloman Air Force Base in honor of Col. George Vernon Holloman, an "...aviation instrument inventor and early experimenter with guided missiles..." two years after he was killed in a 19 March 1946 B-17 accident (Mueller 1989: 245).

Post-World War II

"From Stettin in the Baltic to Trieste in the Adriatic, an 'iron curtain' has descended across the continent," Winston Churchill proclaimed to a rapt crowd in Fulton, Missouri on 5 March 1946 (Daniels 1995: 733). Although the radio broadcast of the speech infuriated those who thought Churchill was being too antagonistic, Churchill was joined by a number of other prominent officials proclaiming communism as a scourge to be eradicated.

A mysterious author writing in a July 1947 issue of *Foreign Affairs* warned the United States that this nation's policy toward the Soviet Union should be the "...firm and vigilant containment of Russian expansionist tendencies" (Daniel 1995: 738). The author, later identified as State Department Soviet Union expert George F. Kennan, remarked two years later that:

> **Whoever, peering from the comfortable distance of the bourgeois-liberal world, views Stalin as just another successful political leader pushing his people firmly but roughly along the path of history, has failed to grasp the cataclysmic horror of modern totalitarianism.**
>
> **-Levering 1994: 19.**

For its part, the Soviet Union could hardly be expected to trust a country which had dropped an atomic bomb "...on densely populated Japanese cities without explicit warning" (Levering 1994: 26). At a time when each of the superpowers was stockpiling conventional weapons, and developing atomic ones, diplomatic relations between the Soviet Union and the United States became strained to the breaking point.

The Cold War

> ***Nuclear weapons both set limits to the struggle--that is, helped keep it cold--and also intensified it in many ways, not the least of which was the fear in each country that the other might try to obliterate it in a surprise attack. Even at those times in which there were relatively few other major issues in dispute, the threat of nuclear destruction loomed like a thunderhead over U. S.-Soviet relations.***
>
> ***-Levering 1994: 28.***

Although not actually at war, elder statesman Bernard Baruch cautioned his colleagues in an address to the South Carolina legislature on 16 April 1947:

"Let us not be deceived. We are today in the midst of a cold war. Our enemies are to be found abroad and at home" (Daniel 1995: 737). The nuclear arms race quickly became the central feature of the newly-defined Cold War, distinguishing this "...rivalry from other great power conflicts in the past" (Levering 1994: 27).

Soviets Detonate Bomb

A shift in the balance of power occurred in September 1949, when it was confirmed that the Soviet Union had successfully detonated a nuclear bomb of its own. Research into the development of a hydrogen bomb ensued. Although technically more complex than a fission bomb, the proposed thermonuclear device would be 100 times more powerful. The risk of a worldwide nuclear holocaust escalated.

The Cold War: President Truman's Directive

Soon after the United States learned that the Soviet Union had exploded its first nuclear bomb, there was a growing post-World War II concern that mainland China was emerging as a second Communist stronghold. In the face of this dual threat to U.S. national security, President Truman issued the following directive to Secretary of State Dean Acheson and Secretary of Defense Louis Johnson:

The President to the Secretary of State

TOP SECRET

Washington, D.C.
January 31, 1950

MY DEAR MR. SECRETARY:

After consideration of the report by the Special Committee of the National Security Council consisting of the Secretary of State, the Secretary of Defense, and the Chairman of the Atomic Energy Commission, designated to advise me on the problem of the development of a thermonuclear weapon, I hereby direct the Secretary of State and the Secretary of Defense to undertake a reexamination of our objectives in peace and war and of the effect of these objectives on our strategic plans, in the light of the probable fission bomb capability and possible thermonuclear bomb capability of the Soviet Union.

I have also decided to indicate publicly the intention of this Government to continue work to determine the feasibility of a thermonuclear weapon, and I hereby direct that no further official information be made public on it without my approval.

I am sending an identical letter to the Secretary of Defense, and a copy of both letters to the Chairman of the Atomic Energy Commission for the information of the Commission.

Sincerely yours,

HARRY TRUMAN

"As America emerged from World War II, it was evident that a new world order was taking shape, one unlike any that had come before it. In this new arrangement, the United States faced the prospect of having to share its status as a nuclear superpower with a hostile Soviet Union. In 1950 it fell to a small group of individuals in the Departments of State and Defense to devise a strategy capable of protecting American national interests" (Drew 1994: Introduction).

National Security Council Response

The task of drafting the response to President Truman's directive fell largely to the Policy Planning Staff at the Department of State, headed by Paul Nitze. "A Report to the President Pursuant to the President's Directive of January 31, 1950" was submitted to President Truman on 7 April 1950. Referred to hereinafter as NSC-68, this report forged for the United States a policy which was to have an immediate and profound effect upon this nation's military posture.

One of the most important ingredients of power is military strength. In the concept of 'containment', the maintenance of a strong military posture is deemed to be essential...

Without superior aggregate military strength...readily mobilizable, a policy of 'containment' - - which is in effect a policy of calculated and gradual coercion - -is no more than a policy of bluff.

- S. Nelson Drew 1994: 55.

NSC-68

Deemed "the seminal strategic document of the Cold War era," (Drew 1994: Introduction) NSC-68 warned of the unprecedented polarization of world power, and described the situation in 1950 as a crisis: "When our military strength is related to the world situation...it is clear that our military strength is becoming dangerously inadequate" (Drew 1994: 65).

Referring to the Soviet Union throughout the document as a "slave state," and as a "grim oligarchy," the authors concluded that Americans must work together to "... make ourselves strong, both in the way in which we affirm our values in the conduct of our national life, and in the development of our military and economic strength (Drew 1994: 42). The authors further maintained that "...we have no choice but to demonstrate the superiority of the idea of freedom by its constructive application, and to attempt to change the world situation by means short of war in such a way as to frustrate the Kremlin design and hasten the decay of the Soviet system (Drew 1994: 45).

The authors of NSC-68 recommended that the United States, burdened with the self-imposition of world leadership, must adopt a strategy to contain communism. "...[E]very consideration of devotion to our fundamental values and to our national security," admonished the authors, "demands that we achieve our objectives by the strategy of the cold war, building up our military strength in order that it may not have to be used" (Drew 1994: 96).

According to accounts by those participating in the process, there was considerable opposition to the level of spending that appeared to be required by NSC-68. President Truman called for further study. The invasion of South Korea

by North Korean forces on 24 June 1950, however, helped solidify a consensus: "The shock of armed aggression by Communist forces made the threat assessments of NSC-68 seem more realistic..." (Drew 1994: 98). A fourth draft of NSC-68 was accepted by President Truman on 14 December 1950.

Cold War Initiatives: Full Moral and Material Strength

The evening after NSC-68/4 was accepted, President Truman delivered an emergency radio and television address to the American people, warning that "...our homes, our Nation, all the things we believe in, are in great danger....The future of civilization depends on what we do--on what we do now, and in the months ahead." Truman implored Americans to unite "...for the security and well-being of our beloved country and to place its needs foremost in thought and action that the *full moral and material strength* of the Nation may be readied for the dangers which threaten us" (Truman 1950: 741-746).

The strategy of containment adopted by President Truman, and embraced by every subsequent administration, resulted in the immediate and unprecedented expansion of defense-funded industry. The Soviet-launched Sputnik satellite seven years later prompted a parallel expansion of scientific institutions and endeavors. Corporate and federal institutions cooperated as never before to attain twin Cold War initiatives: to develop and amass a national weapons arsenal, and to conquer space.

"Americans...have been compelled to create a permanent armaments industry of vast proportions...we annually spend on military security more than the net income of all United States corporations. This conjunction of an immense military establishment and a large arms industry is new in the American experience."

—President Dwight D. Eisenhower

"Farewell Radio and Television Address to the American People" 17 January 1961

The Missile Gap

Eisenhower's solemn warning against the "...acquisition of unwarranted influence by the military-industrial complex" startled many of his listeners who had expected a nostalgic Presidential farewell (Daniel 1995: 790).

Others, however, proclaimed there was a 'missile gap' between the Soviet Union's arsenal and what the United States had been able to develop. The arms race between the world's superpowers was on. Eisenhower's warning went largely unheeded.

Guided Missile Research

By the mid-1950s, the science of warfare had advanced to the point where aircraft delivery of weaponry was no longer necessary. Self-guided missiles were being developed which could evade any form of interception, and could reach any target. Offensive and defensive guided missiles rapidly became the mainstay of the nation's Cold War arsenal. The development of guided missiles spawned research into supersonic speed phenomena, upper atmosphere conditions, and the basic mechanics of propulsion, flight control, electronics, and launching.

Missile Classifications

The Air Force classified missiles in several ways. The most common method used "A" to stand for air, "S" for surface, and "U" for underwater. The first letter in a classification designated the intended launching point, and the second letter stood for the intended destination. This system, used in combination with the letter "M" for missile, classified the use of missiles as follows:

SAM--Surface-to-air missile
AAM--Air-to-air missile
ASM--Air-to-surface missile
SSM--Surface-to-surface missile
AUM--Air-to-underwater missile
SUM--Surface-to-underwater missile
USM--Underwater-to-surface missile
UAM--Underwater-to-air missile

Another classification system developed during the1950s used abbreviations:

TM--Technical Missile
SM--Strategic Missile
IM--Interceptor Missile
GAR--Guided Aircraft Rocket
GAM--Guided Aircraft Missile

"Guided missiles" also included research drones and target drones, generally used to train aircraft and gunnery crews (Myers 1958: 12-14).

Air Force Responsibility

Responsibility for guided missile development and operational employment proved to be a "contentious" issue, with each branch of the service competing with the other (Wolf 1987: 207). A review of the dilemma by the Joint Chiefs of Staff and the Secretary of Defense Louis A. Johnson resulted in a broad assignment of guided missile development areas within each branch.

The Air Force was assigned responsibility for missiles which replaced or supplemented fighter interceptors and ground support aircraft. The Air Force also received responsibility for the research and development of air-to-air and air-to-surface missiles (Wolf 1987: 207).

Further reorganizations resulted in the consolidation of several test sites nationwide. In a memorandum dated 15 March 1950, the White Sands Missile Range and Holloman AFB were consolidated into a single guided missile proving ground (Wolf 1987: 216).

Air Force Missile Development Center

In recognition of its important contributions to the development of guided missiles, Holloman AFB was elevated in 1952 from being simply a local activity to the status of an Air Development Center.

After being selected as "...the most promising site within the United States for important future developments in guided missiles and space technology..." the Holloman Air Development Center was redesignated on 1 September 1957 as the Air Force Missile Development Center (AFMDC 1958).

Space Exploration

Within the larger historic context of containing the threat of communism through a massive build-up of the nation's arsenal, a second national Cold War initiative to conquer space soon developed.

The Race to Outer Space

On 20 February 1962, the world watched as Lieutenant Colonel John Glenn's space capsule shot through a keyhole in the earth's atmosphere and splashed safely back into the Atlantic Ocean at 2:43 in the afternoon. Aloft for more than four hours, Glenn had successfully orbited the earth three times in four hours and fifty-six minutes.
The nation breathed a sigh of relief. Earlier in his flight, Glenn had been puzzled by "small golden flakes" whizzing past his capsule window. National Aeronautics and Space Administration (NASA) controllers feared that his capsule's protective heat shield was disintegrating. President Kennedy canceled his "good-luck and God-bless" telephone conversation, not wanting to be remembered as the man who congratulated Glenn "...before his certain death." Kennedy opted instead to telephone Glenn after he had been safely hauled out of the ocean and onto the *U.S.S. Noa* cruiser (Reeves 1993: 287).

The safe return of astronaut John Glenn represented the culmination of unfathomable expenditures of money and ingenuity, undertaken with a vengeance after the launch of the Sputnik satellite by the Soviets nearly four and a half years earlier. Bernard Beruch, the man credited with coining the phrase "Cold War," spoke for most of the nation when he observed, "Suddenly, rudely, we are awakened to the fact that the Russians have outdistanced us in a race we thought we were winning" (*NY Times* Oct 1957).

Defense Reorganization Act

Finger-pointing began immediately after news of the Sputnik launch was confirmed. Although recently-declassified documents appear to attribute more responsibility to the Truman administration than has been previously ascribed, the Eisenhower administration bore the brunt of the criticism at the time (Bulkeley 1991: 212). President Eisenhower responded swiftly. Based on recommendations provided by the Congressional Symington Committee, which blamed "inter-service rivalries" for development delays, the Department of Defense Reorganization Act was signed into law on 6 August 1958 (Wolf 1987: 325).

Holloman Air Force Base

Holloman Air Force Base was one of many widespread military proving grounds to benefit from the reorganization. Daring research projects assessing the effects of reentry into the earth's atmosphere had been conducted at Holloman Air Force Base and elsewhere since the early 1950s. In September 1955, the first run on the Holloman "Daisy" decelerator track, named for the rifle by the same name, was undertaken. A menagerie of animals, including adult black bears, chimpanzees, dogs, and rainbow trout (in tanks), were strapped onto "sleds," rocketed along the Daisy decelerator track, and abruptly halted to study the effects of rapid acceleration and deceleration.

Kittinger's Balloon Jump

Anthropomorphic dummies had been dropped from balloons at Wright-Patterson's Aero Medical Laboratory in Ohio since 1952, in preparation for human jumps. A spectacular human balloon jump at Holloman AFB occurred in December of 1959.

Captain Joe Kittinger was launched in a balloon to an altitude of more than 100,000 feet above New Mexico's Tularosa Basin. Next, at twelve minutes after seven in the morning, Kittinger jumped. As planned, he fell through the first four minutes of darkness relying only on a six-foot stabilizing parachute. At 17,500 feet, his 28-foot parachute opened. Plummeting earthward for a total of thirteen minutes and forty-five seconds, Kittinger reached speeds of up to 614 miles per hour. He landed in the scrub desert, almost in the center of the designated target area. His first words after dropping nearly nineteen miles were, "I'm very glad to be back with you all, gentlemen" (Meeter 1967: 43-52).

Press releases and photographs made public before Sputnik emphasized that these and other tests were being conducted primarily in an effort to safely eject pilots from jets flying at supersonic speeds.

After Sputnik, press releases emphasized that testing was being conducted to launch humans into space: "Indeed," remarks Holloman AFB historian Bushnell, "...with the post-Sputnik revolution in Air Force research activity, scientists... at last became free to emphasize space work to their hearts' content" (Bushnell n.d.d.: 2).

Project Mercury, commissioned as the "...launch and safe return of a man from earth orbit," was formally approved on 7 October 1958. Just three years elapsed between the award of the NASA contract, and President Kennedy's postponed telephone call to John Glenn aboard the *U.S.S. Noa* (Yenne 1985: 7). Tests at Holloman AFB and other proving grounds, begun in the early 1950s and revitalized after the Sputnik launch, were responsible for propelling Project Mercury to its rapid success.

Operation High Jump

Captain Joseph Kittinger after his record-breaking leap: "I'm very glad to be back with you all, gentlemen."

(Official USAF photograph. Meeter 1967: 148).

During a momentous address to Congress on 21 May 1961, President Kennedy urged the nation to "...commit itself to achieving the goal, before this decade is out, of landing a man on the moon and returning him safely to earth" (*NY Times* May 1961). The effort to place an American on the moon became the cornerstone of NASA's space program, with Glenn's *Freedom 7* spacecraft quickly followed by the two-man *Gemini* flights, and the three-man *Apollo* series (Yenne 1985: 7).

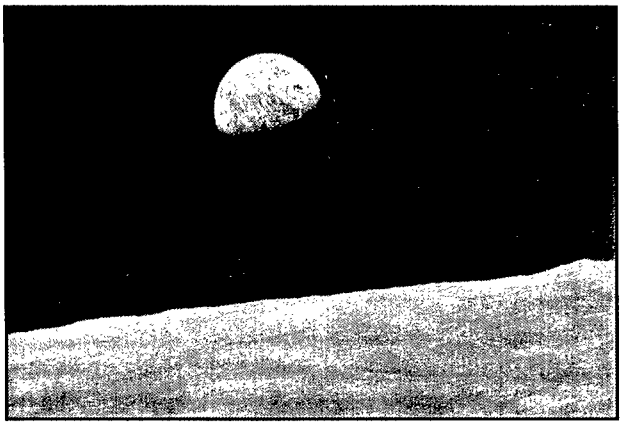
"Earthrise" Photograph

Photographs taken from space caused an international sensation. A color photograph from the December 1968 *Apollo 8* mission showed the earth as an agate of swirling color, hovering in isolation beyond a crater-pocked, and barren, lunar landscape.

This photograph, dubbed "Earthrise," represented an "inversion of an intensely familiar" theme (Cosgrove 1994: 275). Although it captured the familiar image of a nocturnal landscape illuminated by a partial moon, this time humanity was treated to an unprecedented, eyewitness, view of planet earth from the moon.

According to cosmologist Fred Hoyle and others, a new concern for the earth itself was borne of the images received from space. Something new had created a "...worldwide awareness of our planet as a unique and precious place." It seemed to Hoyle much "...more than a coincidence that this awareness should have happened at exactly the moment man took his first step into space" (Goldberg 1991: 57).

Photographs depicting the earth as a fragile and finite planet provided a powerful new impetus for a fledgling environmental movement, fortifying those opposed to further testing of nuclear weapons. Until the



Still Photograph AS8-14-2383: Although earlier photographs of the earth had been taken, the photos were not widely circulated. This photo, called 'Earthrise' "...caused an instant international sensation" (Cosgrove 1994: 275).

Apollo photographs, writer Vicki Goldberg observes, "Poets and philosophers had told us for centuries that human beings were insignificant and transient, but no one had shown us so forcefully how tiny, how alone, how poignantly beautiful our planet was" (Goldberg 1991: 57).

Conclusion

Holloman AFB played a vital role in this nation's achievement of parallel priorities to develop an unprecedented weapons arsenal and to explore outer space.

Although the decade of the 1960s opened up with the terrifying possibility of nuclear war between the world's superpowers, on 20 July 1969 satellites transmitted the image of Neil Armstrong placing his left foot onto the moon. Loftier dreams had narrowly prevailed.

The following chronology highlights some of the most important early Cold War missions accomplished at HAFB, beginning with a few of the early missile tests and culminating in research conducted in support of the successful *Apollo* launches.

Sources for the Holloman AFB Highlights section include selections from chronologies prepared by Air Force historians Bushnell and Cornett cited in the bibliography, a 1958 Air Force Missile Development Center Yearbook, and photographs located at the National Archives II, College Park, MD. Photo captions are cited verbatim.

Holloman AFB Highlights

1943-1947

"**The Air Force Missile Development Center** was borne as a result of drastic changes both in modern technology and in the art of warfare. Its total history has been dominated by its contributions to the perfection of modern missile weapon systems and in the exploration of the limitless vertical frontier reaching out into interstellar space.

As early as 1943, the unique facilities and physical environment of this then isolated installation were considered for a guided missile research and development program. No effort, however, was made to interfere with the program of training bomber crews which was then in force. Instead, it was not until March 1947 that Air Force scientists and technicians journeyed to the vast Tularosa Basin of New Mexico, bringing as part of their physical and intellectual baggage a major portion of the embryonic guided missile program.

On 23 July 1947, a GAPA missile streaking skyward from the new missile center, the first of the many thousand major tests which now comprise the Air Force Missile Development Center record. Very rapidly the workload expanded to include a bevy of air defense missiles, an intercontinental-range missile, shorter-range tactical weapons, a variety of drones, space biology, biodynamics, upper-atmosphere investigations and many other important projects.

Shortly after the Air Force became a separate branch of service, Alamogordo Army Air Field was renamed Holloman Air Force Base in honor of Colonel George V. Holloman, a pioneer in military technical research and development. On 10 October 1952, in recognition of the growing importance of the Holloman contribution, the local activity was elevated to full center status and designated Holloman Air Development Center. And, finally, after being selected as the most promising site within the United States for important future developments in guided missiles and space technology, on 1 September 1957 the Center was redesignated the Air Force Development Center."

--Frontispiece, 1958 AFMDC Yearbook

26 August 1949
Contract for construction of the 3550-foot Holloman High Speed Test Track and blockhouse is awarded to Ponsford Brothers of El Paso, TX in the amount of $451,000.

15 June 1950
The Holloman Track is accepted by Air Installations. It is then turned over to Northrop Aircraft, Inc. for operation as a *Snark* missile launching facility.

23 June 1950 thru 28 March 1952
The first *Snark* launch-sled test is conducted on the Holloman Track 23 June 1950. The maximum speed is 149 feet per second (101 miles per hour). Total distance traveled is 676 feet, the sled being stopped by water brake in 202 feet. *Project Snark* ran 33 missile launches.

March 1952 thru 10 Feb 1954
39 impact, deceleration, and rain tests conducted on the Track *(Project Sleighride)*.

Sept 1952 thru 21 Oct 1952
Six drone acceleration tests *(Project Q-2)* conducted on the Test Track.

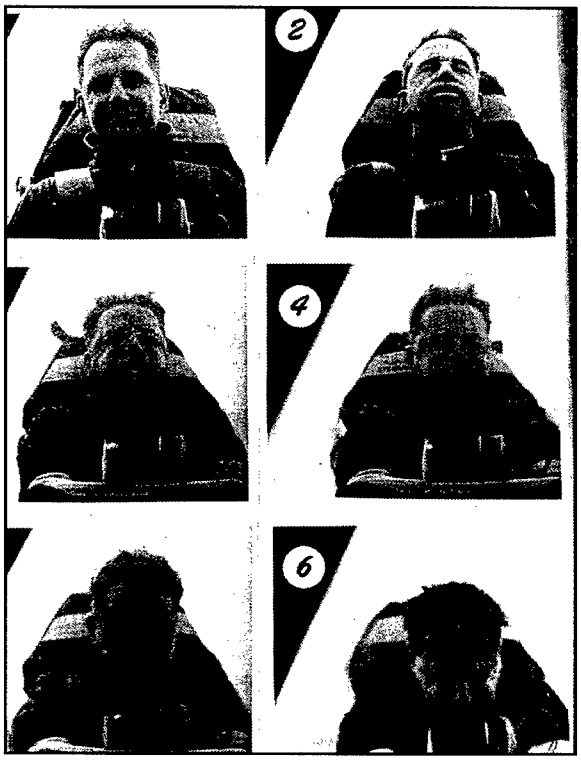
25 Nov 1952 thru 9 Jan 1953
Five of six drone launch tests *(Project OQ-19)* conducted on the Test Track.

Feb 1953 thru 30 Sept 1954
Six jet-vane control tests *(Project MX-1601)* studied through Track launch of a test missile.

3 July 1953 thru 14 Dec 1953
Six parachute recovery system tests conducted on the Test Track *(Project Matador)*.

24 November 1953
First of the Aeromedical Field Laboratory track runs (a sled evaluation test).

19 March 1954 thru 10 Dec 1954



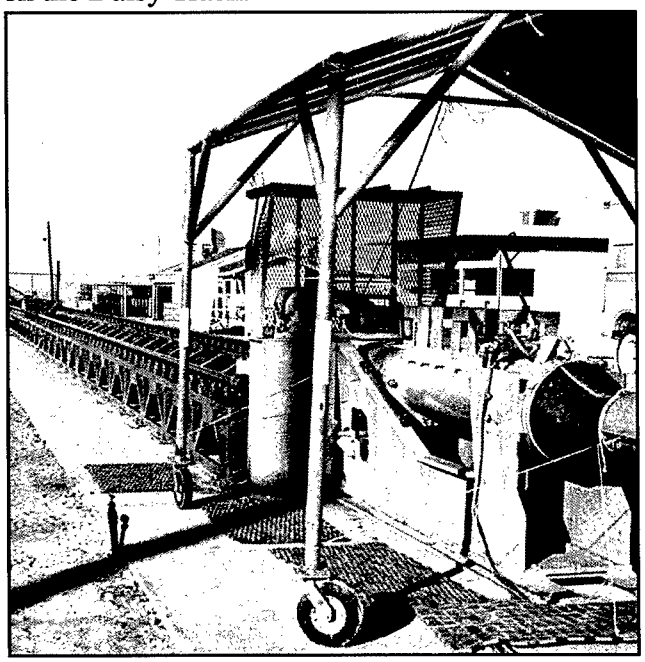
RG 342. Vol. I. 04-142. Archives II.

Between 19 March and 10 December 1954, a daring research project personally directed by Colonel John Paul Stapp focused nationwide attention on Holloman Air Force Base. The research project was specifically oriented toward the study of high-speed escape from aircraft. Unique in this series of sled tests was the fact that Colonel Stapp rode the sled on three separate occasions. The final and most famous run took place on 10 December when the sled run reached a maximum velocity of approximately 937 fps, producing a windblast exposure of 7.7 pounds per square inch and a deceleration plateau of about 25 g's for more than a second.

8 July 1954 thru 15 March 1955
Sixteen aerodynamics tests conducted at the Test Track *(Project MX-194 and B-58 Flutter Model Testing).*

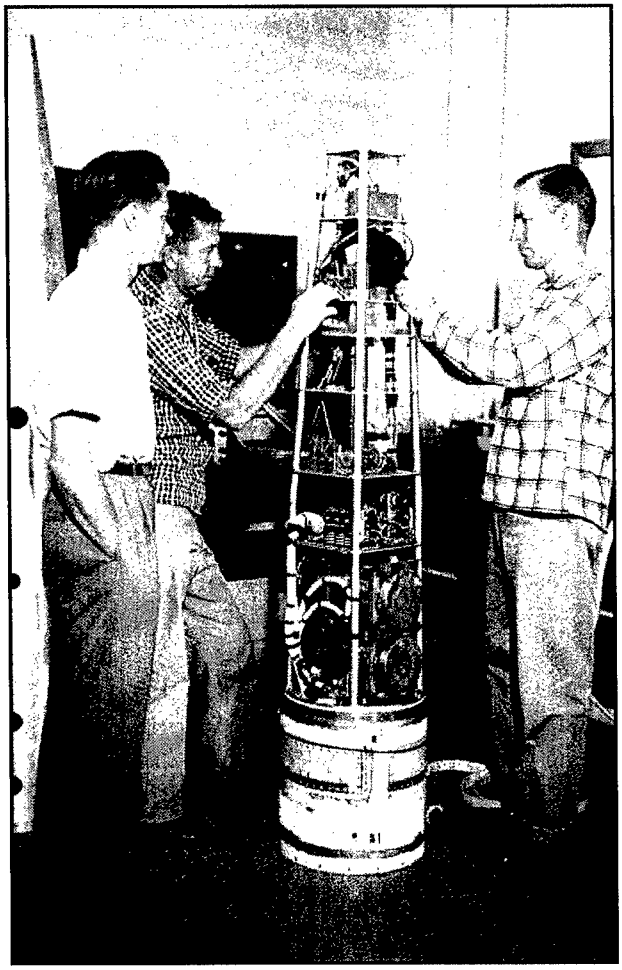
11 Jan 1955 thru 16 March 1955
Ten test runs conducted to detect what linear acceleration can be imposed on flight control gyroscopes *(Project Flight Control Components).*

22 September 1955
The first run is conducted on Holloman's 120-foot Daisy Decelerator Track, a research tool designed expressly for use by the Laboratory in the study of human tolerance to short-duration gravity forces. Between 1961-62 the track was extended to 240 feet. On 4 September 1964, the 2000th run was conducted on the Daisy Track.



Record Group 342-B. Volume I. 06-042. Archives II.

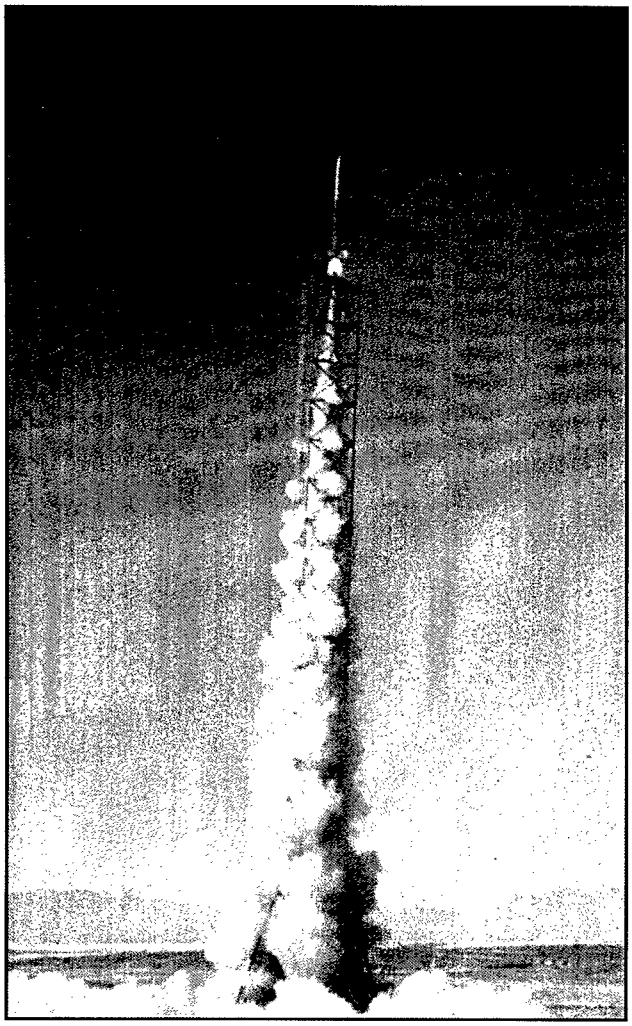
11 October 1955



Record Group 342-B. Volume I. 02-001. Archives II.

Aerobee rocket technicians make an adjustment on the Aerobee sodium vaporizer at Holloman AFB, New Mexico. One hundred and nine Aerobee missiles were launched by the Air Force from Holloman's Aerobee Tower before the project was discontinued mid-1959. In 1965, the Aerobee Tower was dismantled and shipped to White Sands Missile Range to assist in their Aerobee launch program.

October 1955



RG 342-B. Vol. I. 02-001. Archives II.

"*Aerobee*" guided missile being launched at Holloman AFB. Built by Aerojet-General Corporation and used principally for research projects of the Air Force Cambridge Research Center, the *Aerobee* research rocket was first fired at Holloman in December 1949.

18 October 1955

RG 342. Vol. I. 04-160. Archives II.

Technicians check out Hughes GAR-1 "*Falcon*" air-to-air guided missile at Holloman Air Development Center, Holloman Air Force Base.

19 March 1956
Contract awarded to the Robert E. McKee general contracting firm of El Paso, TX to extend the existing Test Track to 35,000 feet.

May 1956
Completion of the first Holloman Test Track extension, to slightly over 5000 feet.

8 June 1956
Operational Requirement 200, prepared by Air Research and Development Command, calls for the establishment of a central inertial guidance test facility.

23 July 1956
Responsiblity for Project 5177, Evaluation and Test of Inertial Components (later Evaluation and Test of Guidance Systems) is transferred from Wright Air Development Center to the Air Force Missile Development Center at Holloman.

1 August 1956
Technical Requirements 90-56 and 191-56 give the Air Force Missile Development Center a major share in the development of guidance and control systems for ballistic and extra-atmospheric vehicles.

June 1957 thru October 1958

USAF Photo (Meeter 1967: 148).

Partly oriented toward cosmic radiation research, and partly toward a broad range of upper atmospheric investigations, *Project Man High* was initiated to find out if human beings were capable, physically and psychologically, of extended travel at a space-equivalent altitude. *Project Man High* consisted of three upper atmosphere balloon flights. In the first flight (2 June 1957) Captain Joseph W. Kittinger ascended to an altitude of 96,000 feet. This was followed by the flight of Major G. Simons on 19-20 August 1957 to a record altitude of 102,000 feet and a flight of thirty-two hours and ten minutes. A third flight took place on 8 October 1958 when Lieutenant Clifton M. McClure (pictured below left) reached an altitude of 99,900 feet.

27 June 1957
Air Research and Development Command advises the Air Force Missile Development Center that Wright Air Development Center will serve as guidance and control "team captain." The mission of the local Center in guidance and control matters thus comes under the direct cognizance of Wright Field, and it is limited to testing as distinct from development.

July 1957
Start of *GAM-72 (Quail)* test program at the Air Force Missile Development Center.

29 August 1957
An *X-7A* ramjet test vehicle is flown on the Holloman proving range at a maximum speed of 3.95 Mach--the fastest speed yet attained by any 'air-breathing' vehicle.

1 September 1957
Holloman Air Development Center redesignated as the Air Force Missile Development Center.

25 September 1957
The first *TM-76A Mace* (an advanced version of the *Matador* missile) is flown from the Air Force Missile Development Center at Holloman to Wendover Air Force, Utah in an overland test.

1 October 1957
The *F-101 Project* accomplishes first live firing of an MB-1 missile from F-101A jet fighter.

4 October 1957

The Soviet Union launches the first artificial earth satellite (*Sputnik I*).

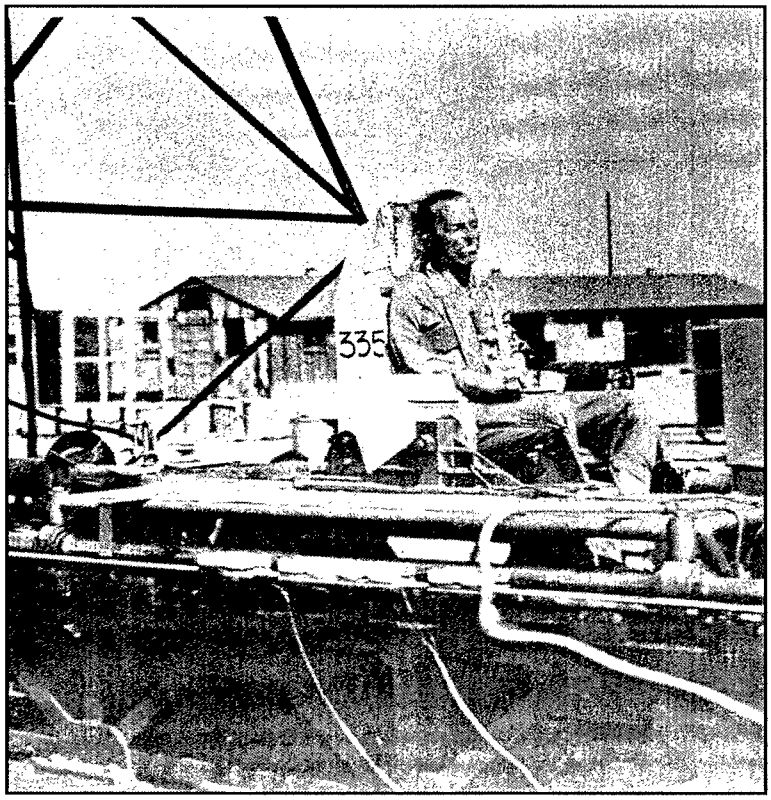
16 October 1957
An *Aerobee* rocket launched from Holloman AFB with special explosive charges blasted small artificial meteorites out into space. This apparently marked the first time that any man-made object achieved escape velocity.

31 October 1957
Major General Leighton I. Davis, Commander of the Air Force Missile Development Center, makes a special presentation to Command Headquarters on the need to revamp Command organization and mission to meet the new demands of missile and space (as distinct from aircraft) technology.

5 November 1957
Initial glide flight of *the GAM-72* decoy missile at the Air Force Missile Development Center.

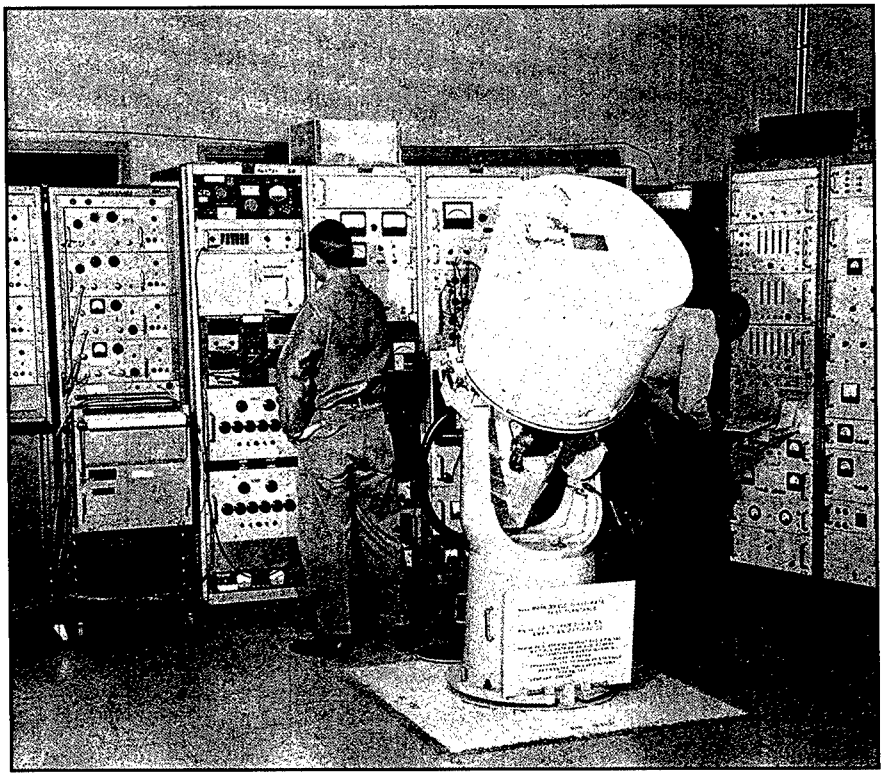
27 November 1957 - March 1958
The Guidance and Control Division initiates a new *Project 6889, Evaluation and Test of Control Systems for Space Vehicles* (later called Advanced Vehicles).

16 May 1958
Captain Eli L. Beeding, Jr. (pictured below) then Assistant Chief of the Biodynamics Branch at the Aeromedical Laboratory sustains a force of 83 g's in a test on the Daisy Decelerator Test Track in a backward-facing position. The force was the greatest experienced in any test with a human subject.



Official USAF Photo (Meeter 1967: 148).

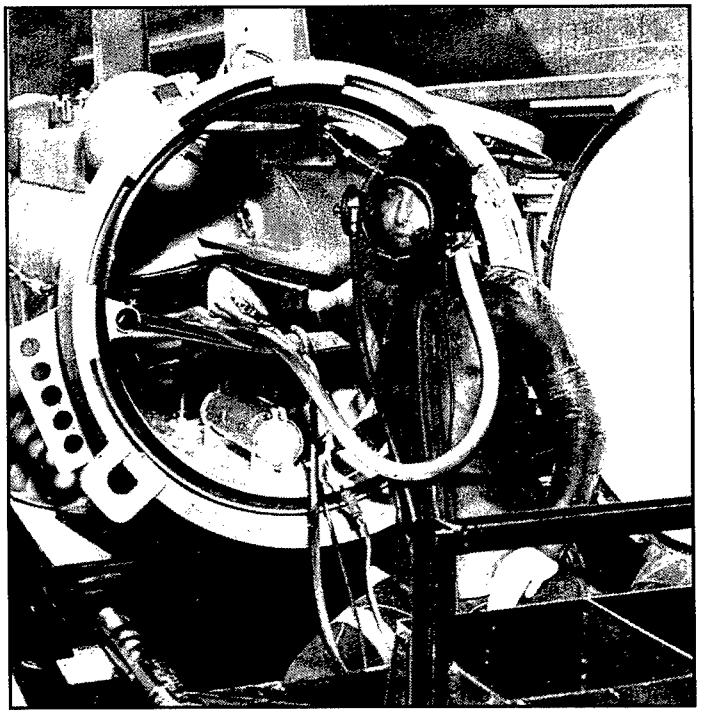
RG 342. Vol. I. 06-011. Archives II.



25 February 1959
Formal dedication of the 35,000-foot Holloman High Speed Test Track. White rats were the first to be tested using an I-beam sled.

19 March 1959
The first High Speed Test Track run occurs in support of a guidance test program for Weapons System 133A (the *Minuteman Project).*

May 1959
The Department of the Air Force formally directs the establishment of a Central Inertial Guidance Test Facility at the Air Force Missile Development Center. Controlled Environmental Area personnel are photographed at work (above) testing gyro calibration procedures (25 March 1963).



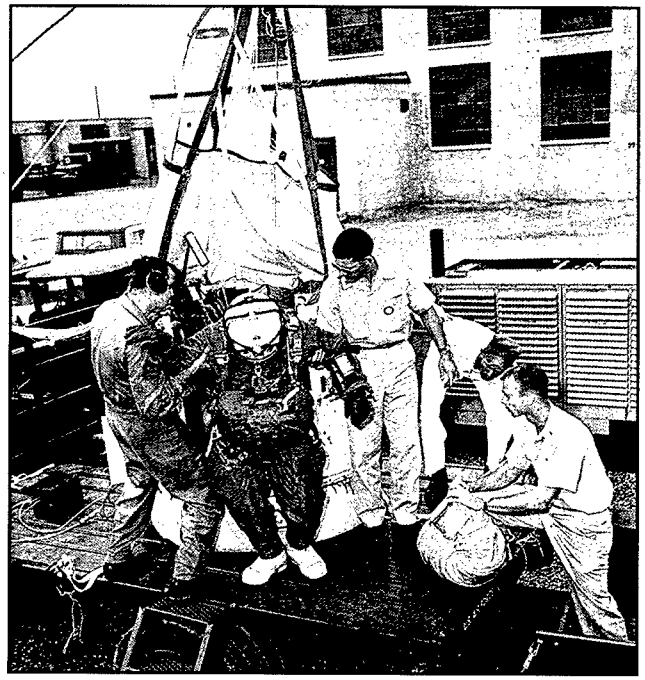
RG 342. Vol. I. 04-151. Archives II.

27 October 1959
In connection with the USAF space program, Air Force personnel involved in physical experiments in determining human tolerance to G stress at the Holloman Air Force Missile Development Center are presently undergoing Aqua Lung practice to familiarize themselves with long-term water immersion. The Aqua Lung practice is a prelude to forthcoming deceleration tests in which the subject will be immersed in water. Here Lt. Al Zaborowski is shown with a water capsule.

18 November 1959
First checkout run of the RS-2 sled, intended for use in guidance testing for Weapons System 107A-2 *(Titan)*.

6 August 1960
The initial run takes place in a series of sled tests to prepare the chimpanzees for the *Project Mercury* acceleration/deceleration profiles. The final run in this series took place on 9 June 1961.

16 August 1960

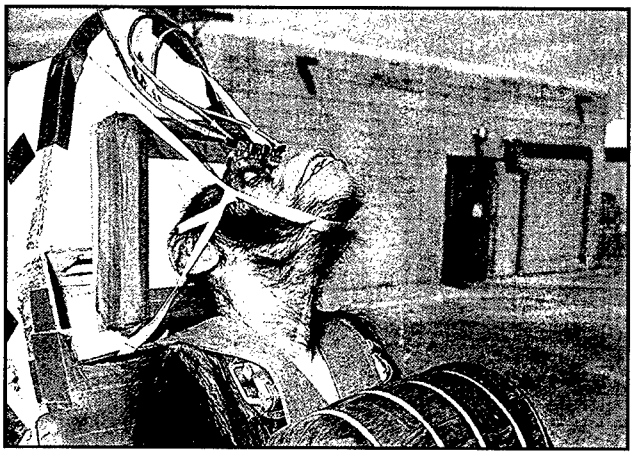


RG 342. Vol. I. 04-071. Archives II.

Captain Joseph W. Kittinger is helped out of his balloon gondola after the final check is made. Capt. Kittinger will attempt to break the record for high altitude bailout at Holloman AFB.

31 January 1961
HAM, a chimpanzee trained at the Laboratory for *Project Mercury*, completed a 155-mile high sub-orbital flight, 420 miles down the Atlantic Missile Range. HAM preceded Commander Alan Shepard in the ballistic space flight phase, and reached a speed of 5800 miles per hour in his brief journey.

9 March 1961



RG 342 Vol. I. 04-164. Archives II.

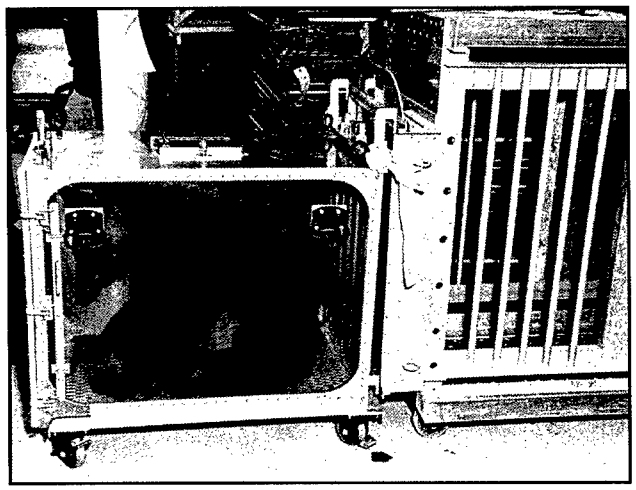
A chimpanzee on a (fighter jet) F-106 parachute pack test prior to a run at the Holloman AFB Biodynamics Laboratory.

21 July 1961
On this date, the foundation for extending the Daisy Decelerator Test Track from 120 to 140 feet was poured. The new extension was officially accepted in October 1962.

29 November 1961
The Holloman AFB-trained chimpanzee, Enos, was launched from Cape Canaveral in a *Project Mercury* capsule which orbited the earth twice. Enos preceded Lieutenant John Glenn in orbital flight and spent about 183 minutes in weightlessness at a perigee of 99 miles and an apogee of 146 miles. Enos was boosted by an Atlas vehicle (MA-5) whereas HAM had been lofted by a Redstone booster (MR-2).

2 July 1962
Completion of a series of eight 97-hour tests to determine the chimpanzee's sensitivity to breathing 100 per cent oxygen.

6 September 1962
Beginning of an American black bear impact series to evaluate recovery "tolerance" for *Project Apollo*. The black bear photographed below is shown in an anesthesia cage in the Veterinary Services Section of the Aeromed facilities (January 1964).

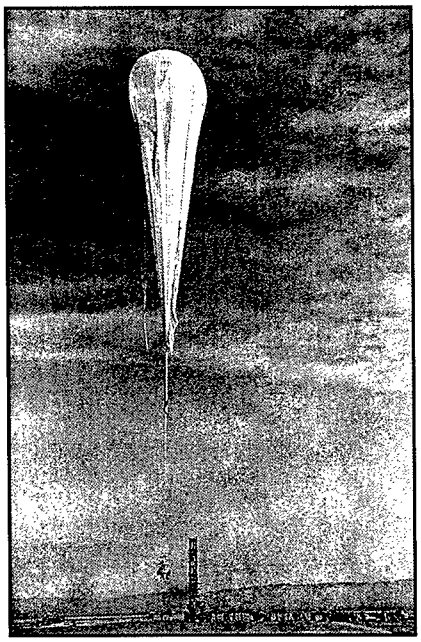


RG 342-B. Vol. II. 09-001. Archives II.

October 1962
A 120-foot extension to the Daisy Decelerator Track is accepted. The extension brought the total length of the biodynamics tool to 240 feet.

4 November 1962
Enos, the chimpanzee famed for his dual orbit of the earth on 29 November 1961 (*Mercury-Atlas-5*) dies.

13 thru 14 December 1962



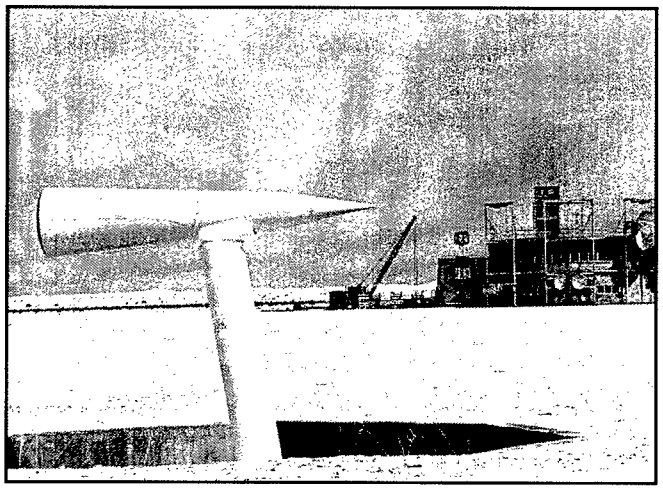
RG 342. Vol. I. 04-071. Archives II.

The *Stargazer* balloon was launched by the Air Force Office of Aerospace Research at the Air Force Missile Development Center. The balloon, which was 400 feet tall including the gondola, had a capacity of 3.2 million cubic feet. The balloon carried Capt. Joseph Kittinger, Jr., Wright-Patterson AFB, OH and Mr. William White, U.S. Naval Ordnance Test Station, China Lake, CA to an altitude of 82,000 feet. The duration of the flight was 18 hours and 32 minutes. The gondola contained a tracking telescope which was used to study the stars from above the earth's atmosphere thus eliminating distortion due to atmospheric haze and dust. Here the balloon is shown immediately following release.

22 January 1963
A series of human impact runs to assist the National Aeronautics and Space Administration in Project *Apollo* was initiated. Phase I, consisting of 140 human tests, ended on 9 November 1963. Phase II ended in July after an additional 95 tests and Phase III started in October 1964.

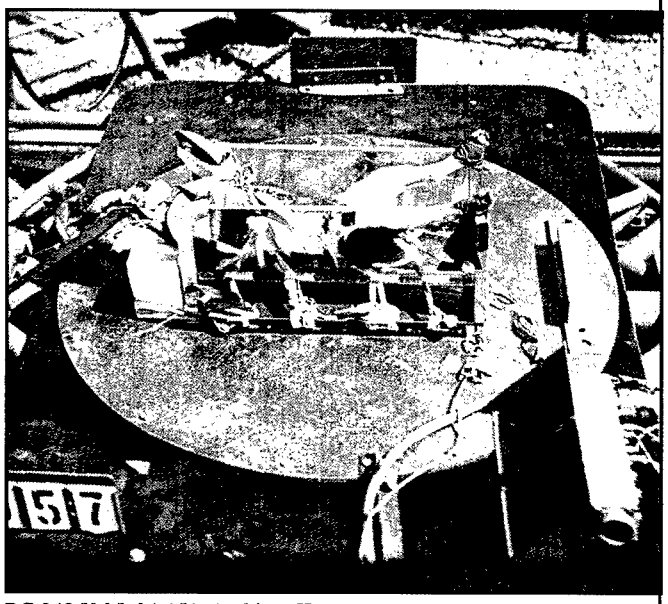
1 April 1963
HAM, the chimpanzee who made a suborbital flight on 31 January 1961 (*Mercury-Redstone-2*) in *Project Mercury*, retired with honors to the National Zoological Park, Washington, D.C.

20 September 1963
This photo (below) shows the tilted column support for the Pershing Nose Cone and a transition or saddle. The tie-down cords serve the purpose of holding the target rigid while it is rotating 360 degrees in azimuth. The building in the right background is the west end of the Radar Target Scatter (RATSCAT) facility.



RG 342-B. Vol.2. 06-042. Archives II.

2 June 1964
The 6571st Aeromedical research Laboratory accepted amendment No. 2 of NASA Purchase request T-16758(G) to study "the effects of decompression of animals (dogs) in a vacuum..."

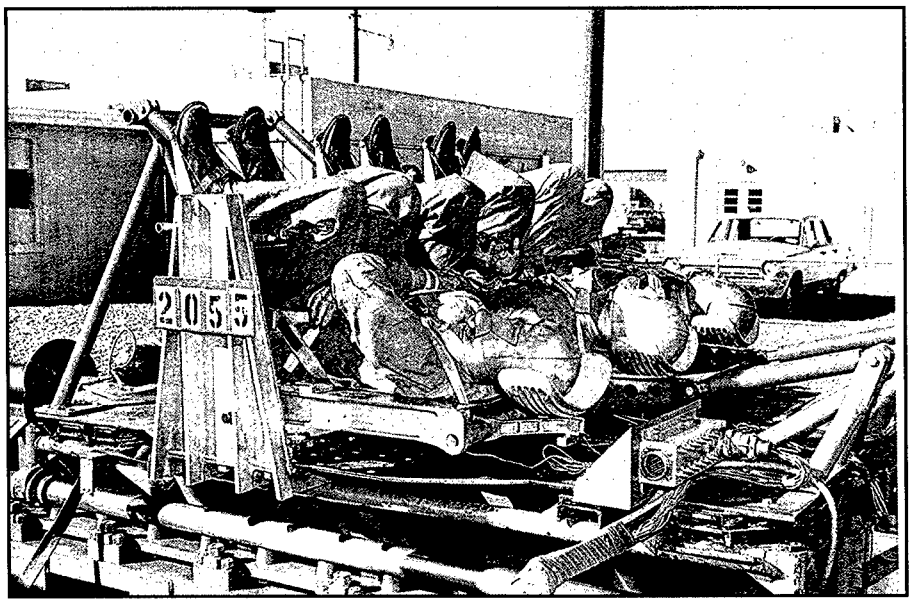


RG 342.Vol.I. 04-151. Archives II.

The photograph above shows the canine subject at the time of impact on the Daisy Decelerator. The subject was instrumented with surgically implanted strain gages, EKG electrodes and pressure receptors in major vessels (30 July 1964).

28 October 1964
The first *Apollo* series human run is made on the Daisy Decelerator in an experimental program which tested three men simultaneously on the capsule couch prototype.

7 November 1964
Three anthropomorphic dummies are shown on the *Apollo* three-man couch prototype just prior to a run on the Daisy Decelerator at Holloman AFB, NM. They will impact in a feet-first position. Dummy tests are always conducted prior to human test to ensure the safety of programmed runs.



RG 342.Vol.I. 04-150. Archives II.

RG 342.Vol.I. 04-150. Archives II.

Volunteers G.E. Mallory, J.H. Frasier, and J.W. Roberts are shown at the moment of impact on the Daisy Decelerator Track, Holloman AFB. They are seated in the *Apollo* three-man couch prototype which is being tested for NASA.

Sources for this highlights section include selections from chronologies prepared by Air Force historians Bushnell and Cornett cited in the bibliography, and a 1958 AFMDC Yearbook. Photograph captions are quoted verbatim from photographs located at National Archives II, College Park, Maryland.

Property Types

The United States Air Force issued a policy statement in 1993, designed to inform military and civilian officials how to decipher and comply with preservation legislation and standards relating to Cold War properties. This USAF *Interim Guidance* suggested that Air Force Cold War properties could be grouped into five resource property types. These types included (1) Operational and Support Installations, (2) Combat Weapons Systems and Combat Support Systems, (3) Training Facilities, (4) Materiel Development Facilities, and (5) Intelligence Facilities.

The USAF *Interim Guidance* also compiled a description of subgroup categories within each main property type (USAF 1993: 78). Researchers with Mariah Associates, Albuquerque, NM refined these preliminary groupings in their study of Air Combat Command Cold War material culture for the Fort Worth District Army Corps of Engineers.

Property Types: Subgroups

Each broad group was divided into a number of subgroups, based on functional descriptions encountered during field visits to U.S. Air Force Air Combat Command bases nationwide. Each subgroup serves to "...further categorize particular types of resources" (Lewis, *et al* 1994: 14). The designation of property type categories, and their related subgroups, was adopted as a method for organizing this report.

As refined by the Mariah Associates Cold War material culture study, the following is a list of suggested Cold War property types, and subgroups within each type (Lewis, *et al* 1994: 113). Each of the Holloman properties is identified within a property type subgroup. In several cases, new subgroups were added to accommodate particular buildings encountered during the Holloman AFB survey. These additions to the Mariah study classification system are denoted with an asterisk (*). The 73 Holloman AFB buildings assessed in this report are organized into property types and subgroups as follows:

I. Operational and Support Installations

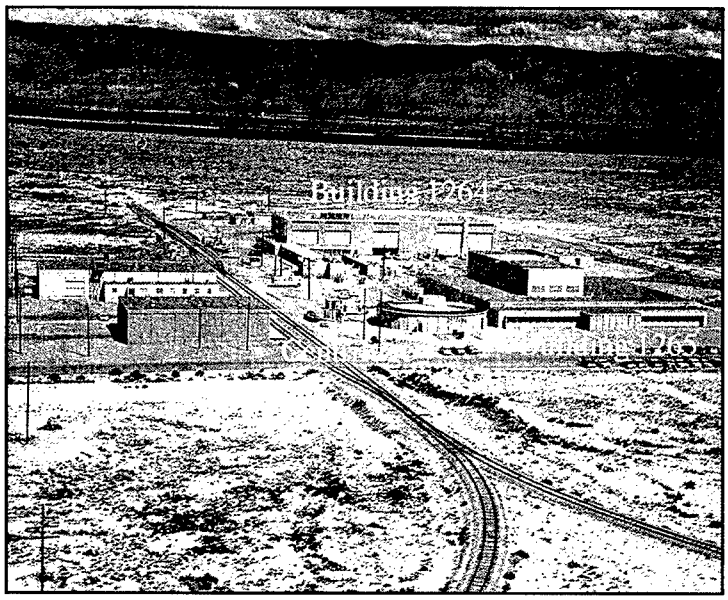
- **Base and Command Centers**
  - -Building 571
- **Missile Stations**
- **Launch Complexes**
- **Housing**
  - -Building 330
  - -Building 331
  - -Building 333
- **Storage**
  - -Building 60
  - -Building 113
  - -Building 115
  - -Building 375
- **Ground Vehicles/Equipment/Fuels***
  - -Building 197
  - -Building 198
  - -Building 701
  - -Building 702
  - -Building 837
- **Base Retail**
- **Recreation**
- **Infrastructure**
  - -Building 22
  - -Building 840
  - -Building 1275
- **Mess/Social**
  - -Building 332
- **Memorial**
- **Communications**
  - -Building 221
  - -Building 880
  - -Building 1097
  - -Building 1098
- **Documentation**
- **Medical***
  - -Building 57

II. Combat Weapons & Support Systems

- **Missiles**
  - -Building 800
  - -Building 820
  - -Building 822
  - -Building 823
  - -Building 824
  - -Building 882
  - -Building 885
  - -Building 886
  - -Building 887
  - -Building 1264 (see photo)
- **Check Stands/Unconventional Fuels***
  - -Building 1190
  - -Building 1193
  - -Building 1194
  - -Building 1195
- **Alert Facilities**
- **Maintenance Docks/Hangars**
  - -Building 500
  - -Building 816
  - -Building 817
  - -Building 825
- **Communications**
- **Storage**
  - -Building 1197
  - -Building 1198
- **Memorial**
- **Weapons Platforms**
- **Documentation**

III. Training Facilities

- **Base Support**
- **Flight Training**
  - -Building 1074
- **Intelligence Training**
- **Combat Training**
- **Combat Support Training**
  - -Building 821
- **Launch Complexes**
- **Combat Training Ranges**
- **Impact Areas and Targets**
- **POW Training Camps**
- **Communications**



RG 342-B. Vol. II. 06-011.

This aerial oblique taken 21 August 1963 shows Building 1265 (Guidance Test Lab) and the then new circular centrifuge building in the foreground. Building 1264, originally constructed in 1956 as a Static Missile Assembly facility, was converted in the early 1960s for use as a primate research facility. The railroad shown in this photograph has been removed.

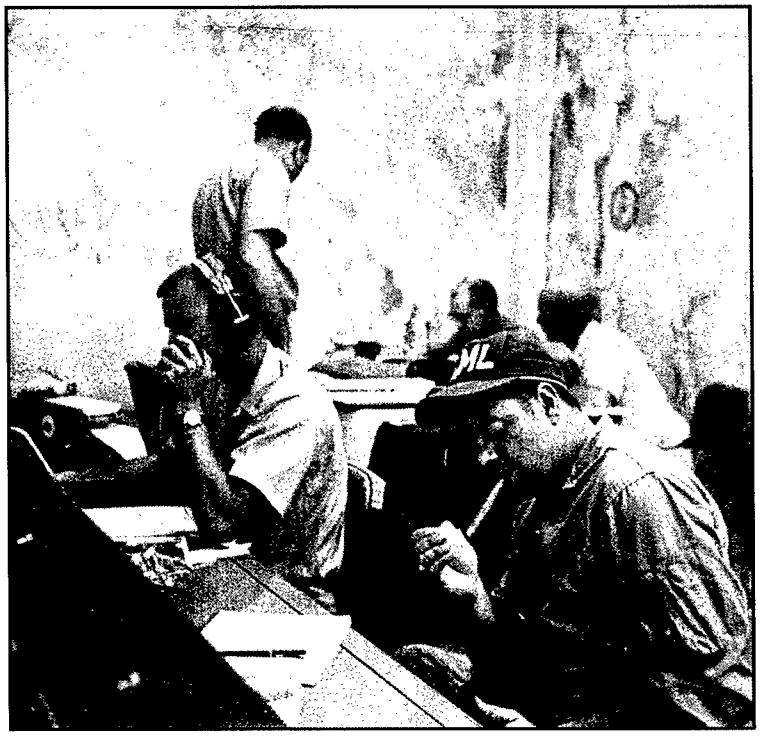
US Air Force Photo.

IV. Materiel Development Facilities

- **Research Laboratories**
  - -Building 839
  - Daisy Test Track:
  - -Building 1200
  - -Building 1201
  - -Building 1202
  - -Building 1203
  - -Building 1204
  - -Building 1205
  - -Building 1206
  - -PRL Facility (No number)
  - Balloon/Parachute Operations:
  - -Building 524
  - -Building 849
  - -Building 850
  - -Building 855
- **Manufacturing Sites**
- **Test Sites**
  - -Building 640
  - High Speed Test Track:
  - -Building 835
  - -Building 1159
  - -Building 1160
  - -Building 1161
  - -Building 1162
  - -Building 1163
  - -Building 1175
  - -Building 1178
  - -Building 1645
- **Proving Grounds**
- **Communications**
  - -Building 1102
  - -Building 1103
  - -Building 1121
- **Documentation**
  - -Building 841
  - -Building 848
  - -Building 1182

V. Intelligence Facilities

- **Radar Sites**
- **Spy Satellites**
- **Listening Posts**
- **Communications**



RG 342 Vol. I. 04-071. Archives II.

Official US Air Force Photo: "On 16 August 1960, over New Mexico near Holloman AFB, Captain Joseph W. Kittinger, Jr. made the highest altitude jump in history. This 102,800 foot jump was made to test high-altitude bail-out survival equipment as well as psychological and physiological reactions, in an attempt to answer some problems of human space flight. Here, during Capt. Kittinger's jump the men behind the scenes' are shown at their duty stations in the Operations Room at Holloman AFB, NM."

Assessment of Holloman AFB Properties

Completed field forms for the 73 early Cold War properties surveyed for this report are organized according to the property types and subgroups discussed in the previous section. It is important to note that each building is arranged according to its historic rather than its current function. Abbreviations used in the Real Property Accountable Records (USAF Form 1430) to define historic and current functions are defined in Appendix IV.

Operational and Support Installations are discussed first. These facilities provided direct support to the overall Base mission and/or provided necessary personnel support services. This section includes buildings such as the flightline control tower, military dormitories, basewide storage units, communications facilities, and a veterinary hospital.

Combat Weapons and Support Systems facilities are discussed next. Ten buildings associated with early guidance missile testing and assembly fall within this category, as do several continuity check stands, conventional and unconventional fuels facilities, and buildings providing support to either ground vehicles or aircraft.

The third category, Training Facilities, includes a flight training building, and a facility that was constructed to provide combat support training.

Most of the properties surveyed for this project were categorized as Materiel Development Facilities. This section includes research laboratories, test sites, proving grounds, communications, and documentation support facilities. This section thus includes Holloman's High Speed Test Track facilities, and aeromedical buildings constructed in support of the Daisy Deceleration Track (no longer in use). No radar sites, spy satellites or other Intelligence Facilities were surveyed for this report.

Evaluation

Each building included in this survey was evaluated using National Register of Historic Places criteria regarding its perceived historic significance and historic integrity (Appendix I).

An assessment of *historic integrity* is based on determining what percentage of a building's original location, design, setting, and construction materials have been retained. Integrity also refers to the intangible aspects of a building, including a determination of whether or not the property continues to convey a sense of its original aesthetic character, and whether or not a property conveys a visible link with its historic period of significance.

An assessment of a property's *historic significance* relies on determining what role the property played within a certain time period and at a certain place. Cold War properties pose a special challenge in that researchers are just now attaining the historical perspective required of such an assessment, particularly in view of the fact that classified documents have only been made public within the last few years.

Eleven buildings included in the present survey were deemed eligible for the National Register by virtue of the important Cold War missions conducted at each facility. These buildings are identified on the field forms as having "exceptional importance." Forty-one buildings either do not retain historic integrity, or do not meet National Register criteria for significance as individual properties. These buildings are identified as "ineligible" on the field forms. Twenty-one buildings retain historic integrity, yet do not meet the "exceptional importance" standard imposed on buildings constructed within the last fifty years. Because these buildings may be eligible once the 50-year construction date is met, these buildings are identified as "further research recommended" on the field forms.

Field Survey: Operational and Support

I. Operational and Support Installations

- **Base and Command Centers**
  - **-Building 571**
- Missile Stations
- Launch Complexes
- Housing
  - -Building 330
  - -Building 331
  - -Building 333
- Storage
  - -Building 60
  - -Building 113
  - -Building 115
  - -Building 375
- Ground Vehicles/Equipment/Fuels*
  - -Building 197
  - -Building 198
  - -Building 701
  - -Building 702
  - -Building 837
- Base Retail
- Recreation
- Infrastructure
  - -Building 22
  - -Building 840
  - -Building 1275
- Mess/Social
  - -Building 332
- Memorial
- Communications
  - -Building 221
  - -Building 880
  - -Building 1097
  - -Building 1098
- Documentation
- Medical*
  - -Building 57

Building 571:

Base Opns Tower

Although the exact date of this photograph is unknown, the source for the picture is the 1958 Holloman Air Force Base Yearbook.

COLD WAR SURVEY: HOLLOMAN AIR FORCE BASE

NAME:
Current: Base Operations/Weather.
Historic: Base Operations Building w/Control Tower.
Street Address: 1081 Eighth Street, HAFB, 88330-8023.

Building Number: 571

I. GENERAL INFORMATION:

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

Comments: Routine maintenance required.

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

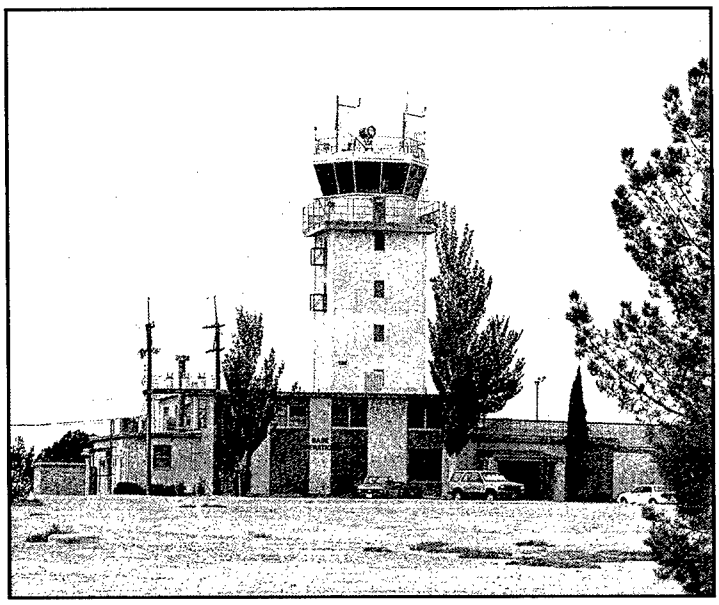
Comments: Renovations to exterior and interior.

Preliminary Determination of National or State Register Eligibility:

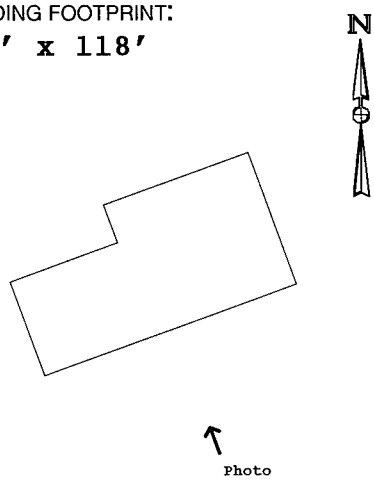
[ ] Exceptional importance [ ] Potentially eligible [ ] Further research recommended [x] Ineligible

Comments: Building 571 no longer retains historic integrity.

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



BUILDING FOOTPRINT:
62′ x 118′



Date of completion: 1955

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 571 is a two-story concrete masonry structure, showing asymmetrical door and window placement. Personnel access is gained at the south elevation. The north elevation and the control tower face the flightline. A one-story addition has been added to the east, obscuring that elevation (1983: CE File #571-6). A parapet wall has been added to the roof (1991: CE File #571-10).

"As-built" construction drawings date the completion of Building 571 in 1955. W. C. Kruger and Associates (Santa Fe, NM) were the architects. The builder is unknown.

III. HISTORIC AND CURRENT USE:

Source: Real Property Accountable Record/571.

Current Function: Base Weather Operations.

Original Function: Base Operations (Control Tower).

Interim Functions: Base Operations.

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

Source: CE File #571-1 (1955).

Foundation: Concrete footings. Stem wall. Foundation walls at Control Tower.

Exterior walls: CMU. Tower: Steel frame w/CMU infill. Corrugated asbestos siding.

Roof: BUR on wood sheathing supported by wood joists. Control Tower: BUR on rigid insulation and concrete deck supported by steel beams.

Notable interior features, including machinery: None noted.

V. CURRENT FEATURES IF DIFFERENT FROM ORIGINAL:

Note: Tower remains essentially as it was originally constructed. Addition to east elevation c1983:

Foundation:

Exterior walls:

Roof: Stucco and insulation board over original CMU.

Notable interior features, including machinery: None noted.

VI. BRIEF STATEMENT OF HISTORIC SIGNIFICANCE:

Building 571 served as the Base flightline operations facility since its construction in 1955 until the recent construction of a new control tower. This facility has undergone several renovations at the exterior and interior, and no longer retains historic integrity.

VII. ASSOCIATED BUILDINGS:

Building 571 provided support for all flightline operations.

VIII. ADDITIONAL COMMENTS AND MAINTENANCE RECOMMENDATIONS:

The control tower is no longer being used. Building 571 is used now for weather operations. Plotting and map rooms have been renovated for use as an officer's lounge. Parachute and bag rooms are now used as offices for airfield management personnel. Second floor radio, message, and "crypto" rooms noted on original blueprints are vacant. Control tower interiors have been gutted. Carpeting and vinyl tile cover the original concrete flooring. Several windows have been removed. Nearly all the original wood panel doors have been removed. At least four interior partitions have been added. At least four interior partitions (including those with windows) have been removed. A picket fence shown in drawings dated 1957 has been removed. A jib crane and antenna assemblies are no longer present at the tower. Although abandoned, the control tower appears from the exterior to be the most intact feature of Building 571. Original corrugated cement asbestos siding is still intact as are twenty double-glazed control tower glass panels. Although not eligible, recommend complete documentation through photographs prior to any future modifications, due to this building's uniqueness.

Suggested routine maintenance: Scrape and paint exterior wood features. Scrape and paint masonry window sills. Inspect control tower catwalk for acceptable loading.

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

Comments: Nearly all of the equipment associated with the original use has been removed. The control tower remains as the most important intact feature of Building 571. Addition to the main building obscures the east elevation.

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

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

Comments: Building 571 continues to be situated adjacent to an active airfield runway, near hangars, and across the street from the base parachute operations.

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

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

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

Comments: Original block walls are obscured by exterior finish and insulation system (EFIS). Nearly half of the original openings have been removed. Entryways have been added or renovated. Control tower remains intact, including siding, windows, glazed panels, and roof.

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

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

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

Comments: Aside from the control tower exterior, much of the original craftsmanship has been removed, or obscured by exterior and interior finishes. Historic integrity of design, materials, and workmanship has been lost.

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: Building 571 retains aesthetic character as a base operations center and control tower, although the building no longer operates as such.

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 [x] Some elements remain [ ] Retains integrity

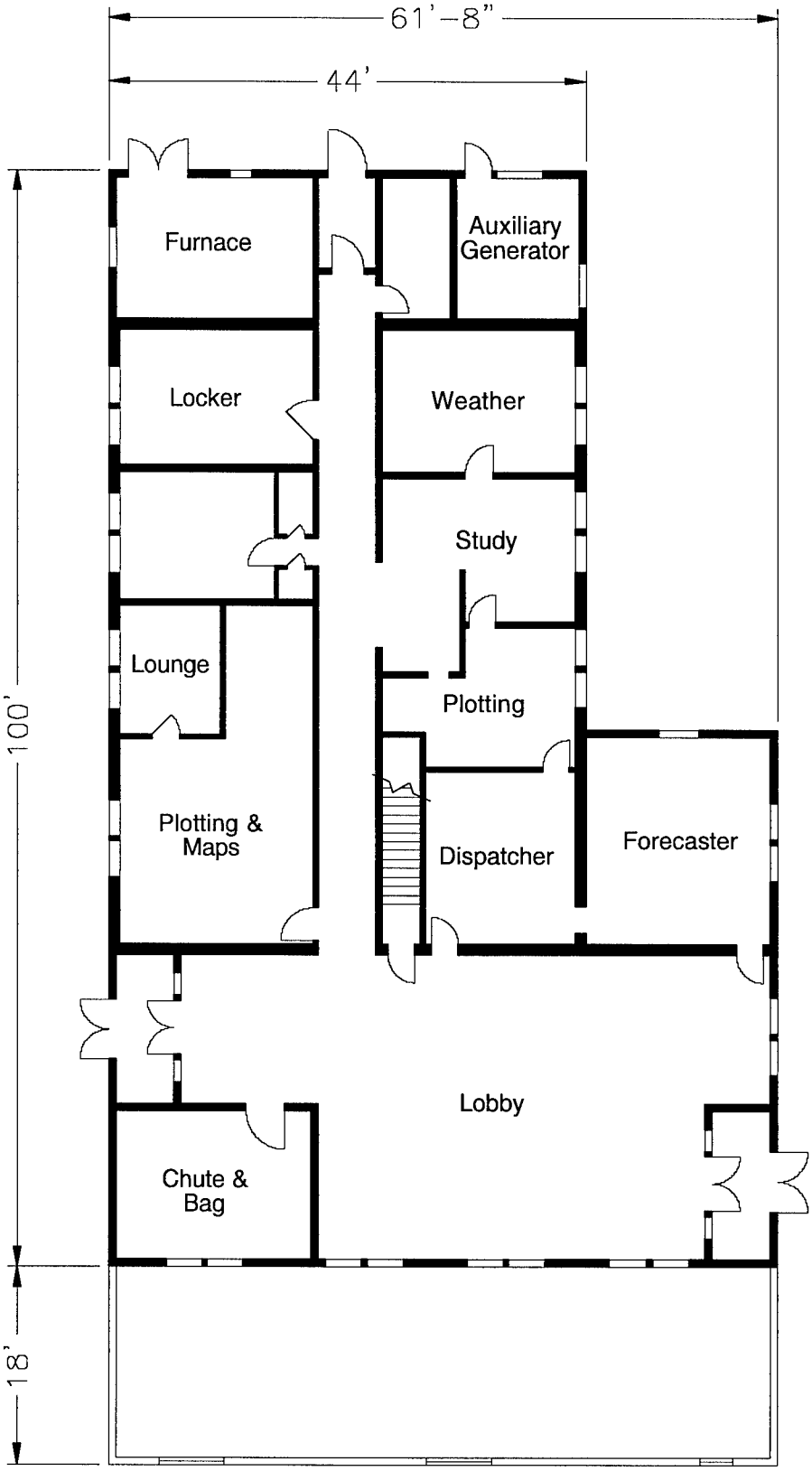
Comments: The control tower retains integrity of association, although the tower and most of the building have been vacated, and nearly all of the original equipment has been removed.

X. FURTHER INFORMATION:

Surveyed By:

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

HAFB Report Number: **CRM Publication #3**
Photograph Citation: **CD-ROM #1-Photo #13**
Negatives On File: **49 CES/CEV, 550 Tabosa Ave, HAFB**
Date of Field Visit: **FALL 1995**



Source: CE File #571-1 (1955)

State of New Mexico Office of Cultural Affairs Historic Preservation Division	**BUILDING 571** Holloman Air Force Base Alamogordo, New Mexico	Project No. 35-95-HAFB-4	AutoCAD rendering by: *Mike Gardner* New Mexico State University **Sheet 1 of 1**	NEW MEXICO STATE UNIVERSITY

Field Survey: Operational and Support

I. Operational and Support Installations

- Base and Command Centers
  - -Building 571
- Missile Stations
- Launch Complexes
- **Housing**
  - **-Building 330**
  - **-Building 331**
  - **-Building 333**
- Storage
  - -Building 60
  - -Building 113
  - -Building 115
  - -Building 375
- Ground Vehicles/Equipment/Fuels*
  - -Building 197
  - -Building 198
  - -Building 701
  - -Building 702
  - -Building 837
- Base Retail
- Recreation
- Infrastructure
  - -Building 22
  - -Building 840
  - -Building 1275
- Mess/Social
  - -Building 332
- Memorial
- Communications
  - -Building 221
  - -Building 880
  - -Building 1097
  - -Building 1098
- Documentation
- Medical*
  - -Building 57

Housing Bldgs 330, 331, 333

Factors influencing the design and materials used to construct military housing are often dictated by Congressional mandate, with variations occurring by region and between Bases.

According to historian David Bushnell's earliest monographs (Bushnell n.d.a; n.d.b.), no housing at all was available to the first troops arriving in 1942 to what was then known as the Alamogordo Army Air Base. Initially quartered in an existing warehouse, personnel was eventually moved to newly constructed barracks and hutment areas.

By 1943, some two hundred civilian housing units constructed under the Latham Housing Act show up on the earliest known map of the Main Post. Tiny hutments approximately 16' x 16' are shown grouped just south of the Northeast-Southeast runway, a Women's Army Auxiliary Corps "W.A.A.C." area is shown adjacent to an existing hospital compound, and a "Colored Area" housing unit is depicted between an existing motor pool and a utility yard (*Post Map* dated c1943. CE File I.E. #288).

Construction blueprints verify that over 600 residences were constructed under the Wherry Housing Act between 1953 and 1956. In 1959, some 400 officer and enlisted personnel housing units were built under the Capehart Housing Act (49 CES/CECNC blueprint vault, 550 Tabosa Avenue, HAFB).

Due to the range and complexity of the housing situation as it has evolved since World War II, only the Airmens Dorms are assessed for National Register eligiblity in the current study. A separate project will be necessary to provide a complete history and HABS/HAER assessment of Holloman AFB housing (Personal communication, Martyn Tagg, HAFB Archaeologist).

COLD WAR SURVEY: HOLLOMAN AIR FORCE BASE

NAME:
Current: Unaccompanied Enlisted Personnel Housing.
Historic: Airmens Dormitory.
Street Address: 701 Delaware Ave., HAFB, 88330-8015.

Building Number: 330

I. GENERAL INFORMATION:

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

Comments: Two-story structure, renovated 1990. Needs routine maintenance.

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

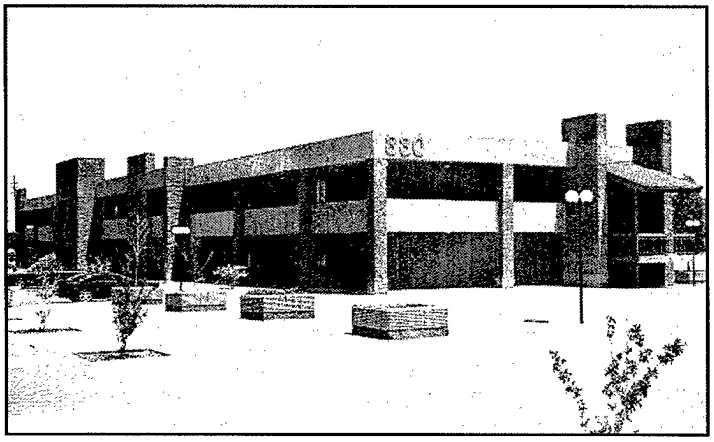
Comments: Original fenestration has been lost. Balcony and stairs added.

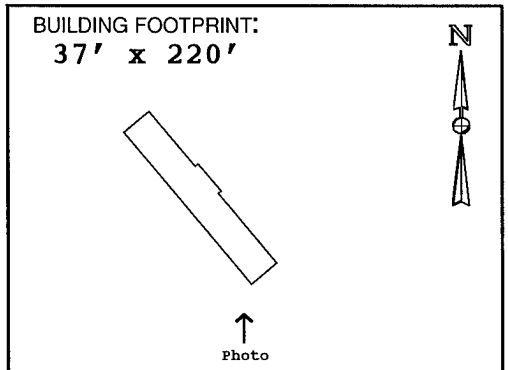
Preliminary Determination of National or State Register Eligibility:

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

Comments: Building 330 no longer retains historic integrity.

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





Date of completion: c1953

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.)

Real Property Accountable Record/330 indicates that this dormitory was completed c1953. August A. Neuner was the architect. Frank Tatsch was the builder. This two-story concrete frame building originally showed symmetrical fenestration, and a flat roof. "As-built" construction drawings document that this building was modified in 1990. The entire building was essentially gutted except for it structural concrete frame. Balconies and stairwells were added. Windows were replaced with doors. New exterior drywall partitions using an EFIS system replace CMU walls. Precast concrete fascia panels at balcony were also added. The dormitories were landscaped, and walkways added. The original foundation was modified at this time also. Construction drawings for the original building, and subsequent renovations, are located in CE File #333, and #330.

III. HISTORIC AND CURRENT USE:

Source: Real Property Accountable Record/330.

Current Function: Dormitory.

Original Function: Dormitory.

Interim Functions: "Dorm AM PP/PCS Std" (c1976); "Dorm, VAQ" Visiting Airmens Quarters (c1992).

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

Source: CE File #330-1 (c1952); Real Property Accountable Record/330.

Foundation: Concrete column footings and perimeter grade beam.

Exterior walls: Concrete masonry units (CMU) between concrete frame.

Roof: BUR on lightweight insulation fill, on structural slab.

Notable interior features, including machinery: None noted.

V. CURRENT FEATURES IF DIFFERENT FROM ORIGINAL:

Source: CE File #330 and #331 (1990).

Foundation: Original grade beams replaced by larger grade beams in areas.

Exterior walls: Metal Studs; Exterior Insulation and Finish System (EIFS).

Roof: Built-up roof over 4" rigid insulation over original roof.

Notable interior features, including machinery: None noted.

VI. BRIEF STATEMENT OF HISTORIC SIGNIFICANCE:

Building 330 has provided housing for military personnel since its construction c1953. This dormitory does not meet National Register criteria for significance as an individual property. Building 330 does not retain historic integrity.

VII. ASSOCIATED BUILDINGS:

Associated dormitories include: Buildings 331, 337, 338, 333, 334, 340, 335, 341, 336, and 343. Also historically associated with support Building 332.

VIII. ADDITIONAL COMMENTS AND MAINTENANCE RECOMMENDATIONS:

Although Building 330 continues to function as a dormitory, this building has lost most of its integrity of design, setting, materials, and workmanship. Although only a few rooms were accessed, HAFB personnel verified that all rooms were renovated with new walls, flooring, and ceilings. Sliding windows with aluminum frames replaced original windows, with different locations and sizes throughout. Private exterior doors were added to each room, versus the old dorm style of entering through a lobby, and then accessing rooms through interior corridors. New planters, sidewalks, and pavers were constructed on West Connecticut Avenue to serve as a pedestrian mall. Upgraded landscaping and grading around the building appear to be in good condition.

Suggested routine maintenance: Efflorescence noticed on stucco in some areas. Moisture noticed on balcony ceiling, all floors. Water leakage possibly starting at roof and balcony parapet, or original building/balcony roof connection. Check cant strip and flashing at roof interfaces.

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

Comments: Architectural layout has changed very little. Elevations, however, have been altered by the addition of private doors and balconies.

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

[ ] Unable to determine [x] Retains very little [ ] 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: It appears that the viewshed and the landscaping have completely changed with the construction of the W. Connecticut Ave. pedestrian mall.

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: Original concrete masonry unit walls replaced with metal studs and exterior insulation panel system. Original windows replaced. Doors added. New interior finishes obscure original materials.

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: Original building gutted except for structural concrete frame.

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

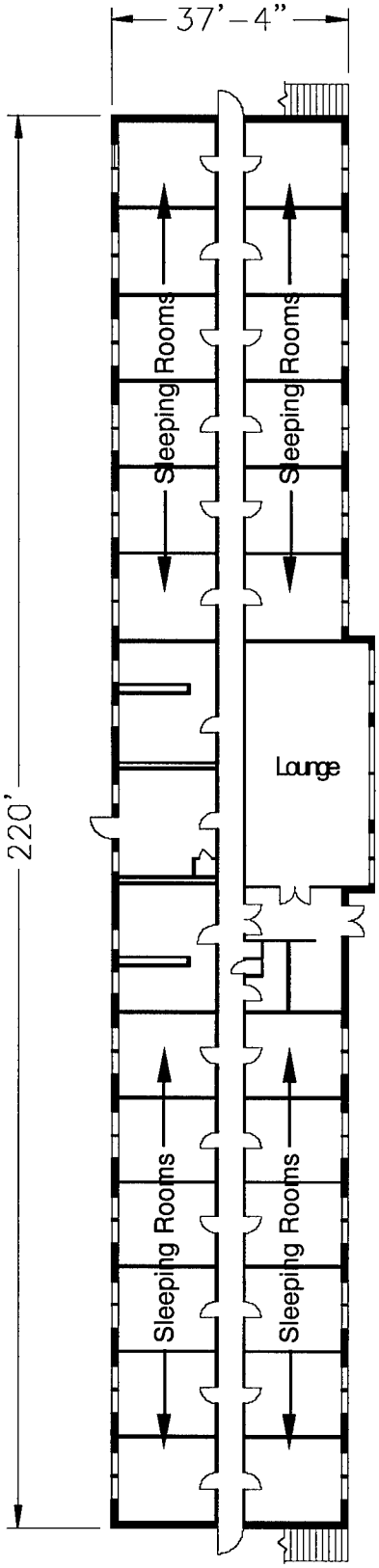
Comments:

X. FURTHER INFORMATION:

Surveyed By:

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

HAFB Report Number: **CRM Publication #3**
Photograph Citation: **CD-ROM #2-Photo #107**
Negatives On File: **49 CES/CEV, 550 Tabosa Ave, HAFB**
Date of Field Visit: **SPRING 1996**



Source: CE File #330-#331 Sheet 12.1 (n.d.)

State of New Mexico Office of Cultural Affairs Historic Preservation Division	**BUILDING 330** Holloman Air Force Base Alamogordo, New Mexico	Project No. 35-95-HAFB-4	AutoCAD rendering by: *Mike Gardner* New Mexico State University **Sheet 1 of 1**

COLD WAR SURVEY: HOLLOMAN AIR FORCE BASE

NAME: **Building Number:**
Current: Unaccompanied Enlisted Personnel Housing.
Historic: Airmens Dormitory.
Street Address: 711 Delaware Ave., HAFB, 88330-8015.

331

I. GENERAL INFORMATION:

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

Comments: Two-story structure, renovated 1990. Needs routine maintenance.

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

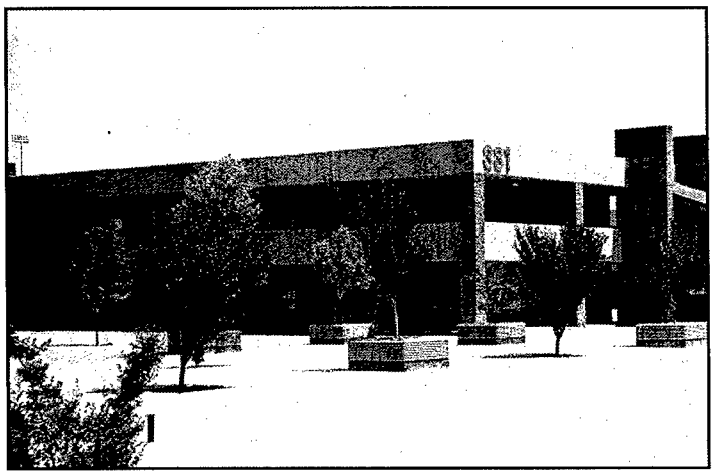
Comments: The original fenestration lost. Addition of balcony, stairs.

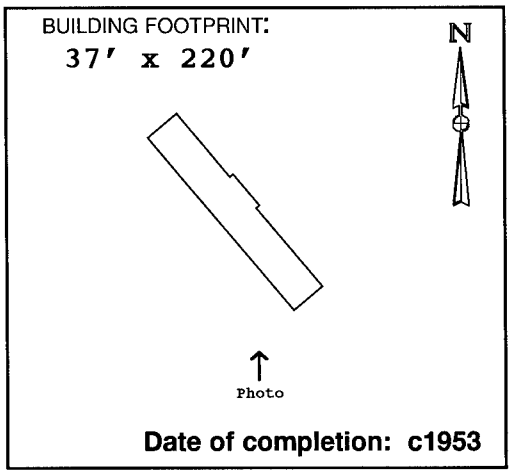
Preliminary Determination of National or State Register Eligibility:

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

Comments: Building 331 has lost historic integrity.

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





Date of completion: c1953

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.)

Real Property Accountable Record/331 indicates that this dormitory was completed c1953. August A. Neuner was the architect. Frank Tatsch was the builder. This two-story concrete frame building originally showed symmetrical fenestration, and a flat roof. "As-built" construction drawings document that this building was modified in 1990. The entire building was essentially gutted except for its structural concrete frame. Balconies and stairwells were added. Windows were replaced with doors. New exterior drywall partitions with an exterior finish and insulation system (EFIS) replace the original concrete masonry unit (CMU) walls. The dormitories were landscaped, and walkways added. The original foundation was modified at this time also. Construction drawings for the original building, and subsequent renovations, are located in CE Files #333 and #330.

III. HISTORIC AND CURRENT USE:

Source: Real Property Accountable Record/331.

Current Function: Dormitory.

Original Function: Dormitory.

Interim Functions: "Dorm AM PP/PCS STD" (c1976); "Dorm, VAQ" Visiting Airmens Quarters (c1992); "NCO Prof Ed Cen" (c1994).

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

Source: CE File #333-1 (c1952); Real Property Accountable Record/331.

Foundation: Concrete column footings and perimeter grade beam.

Exterior walls: Concrete masonry units (CMU) between concrete frame.

Roof: BUR on lightweight insulation fill, on structural slab.

Notable interior features, including machinery: None noted.

V. CURRENT FEATURES IF DIFFERENT FROM ORIGINAL:

Source: CE File #330 and #331 (1990).

Foundation: Original grade beams replaced by larger grade beams in areas.

Exterior walls: Metal Studs; Exterior Insulation and Finish System (EIFS).

Roof: Built-up roof over 4" rigid insulation over original roof.

Notable interior features, including machinery: None noted.

VI. BRIEF STATEMENT OF HISTORIC SIGNIFICANCE:

Building 331 has provided housing for military personnel since its construction c1953. This dormitory does not meet National Register criteria for significance as an individual property. Building 330 does not retain historic integrity.

VII. ASSOCIATED BUILDINGS:

Associated dormitories include: Buildings 330, 337, 338, 333, 334, 340, 335, 341, 336, and 343. Also associated with support Building 332.

VIII. ADDITIONAL COMMENTS AND MAINTENANCE RECOMMENDATIONS:

Although Building #331 continues to function as a dormitory, this building has lost most of its integrity of design, setting, materials, and workmanship. Although only a few rooms were accessed, HAFB personnel verified that all rooms were renovated with new walls, flooring, and ceilings. Sliding windows with aluminum frames replaced original windows, with different locations and sizes throughout. Private exterior doors were added to each room, versus the old dorm style of entering through a lobby, and then accessing rooms through interior corridors. New planters, sidewalks, and pavers were constructed on West Connecticut Avenue to serve as a pedestrian mall. Upgraded landscaping and grading around the building appear to be in good condition.

Suggested routine maintenance: Efflorescence noticed on stucco in some areas. Moisture noticed on balcony ceiling, all floors. Water leakage possibly starting at roof and balcony parapet, or original building/balcony roof connection. Check cant strip and flashing at roof interfaces.

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

Comments: Architectural layout has changed very little. Elevations, however, have been altered by the addition of private doors and balconies.

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

[ ] Unable to determine [x] Retains very little [ ] 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: It appears that the viewshed, and the landscaping have completely changed with the construction of the W. Connecticut Ave. pedestrian mall.

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: Original concrete masonry unit walls replaced with metal studs and exterior insulation panel system. Original windows replaced. Doors added. New interior walls and finishes.

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: Original building gutted except for structural concrete frame.

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

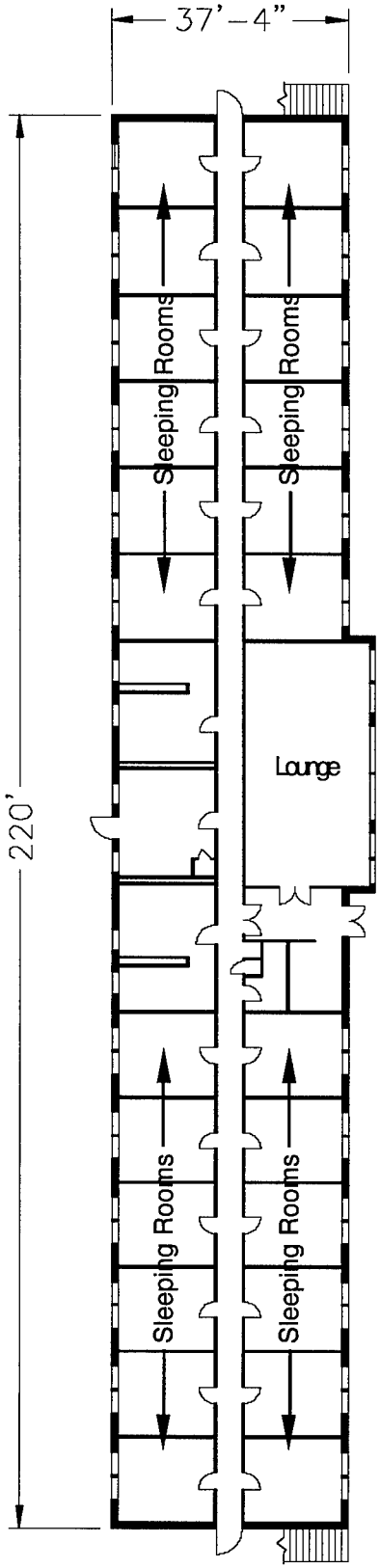
Comments:

X. FURTHER INFORMATION:

Surveyed By:

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

HAFB Report Number: **CRM Publication #3**
Photograph Citation: **CD-ROM #2-Photo #106**
Negatives On File: **49 CES/CEV, 550 Tabosa Ave, HAFB**
Date of Field Visit: **SPRING 1996**



Source: CE File #330 and #331 Sheet 12.1 (n.d.)

State of New Mexico Office of Cultural Affairs Historic Preservation Division	**BUILDING 331** Holloman Air Force Base Alamogordo, New Mexico	Project No. 35-95-HAFB-4	AutoCAD rendering by: *Mike Gardner* New Mexico State University **Sheet 1 of 1**	NEW MEXICO STATE UNIVERSITY

COLD WAR SURVEY: HOLLOMAN AIR FORCE BASE

NAME:
Current: Airmens Dormitory.
Historic: Airmens Dormitory.
Street Address: 761 Delaware Ave., HAFB, 88330-8015.

Building Number: 333

I. GENERAL INFORMATION:

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

Comments: Three-story structure, renovated 1990. Needs maintenance.

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

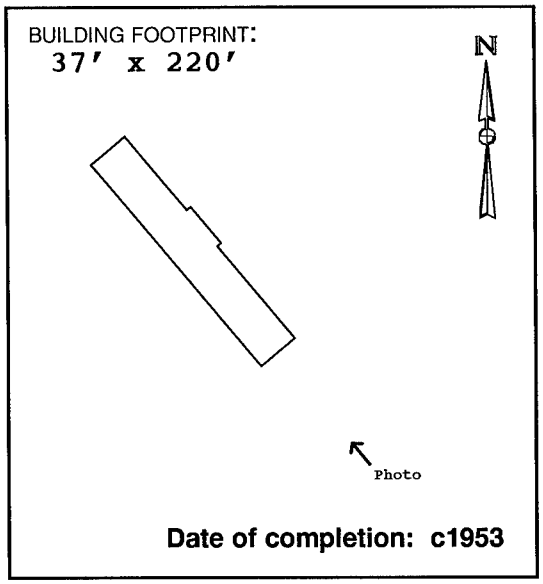
Comments: The original fenestration lost. Addition of balcony, stairs.

Preliminary Determination of National or State Register Eligibility:

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

Comments: Building 333 has lost historic integrity.

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



Date of completion: c1953

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.)

Real Property Accountable Record/333 indicates that this dormitory was completed c1953. August A. Neuner was the architect. Frank Tatsch was the builder. This three-story concrete frame building originally showed symmetrical fenestration, and a flat roof. "As-built" construction drawing document that this building was modified in 1990. This building was essentially gutted, except for its structural concrete frame. Balconies and stairwells were added. Windows were replaced with doors. New exterior and interior walls replaced exterior concrete masonry unit (CMU) walls and interior partitions. The dormitories were landscaped, and walkways added. The original foundation was modified at this time also. Construction drawings for the original building, and subsequent renovations, are located in CE File Drawer #333.

III. HISTORIC AND CURRENT USE:

Current Function: Dormitory.

Original Function: Dormitory.

Interim Functions: Visiting Airmens Quarters--Dormitory.

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

Source: (c1952: CE File #333-1); Real Property Accountable Record/333.

Foundation: Concrete column footings and perimeter grade beam.

Exterior walls: Concrete masonry units (CMU) between concrete frame.

Roof: BUR on lightweight insulation fill, on structural slab.

Notable interior features, including machinery:

V. CURRENT FEATURES IF DIFFERENT FROM ORIGINAL:

Source: (1990: CE File #330,331).

Foundation: Original grade beams replaced by larger grade beams in areas.

Exterior walls: Metal Studs; Exterior Insulation and Finish System (EIFS).

Roof: Built-up roof (BUR) over 4" rigid insulation over original (BUR) roof.

Notable interior features, including machinery:

VI. BRIEF STATEMENT OF HISTORIC SIGNIFICANCE:

Although Building 333 has provided housing since its construction c1953, this dormitory does not meet National Register criteria for significance as an individual property. Building 333 does not retain historic integrity.

VII. ASSOCIATED BUILDINGS:

Other dorms include: Buildings 330,337,338,331,334,340,335,341,336,343. Also associated with support Building 332.

VIII. ADDITIONAL COMMENTS AND MAINTENANCE RECOMMENDATIONS:

Although Building 333 continues to function as a dormitory, this building has lost most of its integrity of design, setting, materials, and workmanship. Although only a few rooms were accessed, HAFB personnel verified that all rooms were renovated with new walls, flooring, and ceilings. Sliding windows with aluminum frames replaced original windows, with different locations and sizes throughout. Private exterior doors were added to each room, versus the old dorm style of entering through a lobby, and then accessing rooms through interior corridors. New planters, sidewalks, and pavers were constructed on West Connecticut Avenue to serve as a pedestrian mall. Upgraded landscaping and grading around the building appear to be in good condition.

Suggested routine maintenance: Efflorescence noticed on stucco in some areas of each of the Airman's dorms. Moisture noticed on balcony ceiling, all floors. Water leakage possibly starting at roof and balcony parapet, or original building/balcony roof connection. Check cant strip and flashing at roof interfaces.

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

Comments: Architectural layout has changed very little. Elevations, however, have been altered by the addition of private doors and balconies.

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

[ ] Unable to determine [x] Retains very little [ ] 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: It appears that the viewshed, and the landscaping have completely changed with the construction of the W. Connecticut Ave. pedestrian mall.

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: Original concrete masonry unit walls replaced with metal studs and exterior insulation panel system. Original windows replaced. Doors added. New interior walls and finishes obscure original.

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: Original building gutted except for structural concrete frame.

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

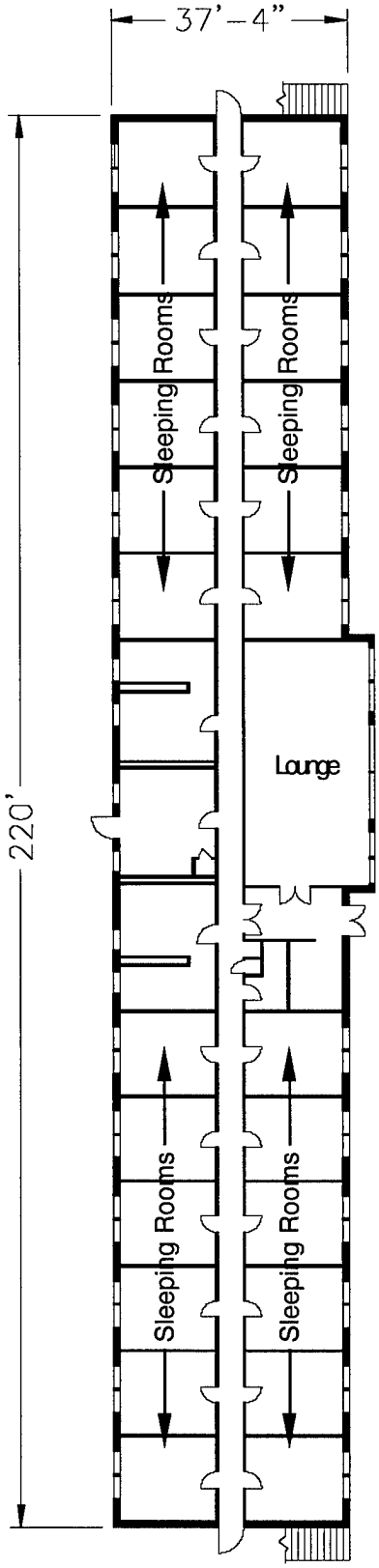
Comments:

X. FURTHER INFORMATION:

Surveyed By:

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

HAFB Report Number: **CRM Publication #3**
Photograph Citation: **CD-ROM #2-Photo #104**
Negatives On File: **49 CES/CEV, 550 Tabosa Ave, HAFB**
Date of Field Visit: **SPRING 1996**



Source: CE File #333-1 (c1952)

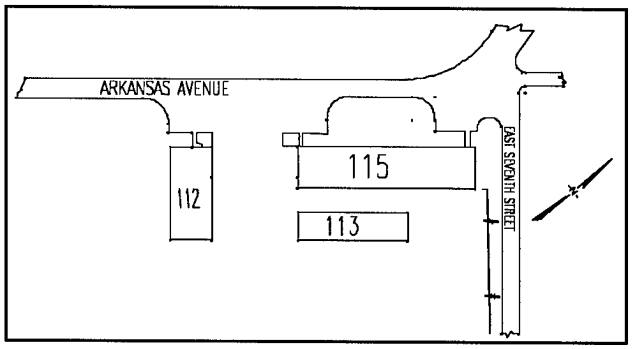
State of New Mexico Office of Cultural Affairs Historic Preservation Division	**BUILDING 333** Holloman Air Force Base Alamogordo, New Mexico	Project No. 35-95-HAFB-4	AutoCAD rendering by: *Mike Gardner* New Mexico State University **Sheet 1 of 1**	NEW MEXICO STATE UNIVERSITY

Field Survey: Operational and Support

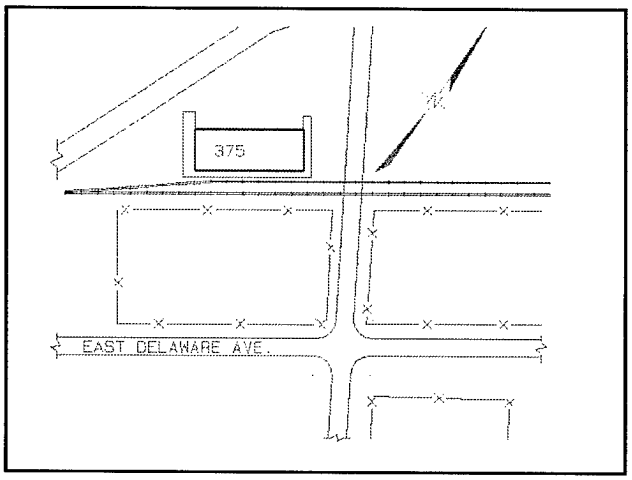
I. Operational and Support Installations

- Base and Command Centers
  - -Building 571
- Missile Stations
- Launch Complexes
- Housing
  - -Building 330
  - -Building 331
  - -Building 333
- **Storage**
  - **-Building 60**
  - **-Building 113**
  - **-Building 115**
  - **-Building 375**
- Ground Equipment/Vehicles/Fuels*
  - -Building 197
  - -Building 198
  - -Building 701
  - -Building 702
  - -Building 837
- Base Retail
- Recreation
- Infrastructure
  - -Building 22
  - -Building 840
  - -Building 1275
- Mess/Social
  - -Building 332
- Memorial
- Communications
  - -Building 221
  - -Building 880
  - -Building 1097
  - -Building 1098
- Documentation
- Medical*
  - -Building 57

Storage: Bldgs 60, 113, 115, 375



Site plan. Buildings 112, 113, and 115.



Site plan. Building 375.

COLD WAR SURVEY: HOLLOMAN AIR FORCE BASE

NAME:
Current: Paint storage facility.
Historic: Covered storage facility.
Street Address: 572 Tabosa Ave., HAFB, 88330-8457.

Building Number: 60

I. GENERAL INFORMATION:

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

Comments: Well maintained. Minor routine maintenance required.

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

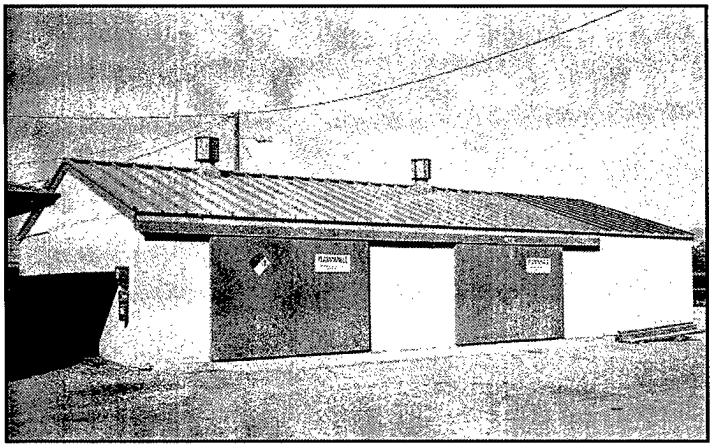
Comments: No structural modifications noted.

Preliminary Determination of National or State Register Eligibility:

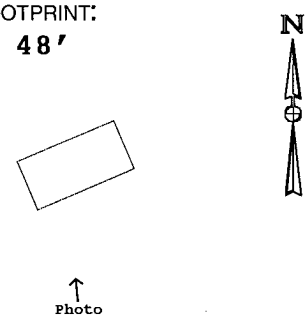
[ ] Exceptional importance [ ] Potentially eligible [ ] Further research recommended [x] Ineligible

Comments: Building 60 has been moved from its original location.

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



BUILDING FOOTPRINT:
20′ x 48′



Date of completion: c1955

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 60 is a single-story, rectangular, metal storage shed with a metal gable roof and asymmetrically-placed metal slider doors. Real Property Accountable Record/60 indicates that this building was completed c1955. Neither the architect nor the builder are known.

According to "As-built" drawings dated February 1972, the entire structure was relocated from it original construction site to allow room for the Base Civil Engineer's Maintenance Shop (CE File #55-1. Sheet 1). The architects for this project were Monroe, Higgens, and Lantow out of El Paso, Texas.

III. HISTORIC AND CURRENT USE:

Source: Real Property Accountable Record/60.

Current Function: Storage facility--paint.

Original Function: Storage facility--miscellaneous.

Interim Functions:

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

Source: Real Property Accountable Record/60.

Foundation: Concrete slab on grade.

Exterior walls: Steelox® wall system.

Roof: Steelox®.

Notable interior features, including machinery:

Steelox® is a metal prefabricated system incorporating the structural frame and the siding and roofing systems as one unit.

V. CURRENT FEATURES IF DIFFERENT FROM ORIGINAL:

Source: Field visit Fall 1996.

Foundation:

Exterior walls:

Roof:

Notable interior features, including machinery: None noted.

VI. BRIEF STATEMENT OF HISTORIC SIGNIFICANCE:

As an ancillary storage building exhibiting no distinctive design or architectural features, Building 60 does not meet National Register criteria for historic significance.

VII. ASSOCIATED BUILDINGS:

Building 60 shares no known historic association with any other storage structures. Its original association as a support facility is unknown.

VIII. ADDITIONAL COMMENTS AND MAINTENANCE RECOMMENDATIONS:

Although original construction drawings were not located, Building 60 shares several features with similar buildings built in the mid 1950s, including footprint layout, and structural and architectural features. These features do not appear to have been modified. According to CE File # 55-1/ Sheet 2, dated February 1972, Building Numbers 60, 65, 63, 62, 51, 59, and 58 were all relocated prior to the construction of the Base Civil Engineer's Maintenance Shop. Construction drawings for all of these buildings, including Building 60, are missing from the Civil Engineering blueprint files. The Steelox® wall and roof system, Armco® flashing, sliding doors, and metal frame windows appear as features of similar buildings constructed in the mid- 1950s. The rear elevation is obscured by a chain-link fence enclosure. The interior is partitioned into two spaces. The smaller space has a dropped ceiling, while the larger space maintains the exposed Steelox®.

Suggested routine maintenance: Regrade at foundation to promote positive drainage. Scrape, prime, and paint wall at junction box. Scrape, prime, and paint the slider doors.

IX. ASSESSMENT OF HISTORIC INTEGRITY:

NOTE: BUILDING 60 IS NOT ELIGIBLE FOR THE NATIONAL REGISTER . IT HAS BEEN MOVED FROM ITS ORIGINAL LOCATION.

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

[ ] Unable to determine [x] Entire structure has been moved [ ] Entire structure located at original site.

Comments: The entire storage shed was relocated prior to the construction of the Base Civil Engineer's Maintenance Shop.

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: One partition added, dividing floor plan into two rooms.

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

[ ] Unable to determine [x] Retains very little [ ] 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: Structure has been relocated from its original site. Continues, however, to be situated with other storage facilities and equipment yards.

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

Comments: Real Property Accountable Record/60 indicates that the concrete floor and Steelox evident today were used in the original construction.

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

Comments: Floor, walls, roof, and architectural features do not appear to have been modified, although a dropped ceiling has been added in one room.

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: The technique of prefabrication allowed this storage facility to serve as a mobile unit. Its mobility and functional design have served Holloman Air Force Base for over forty years.

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 [x] Some elements remain [ ] Retains integrity

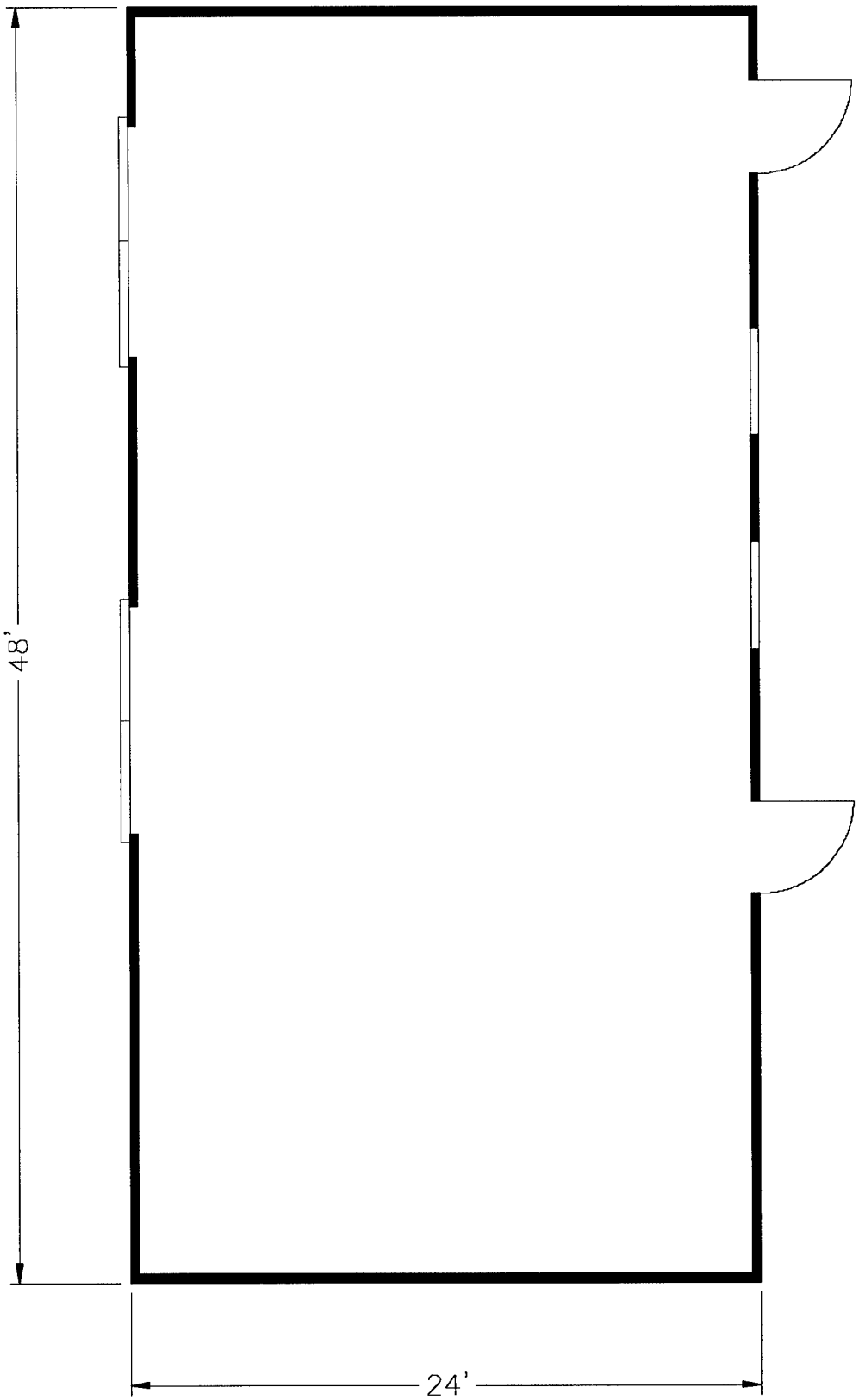
Comments: Continues to function as a storage facility, surrounded by other storage buildings and equipment yards.

X. FURTHER INFORMATION:

Surveyed By:

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

HAFB Report Number: **CRM Publication #3**
Photograph Citation: **CD-ROM #2-Photo #87**
Negatives On File: **49 CES/CEV, 550 Tabosa Ave, HAFB**
Date of Field Visit: **FALL 1996**



Source: Field measurements, S. Cooper, Fall 1996.

State of New Mexico Office of Cultural Affairs Historic Preservation Division	**BUILDING 60** Holloman Air Force Base Alamogordo, New Mexico	Project No. 35-95-HAFB-4	AutoCAD rendering by: *Mike Gardner* New Mexico State University **Sheet 1 of 1**	NEW MEXICO STATE UNIVERSITY

COLD WAR SURVEY: HOLLOMAN AIR FORCE BASE

NAME:
Current: Base Supply and Equipment Shed.
Historic: Storage Shed.
Street Address: 211 Arkansas Ave., HAFB, 88330-7703.

Building Number: 113

I. GENERAL INFORMATION:

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

Comments: Although intact, Building 113 is in need of routine maintenance.

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

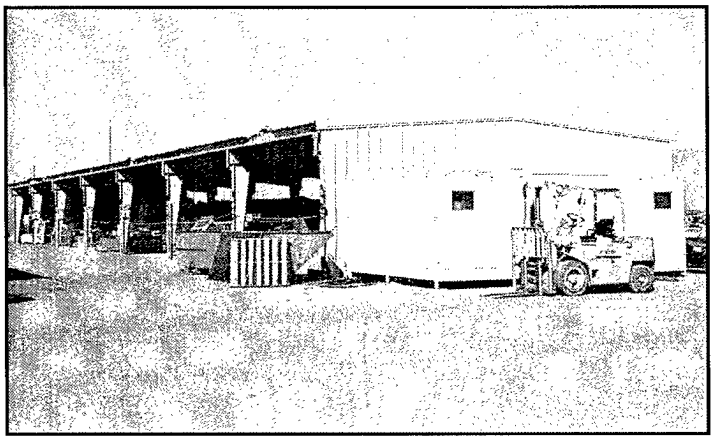
Comments: Shed gable ends have been enclosed; metal roof panels added.

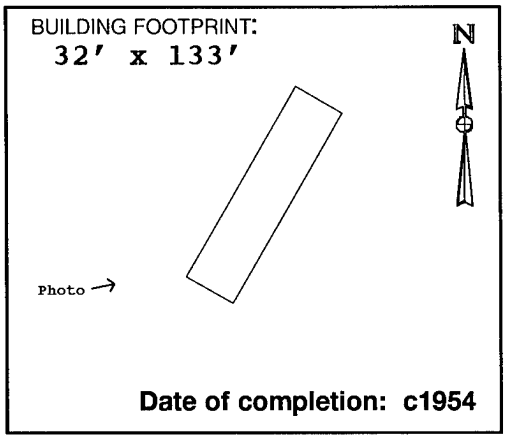
Preliminary Determination of National or State Register Eligibility:

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

Comments: Building 113 does meet National Register criteria.

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





Date of completion: c1954

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 113 is an open-sided, prefabricated metal shed using steel bent frame construction with metal panels on the gable roof. Real Property Accountable Record/113 indicates that this structure was completed c1954. Neither an architect nor a builder are noted on the one construction drawing located for this shed (c1964: CE File #113-1). This drawing indicates that footings, bent frames, purlins, sag rods and metal roof panels were added to the original concrete slab on grade. (c1964: CE File #113-1).

III. HISTORIC AND CURRENT USE:

Source: Real Property Accountable Record/113.

Current Function: Storage shed.

Original Function: Storage area.

Interim Functions:

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

Note: The original storage facility was simply a slab on grade, completed c1954 (Real Property Record/113).

Foundation: Concrete slab on grade.

Exterior walls: None.

Roof: None.

Notable interior features, including machinery: None noted.

V. CURRENT FEATURES IF DIFFERENT FROM ORIGINAL:

Shed added to slab c1964 (CE File #113-1); Field visit Summer 1996.

Foundation: Concrete slab, isolated concrete column footings.

Exterior walls: Metal siding on steel bent frame (ends only).

Roof: Metal roofing on bent steel frame.

Notable interior features, including machinery: None noted.

VI. BRIEF STATEMENT OF HISTORIC SIGNIFICANCE:

Building 113 does not meet National Register criteria for historic significance, and has not retained historic integrity.

VII. ASSOCIATED BUILDINGS:

According to early construction drawings, Building 113 appears to be associated with Building 115 and Building 112 (c1964: CE File #113-1).

VIII. ADDITIONAL COMMENTS AND MAINTENANCE RECOMMENDATIONS:

This partially enclosed shed currently serves as a storage unit for the Defense Reutilization and Marketing Office (DRMO). Construction drawings indicate that the shed was added to the slab c1964. Prefabricated metal panels were installed to enclose the ends. Structural steel bent frames, footings, purlins, sag rods, and metal roof panels were also added at this time. (c1964: CE File # 113-1). Although construction drawings for the original structure were not located, these modifications indicate new design, workmanship, and materials.

Suggested routine maintenance: The steel columns have incurred moderate to heavy forklift damage. These columns must be checked for plumbness and structural integrity if subjected to additional loads. Each column base connection should be inspected. Loose metal roof and siding panels need to be reattached.

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: Concrete footings added outside the existing slab (c1964: CE File #113-1).

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: Original construction drawings not located. Blueprint showing "existing concrete pad," though, indicate that the pad was original.

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: This structure was originally constructed as a concrete pad for use as a storage area. This yard area continues to be used for storage.

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

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

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

Comments: CE File #113-1 shows that the original roof was replaced c1964.

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

Comments:

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:

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 [x] Some elements remain [ ] Retains integrity

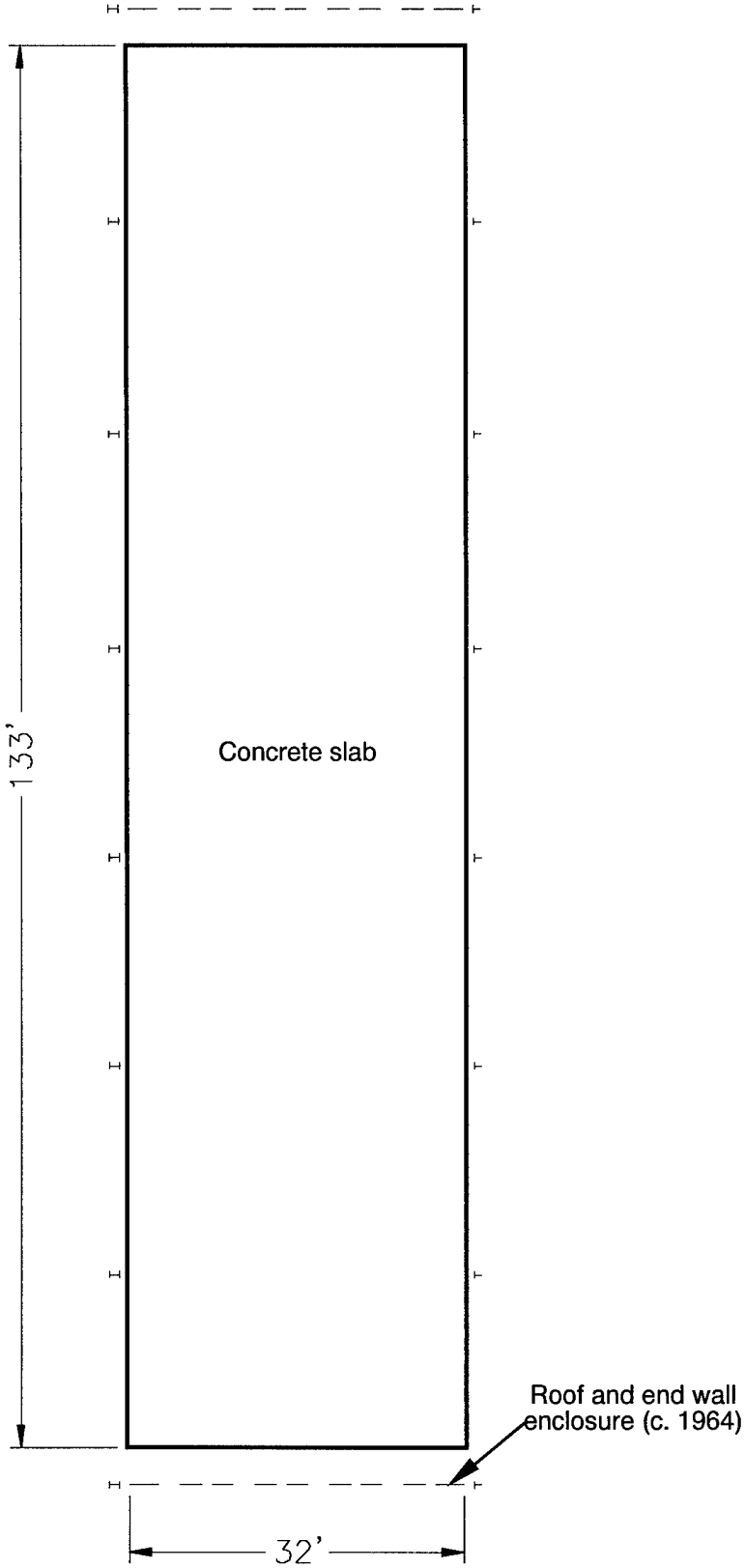
Comments: Building 113 continues to perform as a storage shed as it was originally designed.

X. FURTHER INFORMATION:

Surveyed By:

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

HAFB Report Number: **CRM Publication #3**
Photograph Citation: **CD-ROM #2-Photo #24**
Negatives On File: **49 CES/CEV, 550 Tabosa Ave, HAFB**
Date of Field Visit: **SUMMER 1996**



Source: Field measurements, S. Cooper. Summer 1996.

State of New Mexico Office of Cultural Affairs Historic Preservation Division	**BUILDING 113** Holloman Air Force Base Alamogordo, New Mexico	Project No. 35-95-HAFB-4	AutoCAD rendering by: *Steve Merrill* New Mexico State University **Sheet 1 of 1**	NEW MEXICO STATE UNIVERSITY

COLD WAR SURVEY: HOLLOMAN AIR FORCE BASE

NAME:
Current: Base Equipment and Supply Warehouse.
Historic: Workshop & Classification, Salvage Yard.
Street Address: 201 Arkansas Ave., HAFB, 88330-7703.

Building Number: 115

I. GENERAL INFORMATION:

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

Comments: Building is intact, though in need of minor routine maintenance.

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

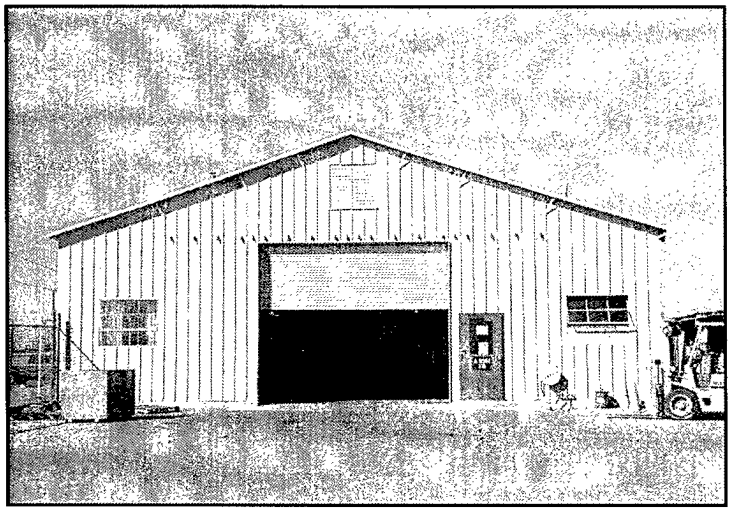
Comments: Construction of 100-foot extension (1961: CE File #115-3).

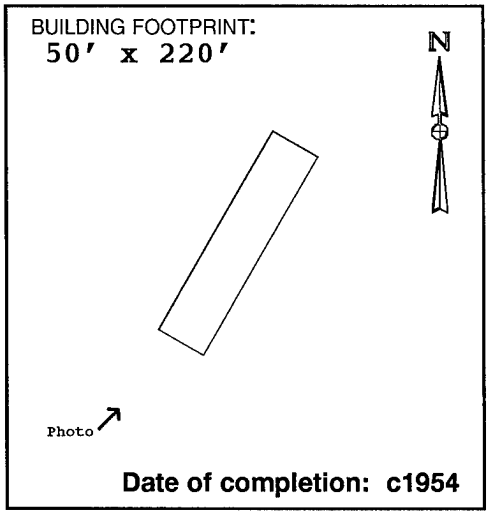
Preliminary Determination of National or State Register Eligibility:

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

Comments: Does not meet National Register criteria as individual property.

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





Date of completion: c1954

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 115 is a steel, bent frame storage building clad in metal siding and showing a metal gable roof. Real Property Accountable Record/115 indicates a completion date of c1954. Construction drawings dated c1961 show that a 100-foot extension was constructed at the north elevation as a subsequent improvement to the original structure. Building 115 was originally constructed for use as a warehouse, and continues to serve in that capacity. Neither the architect nor the builder is known.

III. HISTORIC AND CURRENT USE:

Source: Real Property Accountable Record/115.

Current Function: Warehouse.

Original Function: Warehouse.

Interim Functions:

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

Source: CE File #115-1 (c1953).

Foundation: Concrete column footings and piers.

Exterior walls: Metal siding on steel bent frame.

Roof: Metal roof.

Notable interior features, including machinery: None noted.

V. CURRENT FEATURES IF DIFFERENT FROM ORIGINAL:

Source: Field visit Summer 1995.

Foundation:

Exterior walls:

Roof:

Notable interior features, including machinery: Shelving units, bolted in place.

VI. BRIEF STATEMENT OF HISTORIC SIGNIFICANCE:

Building 115, as an ancillary structure, does not meet National Register criteria for significance.

VII. ASSOCIATED BUILDINGS:

Building 113 and Building 112 appear to be associated with Building 115 on early construction drawings (c 1953: CE File #113-1).

VIII. ADDITIONAL COMMENTS AND MAINTENANCE RECOMMENDATIONS:

Building 115 retains integrity of location, setting, materials, workmanship, feeling, and association. A 100-foot subsequent improvement at the north elevation is in keeping with original design and materials (1961: CE File #115-3). This building continues to feature original doors, windows, exposed structural framing, and construction materials. Minor modifications to the interior include two partitioned rooms. Although not eligible for the National Register, this exposed steel bent-frame construction may warrant interior photo-documentation prior to future modifications purely from a local (HAFB) standpoint.

Suggested routine maintenance: Broken window glass needs to be replaced. Metal siding needs minor repair work. The concrete foundation is cracked and spalling in areas. A steel frame supporting the air conditioning unit (outside the building at the north end) has rusted and must be shored or replaced. Vegetation should be removed at the foundation. Several areas around the foundation should be regraded to promote positive drainage (water runoff away from the structure). Ruts and tears in paving repair work around Buildings 113 and 115 indicate an incorrect asphaltic mix and installation for the present traffic loading. Recommend the top surface be removed to the base coarse, additional base added and compacted, and tack coat added.

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

Comments: A subsequent improvement to provide additional storage space was constructed at the north elevation (1961: CE File #115-3).

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

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

Comments: Continues to be associated with Buildings 112 and 113, within an enclosed storage yard.

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

Comments: The original roof, walls, structural members, doors, and windows appear to remain intact.

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

Comments: The original north wall, including the sliding doors, were removed with the construction of the 100-foot improvement.

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 [ ] Some elements remain [x] Retains integrity

Comments:

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

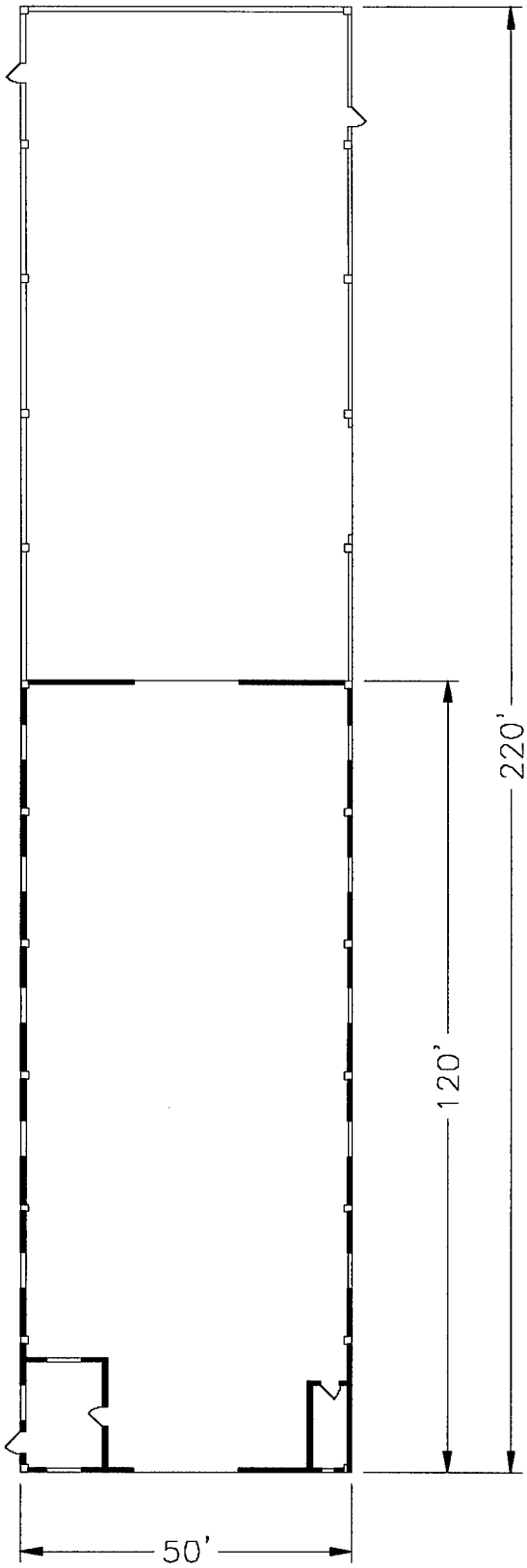
Comments: Building 115 continues to reflect its original design and use.

X. FURTHER INFORMATION:

Surveyed By:

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

HAFB Report Number: **CRM Publication #3**
Photograph Citation: **CD-ROM #2-Photo #25**
Negatives On File: **49 CES/CEV, 550 Tabosa Ave, HAFB**
Date of Field Visit: **SUMMER 1995**



Source: CE File #115-5 (c1953)

State of New Mexico Office of Cultural Affairs Historic Preservation Division	**BUILDING 115** Holloman Air Force Base Alamogordo, New Mexico	Project No. 35-95-HAFB-4	AutoCAD rendering by: *Steve Merrill* New Mexico State University **Sheet 1 of 1**	NEW MEXICO STATE UNIVERSITY

COLD WAR SURVEY: HOLLOMAN AIR FORCE BASE

NAME:
Current: Warehouse 13.
Historic: Warehouse.
Street Address: 210 Delaware Ave., HAFB, 88330-7706.

Building Number: 375

I. GENERAL INFORMATION:

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

Comments: Building 375 is in need of minor routine maintenance.

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

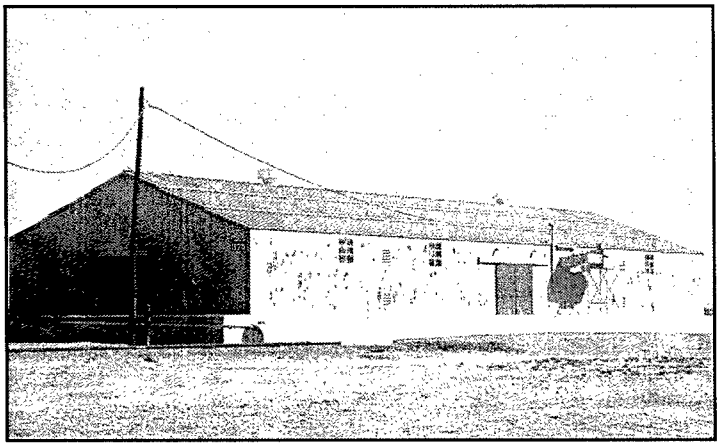
Comments: Remains essentially as it was originally constructed.

Preliminary Determination of National or State Register Eligibility:

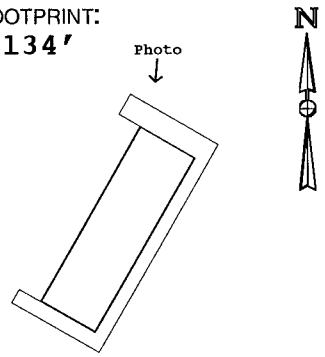
[ ] Exceptional importance [ ] Potentially eligible [ ] Further research recommended [x] Ineligible

Comments: Does not meet NRegister criteria as an individual property.

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



BUILDING FOOTPRINT:
51' x 134'



Date of completion: c1952

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 375 is a rectangular, one-room, gable-roofed, steel frame, prefabricated, storage structure situated on an abandoned railroad line at the intersection of three roads. Real Property Accountable Record/375 indicates that this structure was assembled c1952, and continues to serve as a Base warehouse.

Building 375's exterior shell was manufactured by the Parkersburg Rig and Reel Company, Parkersburg, West Virginia, according to a metal plate mounted on the south elevation wall. No structural modifications to the original structure noted. Although no "As-built" drawing were located for Building 375, subsequent drawings note minor alterations to the original design.

III. HISTORIC AND CURRENT USE:

Source: Real Property Accountable Record/375.

Current Function: Warehouse.

Original Function: Warehouse.

Interim Functions: "Whse, Sup & Equip, Bse" (n.d.).

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

Source: CE File #375-1 (n.d.).

Foundation: Concrete footings and foundation wall.

Exterior walls: Prefab metal shell supported by steel frame.

Roof: Metal roof supported by eight steel trusses.

Notable interior features, including machinery: Large steel roof trusses.

V. CURRENT FEATURES IF DIFFERENT FROM ORIGINAL:

Source: Field visit Summer 1995.

Foundation:

Exterior walls:

Roof:

Notable interior features, including machinery: None noted.

VI. BRIEF STATEMENT OF HISTORIC SIGNIFICANCE:

Although Building 375 does not meet National Register criteria as an individual property, this building may warrant consideration as a contributing feature once the fifty year construction date is met in the year 2002.

VII. ASSOCIATED BUILDINGS:

Building 375 was associated with the nearby railroad system, no longer in use. Historic association with other buildings is presently unknown.

VIII. ADDITIONAL COMMENTS AND MAINTENANCE RECOMMENDATIONS:

The exterior shell of this one-room prefabricated steel shell and structure was manufactured by the Parkersburg Rig and Reel Company, Parkersburg, West Virginia, according to a plate mounted on the south elevation wall. This building provides an intact example of prefabricated structures being shipped cross-country to fulfill storage requirements during the Cold War military buildup, and may warrant further research as such. Although not eligible as an individual property due to its ancillary role, recommend that this facility be photographed prior to major modifications. It is worth noting that goods were apparently delivered via railroad to this warehouse. A railroad grade is located adjacent to Building 375, although this railroad system has been abandoned. The front elevation historically faced the railroad (n.d.: CE File #375-1). Building 375 is currently accessed at the north elevation loading dock. Interior steel columns support large steel trusses, which are all exposed. The truss span is approximately 50 feet. The building length is approximately 133 feet, and the clear height (top of slab to bottom chord of truss) is approximately 12 feet. The interior steel columns and walls are covered with a fiber fireproofing material. Electrical and mechanical systems are exposed. Sliding doors and windows are all original. The sole modification to the original plans includes the partitioning of a receiving room and a latrine at the entrance. These wood stud partitions represent a minor modification, and are removable.

Suggested routine maintenance: Scrape, prime, and paint exterior. Repair torn roofing at south gable.

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

Comments:

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

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

Comments: Building 375 continues to be situated adjacent to a section of the railroad, and at the intersection of three roads.

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

Comments:

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

Comments:

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 [ ] Some elements remain [x] Retains integrity

Comments:

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

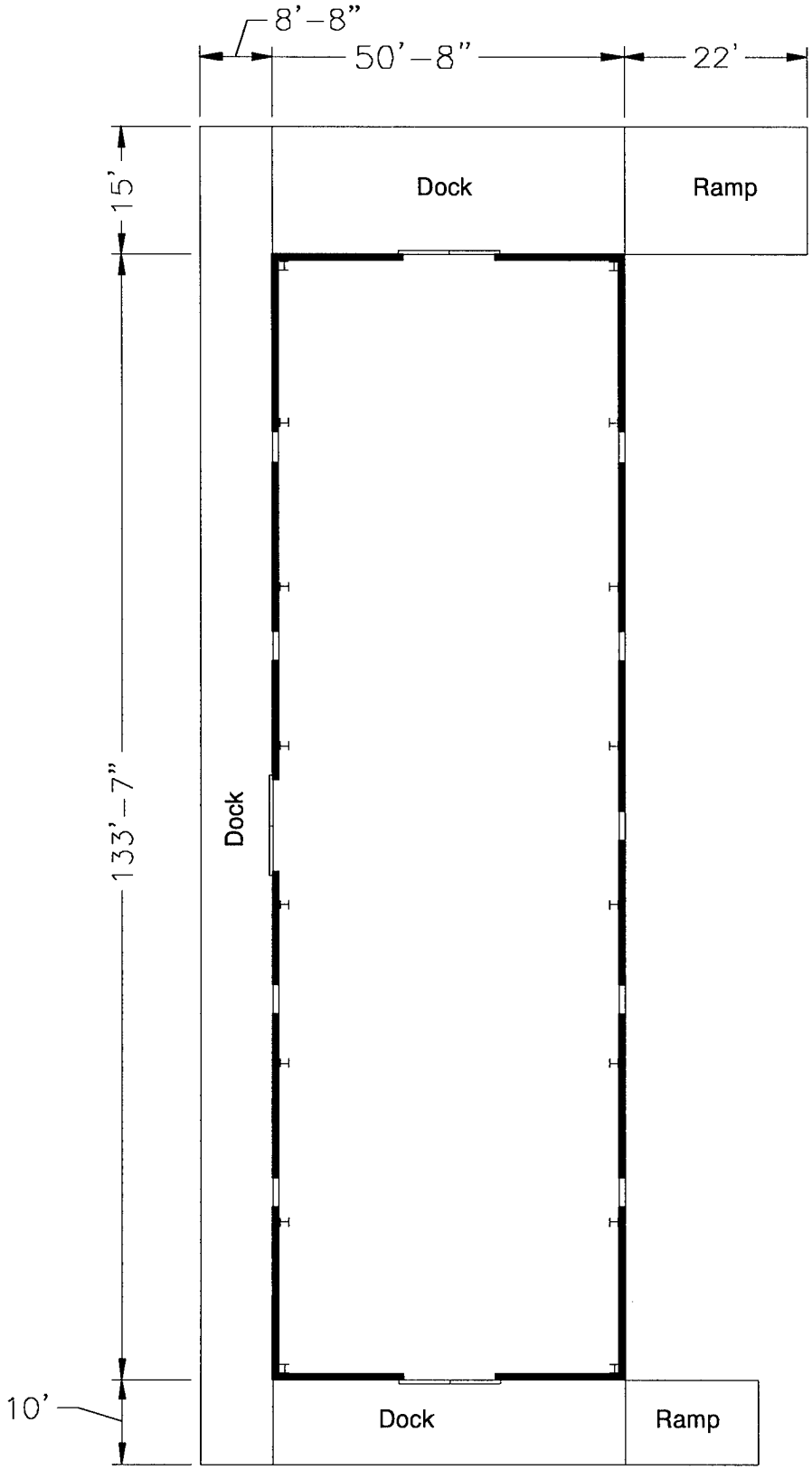
Comments: This building was originally constructed as a warehouse c1952, and continues to function as a warehouse.

X. FURTHER INFORMATION:

Surveyed By:

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

HAFB Report Number: **CRM Publication #3**
Photograph Citation: **CD-ROM #2-Photo #89**
Negatives On File: **49 CES/CEV, 550 Tabosa Ave, HAFB**
Date of Field Visit: **SUMMER 1995**



Source: CE File #375-1 (c1952)

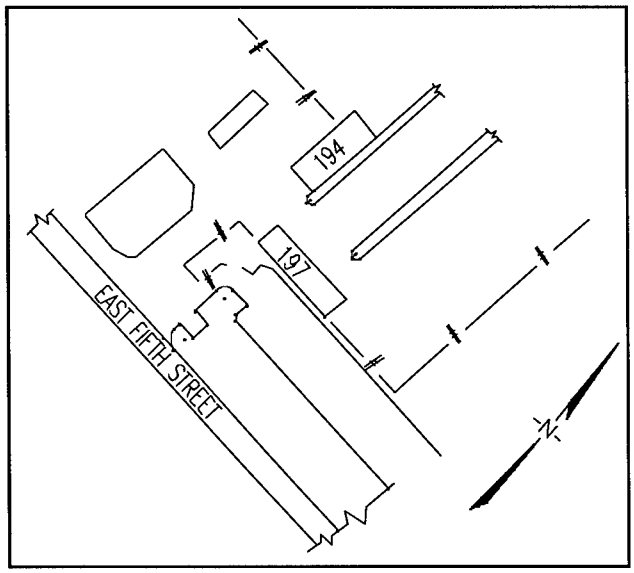
State of New Mexico Office of Cultural Affairs Historic Preservation Division	**BUILDING 375** Holloman Air Force Base Alamogordo, New Mexico	Project No. 35-95-HAFB-4	AutoCAD rendering by: *Mike Gardner* New Mexico State University **Sheet 1 of 1**	NEW MEXICO STATE UNIVERSITY

Field Survey: Operational and Support

I. Operational and Support Installations

- Base and Command Centers
  - -Building 571
- Missile Stations
- Launch Complexes
- Housing
  - -Building 330
  - -Building 331
  - -Building 333
- Storage
  - -Building 60
  - -Building 113
  - -Building 115
  - -Building 375
- **Ground Vehicles/Equipment/Fuels***
  - **-Building 197**
  - **-Building 198**
  - **-Building 701**
  - **-Building 702**
  - **-Building 837**
- Base Retail
- Recreation
- Infrastructure
  - -Building 22
  - -Building 840
  - -Building 1275
- Mess/Social
  - -Building 332
- Memorial
- Communications
  - -Building 221
  - -Building 880
  - -Building 1097
  - -Building 1098
- Documentation
- Medical*
  - -Building 57

Vehicles/Equipment/Fuels Bldgs 197, 198, 701, 702, 837



Site plan. Building 197.

COLD WAR SURVEY: HOLLOMAN AIR FORCE BASE

NAME:
Current: Vehicle Operations Parking Shed.
Historic: Ambulance Garage.
Street Address: 810 Ocotillo Ave., HAFB, 88330-7729.

Building Number: 197

I. GENERAL INFORMATION:

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

Comments: Building 197 is in need of routine maintenance.

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

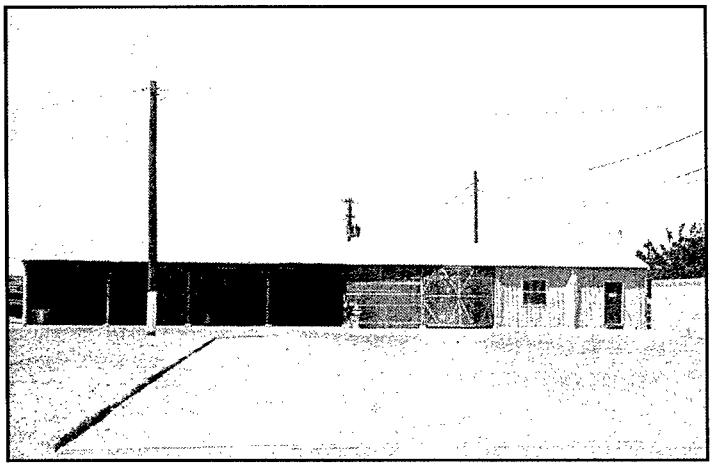
Comments: Two open bays enclosed at west end. Finishes added.

Preliminary Determination of National or State Register Eligibility:

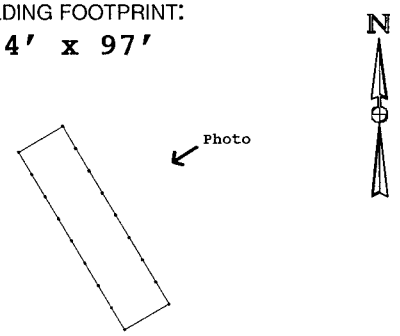
[ ] Exceptional importance [ ] Potentially eligible [ ] Further research recommended [x] Ineligible

Comments: Does not meet National Register criteria for significance.

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



BUILDING FOOTPRINT:
24' x 97'



Date of completion: c1955

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 197 is a rectangular metal frame shed, open at the north elevation, and enclosed using metal at the other three sides. Double steel channels serve as columns, spaced every 12 feet lengthwise. These columns support steel trusses, forming a gable roof. The date of original construction completion is c1955 according to Real Property Accountable Record/197. No construction drawings for this structure were located. Personal communication with vehicle yard employees verified that two 12' bays were enclosed at the west end in 1996 to serve as an office. A door and window were added at the same time. The original architect and builder are unknown.

III. HISTORIC AND CURRENT USE:

Source: Real Property Accountable Record/197.

Current Function: Employee parking. Storage. Office space.

Original Function: "Garage, Ambulance" (n.d.).

Interim Functions: "Auto Stor Shed" (c1969); "Veh Ops Pkng Shed" (n.d.).

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

Source: Real Property Accountable Record/197.

Foundation: Isolated concrete column footings. Concrete slab.

Exterior walls: Metal siding on metal frame. Open at north elevation.

Roof: Metal roof.

Notable interior features, including machinery: None noted.

V. CURRENT FEATURES IF DIFFERENT FROM ORIGINAL:

Source: Field visit Spring 1996.

Foundation: Wood frame floor at west end.

Exterior walls: ~24' feet at west end, north elevation, enclosed by metal siding.

Roof:

Notable interior features, including machinery: None noted.

VI. BRIEF STATEMENT OF HISTORIC SIGNIFICANCE:

Building 197 does not meet National Register criteria for significance.

VII. ASSOCIATED BUILDINGS:

Historically associated with other facilities within the enclosed vehicle maintenance area. It is unclear which medical buildings this ambulance garage may have been associated with.

VIII. ADDITIONAL COMMENTS AND MAINTENANCE RECOMMENDATIONS:

Although this simple shed structure retains most of its original materials, it has lost integrity of design, materials, workmanship, feeling and association. This structure was originally built for use as an ambulance garage, according to Real Property Accountable Record/197. The west end has been enclosed with metal, and a door and window added to convert this area into office space. Metal grating has been added to convert another bay into a storage and locker area. The remaining open 3-4 open bays are used as employee parking spaces.

Suggested routine maintenance: Reattach metal siding at south and east elevations. Existing damage to the columns should be monitored. Further use of this shed for parking may require that the columns be replaced and/or strengthened.

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

Comments: The original layout as a garage/shed has changed due to the enclosure of two bays at the west end. These bays were enclosed using metal siding. A door and a window were added at the same time (1996).

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: A split-faced block wall has been constructed to the west, obscuring the rest of the motor pool area from view.

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

Comments: Although original materials have not been removed, materials have been added to Building 197.

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

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

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

Comments: Some of the original interior space obscured by metal siding and metal grate enclosures.

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: The split-faced wall constructed at the west end isolates Building 197 from the rest of the motor pool.

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

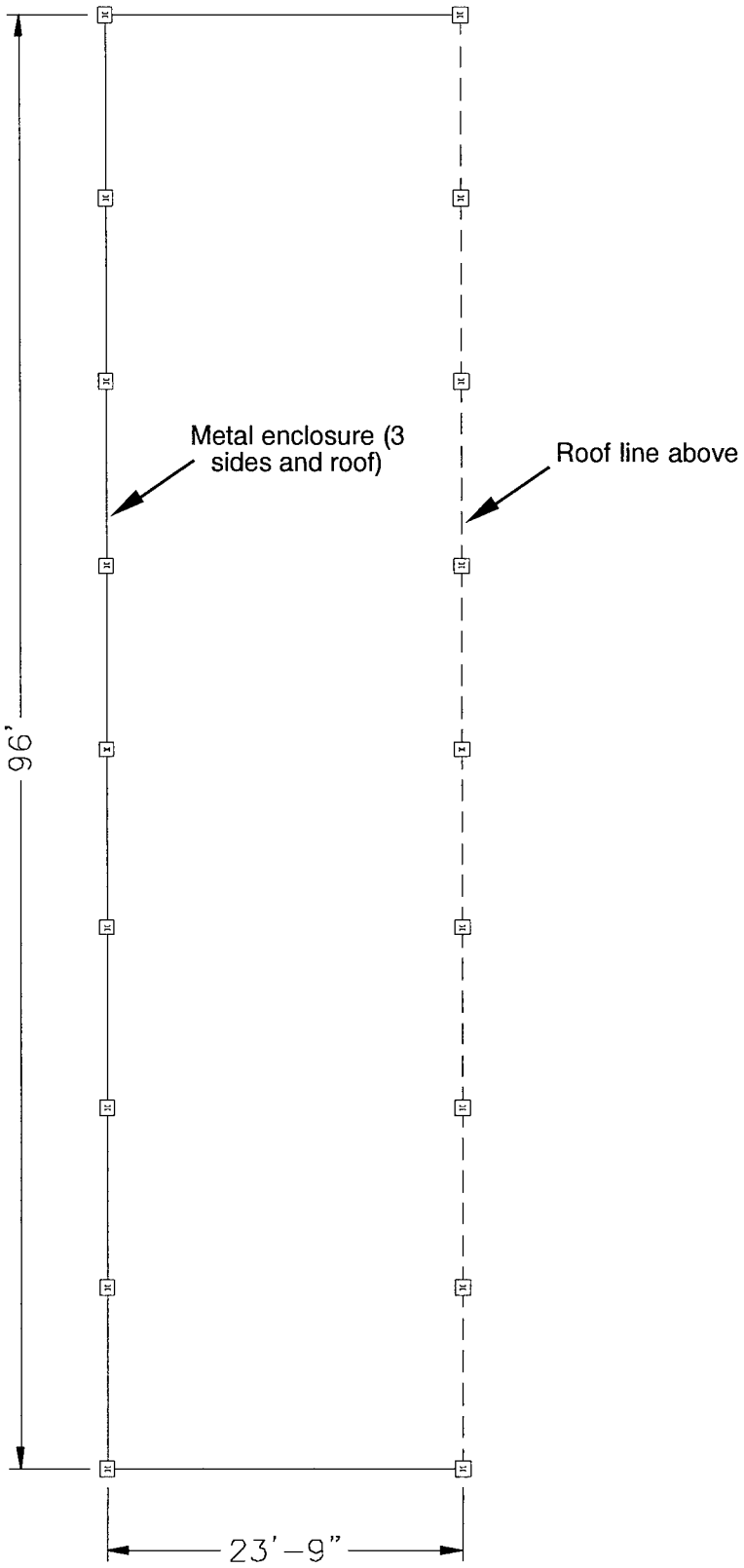
Comments: Building 197 no longer retains any association with its construction as an ambulance garage, serving instead as a storage shed, locker and office space, and employee parking.

X. FURTHER INFORMATION:

Surveyed By:

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

HAFB Report Number: **CRM Publication #3**
Photograph Citation: **CD-ROM #2-Photo #71**
Negatives On File: **49 CES/CEV, 550 Tabosa Ave, HAFB**
Date of Field Visit: **SPRING 1996**



Source: Field measurements, S. Cooper, Fall 1996

State of New Mexico Office of Cultural Affairs Historic Preservation Division	**BUILDING 197** Holloman Air Force Base Alamogordo, New Mexico	Project No. 35-95-HAFB-4	AutoCAD rendering by: *Eugene N. Kilmer* *(505) 323-0641* Mag Drafting **Sheet 1 of 1**

COLD WAR SURVEY: HOLLOMAN AIR FORCE BASE

NAME:
Current: Vehicle Maintenance Shop
Historic: Ground Powered Equipment Repair Shop
Street Address: 850 Ocotillo Ave., HAFB, 88330-7729.

Building Number: 198

I. GENERAL INFORMATION:

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

Comments: In need of routine maintenance.

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

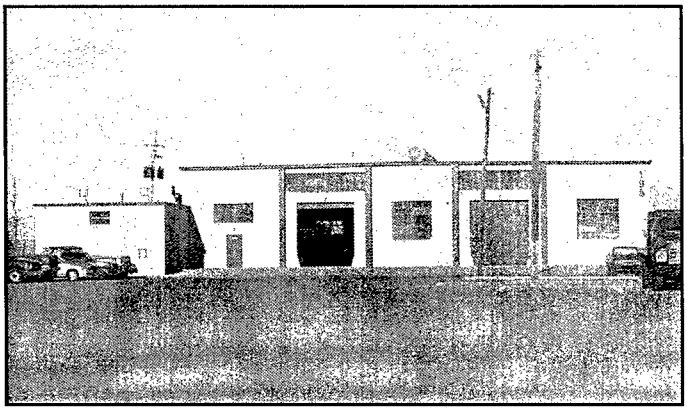
Comments:

Preliminary Determination of National or State Register Eligibility:

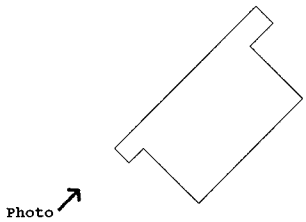
[ ] Exceptional importance [ ] Potentially eligible [ ] Further research recommended [x] Ineligible

Comments: Does not meet National Register criteria for individual significance.

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



BUILDING FOOTPRINT:
120′ x 245′



Date of completion: 1953

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 198 is a one-story vehicle maintenance shop with an original rectangular footprint. A 25′-4″ high bay, square addition was added to the southwest elevation (1959: CE File #198-2) and an addition was constructed at the northeast elevation (1982: CE File #198-5). The original building was completed in 1953 according to "As-built" dates on the drawings (CE File #850-1), and the Real Property Accountable Record/198. The floor plan shows a row of partitioned rooms along the northwest side (low roof), and a large high-bay area approximately 95′ x 180′ with 14′ clear height. All elevations except the northwest exhibit large roll-up doors. The high roof is slightly tapered, and low roof is flat. W.C. Kruger Company (Santa Fe, NM) provided the architectural work. The builder is unknown.

III. HISTORIC AND CURRENT USE:

Source: Real Property Accountable Record/198.

Current Function: Vehicle Maintenance Shop.

Original Function: Vehicle Maintenance Shop.

Interim Functions: "Auto Maint Shop" (n.d.).

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

Source: CE File #850-1 (c1953).

Foundation: Concrete grade beam and wall footing. Concrete column footings.

Exterior walls: Concrete columns. Painted concrete masonry units (CMU).

Roof: 2" gypsum deck on form boards supported by steel purlins and trusses.

Notable interior features, including machinery:

Overhead monorail. Steel trusses fabricated with rolled sections (1953: CE File #850-1).

V. CURRENT FEATURES IF DIFFERENT FROM ORIGINAL:

Source: Field visit Fall 1995.

Foundation:

Exterior walls:

Roof:

Notable interior features, including machinery: None noted.

VI. BRIEF STATEMENT OF HISTORIC SIGNIFICANCE:

Building 198 maintains historic integrity, and continues to provide support to Holloman AFB's military mission. Although this vehicle maintenance shop does not currently meet National Register criteria for individual properties, it may be deemed significant at a local level once the fifty-year date for its construction is met.

VII. ASSOCIATED BUILDINGS:

Although this relationship is unclear, the original drawings for Building 198 were located in CE File #850-1. The drawings are labeled "Technical Buildings," and show Building 850 and Building 839, Electronic and Atmospheric Research Test Building, and Technical Projects Building, respectively. Currently associated with other buildings within the vehicle maintenance yard.

VIII. ADDITIONAL COMMENTS AND MAINTENANCE RECOMMENDATIONS:

Building 198 retains integrity in all six areas. Except for minor partitioning to the northwest row of rooms and the two small additions, Building 198 remains essentially as it was originally constructed. An overhead monorail system and oil drain trough run the entire length of the floor in the main shop. This building was originally constructed to service base vehicles, and continues to serve in that capacity. The fact that this building maintains historic integrity may mean that future modifications to this building take into account its distinctive design features, including the open bay area, large roll-up doors, and the row of windows at the second story. If historic integrity is maintained, this building may acquire a local level of significance under Criterion C once the fifty-year mark for its construction is reached in the year 2003. Suggested routine maintenance: Repair water pipe leak in Bay B4. Point-up cracks in CMU joints inside southwest corner. Reglaze tile and install new fixtures in mens' latrine. Monitor water damage in Bay B7: Inspect roof at ridge vent for proper flashing and waterproofing.

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

Comments: Continues to function as a vehicle maintenance building. All of the orginial essential design elements remain intact.

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

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

Comments: Situated within enclosed vehicle maintenance yard.

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

Comments:

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

Comments: Steel trusses, steel columns, concrete floor, CMU exterior walls, large roll-up doors, and multiple-light windows still visible.

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 [ ] Some elements remain [x] Retains integrity

Comments: Retains feeling as a vehicle maintenance shop.

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 of feeling remains [ ] Some elements remain [x] Retains integrity

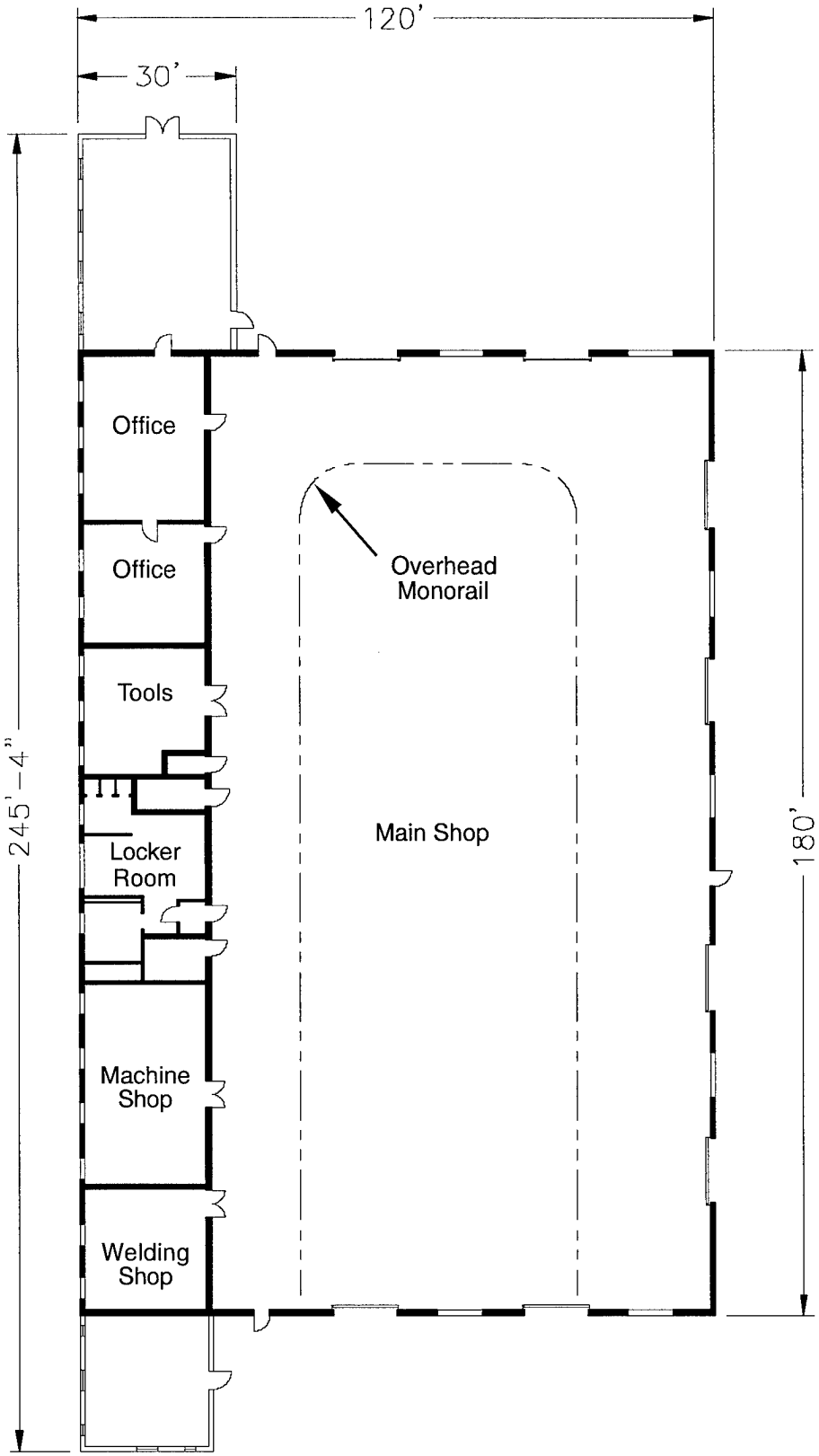
Comments: Building 198 was originally constructed as a vehicle maintenance facility, and continues to serve in that capacity.

X. FURTHER INFORMATION:

Surveyed By:

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

HAFB Report Number: **CRM Publication #3**
Photograph Citation: **CD-ROM #2-Photo #31**
Negatives On File: **49 CES/CEV, 550 Tabosa Ave, HAFB**
Date of Field Visit: **FALL 1995**



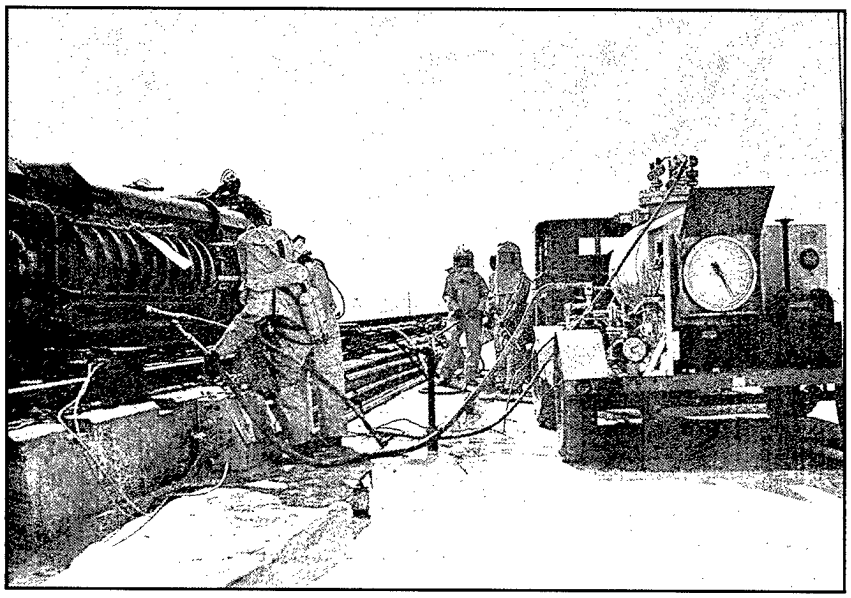
Source: CE File #850-1 (c1953)

State of New Mexico Office of Cultural Affairs Historic Preservation Division	**BUILDING 198** Holloman Air Force Base Alamogordo, New Mexico	Project No. 35-95-HAFB-4	AutoCAD rendering by: *Mike Gardner* New Mexico State University **Sheet 1 of 1**	NEW MEXICO STATE UNIVERSITY

Fuels

Solid and liquid fuels are used Base-wide for aircraft, ground vehicle transport, and at the High Speed Test Track to fire rocket sleds. The purpose of fuel is to act as a propellant to impart a desired velocity to a vehicle within a specified reaction time.

The propellant may consist of a solid material which reacts within itself to produce a considerable volume of gas at a fairly high temperature. The rate of burning in this case is a function of the propellant temperature, and the surrounding gas pressure (Wimpress 1950: 1-16). The propellant may also be a liquid-based system such as liquid oxygen, and gasoline as the fuel (Liebermann 1992: 96).



RG 342-B. Vol. I. 03-056. Archives II.

"A fueling crew from the Propellant Branch is shown during the fueling of the acid sled in preparation for a firing on the Captive Missile Test Track at the Air Force Missile Development Center, Holloman AFB. The operation involves the transfer of 350 gallons of red fuming nitric acid from the fueling trailer to the sled, and elaborite protective clothing must be worn when handling nitric acid." US Air Force photo 18 February 1960.

High Speed Test Track

Many measurements are taken at the High Speed Test Track to study the effects of different fuels used. The selection of the propulsion system is usually determined by the type of test and the desired results sought.

The number of runs required and the costs involved with the test design also have a direct influence on the choice of propulsion used. In general, the low construction cost of a few runs makes the high costs associated with solid propellants affordable, whereas the high construction costs of many runs make only the low liquid propellant costs affordable.

Buildings

Buildings documented in this report that continue to have a direct link with testing and transporting conventional fuels include Buildings 701, 702, and 837. Fuel storage sites are located throughout the Base.

COLD WAR SURVEY: HOLLOMAN AIR FORCE BASE

NAME:
Current: Petroleum Operations.
Historic: Grease Storage Building.
Street Address: 115 Delaware Avenue, HAFB, 88330-7705.

Building Number: 701

I. GENERAL INFORMATION:

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

Comments: Building 701 appears to be well-maintained.

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

Comments: Recent renovations obscure the original building.

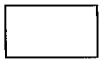
Preliminary Determination of National or State Register Eligibility:

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

Comments: Building 701 no longer retains historic integrity.

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

BUILDING FOOTPRINT:
24' x 36'



↑
Photo

Date of completion: c1955

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 701 is a small, single-story, gable-roofed structure originally constructed to store drums of grease. This storage facility has since been converted into offices and a lounge area.

Real Property Accountable Record/701 indicates that this facility was completed c1955. Neither the builder nor the architect is known. No structural modifications to the original building noted. Architectural modifications are summarized in Section VIII of this form.

III. HISTORIC AND CURRENT USE:

Source: Real Property Accountable Record/701.

Current Function: Fuels Support.

Original Function: Grease Storage Building.

Interim Functions: "Shed Sup & Equip Base" (n.d.); "Stor Oil & Grease" (c1972); "Hazard Stor, Bse" (c1972); "Prtrol Ops Bldg" (c1973).

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

Source: Real Property Accountable Record/701.

Foundation: Concrete wall footings/concrete slab.

Exterior walls: Steelox®.

Roof: Steelox®.

Notable interior features, including machinery: None noted.

V. CURRENT FEATURES IF DIFFERENT FROM ORIGINAL:

Source: Field visit Summer 1995.

Foundation:

Exterior walls: Stucco on frame.

Roof:

Notable interior features, including machinery: Converted to office space.

VI. BRIEF STATEMENT OF HISTORIC SIGNIFICANCE:

This grease storage facility does not meet National Register criteria for eligibility as an individual property. Building 701 has not retained historic integrity of design, materials, workmanship, feeling or association.

VII. ASSOCIATED BUILDINGS:

Building 701 may have been associated with the Petroleum Operations facility (Building 702) during its early Cold War period of significance.

VIII. ADDITIONAL COMMENTS AND MAINTENANCE RECOMMENDATIONS:

Building #701 has lost historic integrity of design, materials, workmanship, feeling, and association, and is therefore not eligible for the National Register of Historic Places. Originally constructed to store mechanical grease and oil, this building featured two large sliding metal doors at the north elevation. Each door accessed one large room. Metal drums containing reciprocating engine oil were forklifted into one room, and jet engine oil drums were forklifted into the other room (personal communication with Building 701 and 702 personnel).

Extensive renovations converted this storage building into offices (1986: CE File #701). The large access doors have been removed. Interior floor, wall, and ceiling finishes obscure original materials. Partitions and doors have been added to create offices and a lounge area. The exterior standing seam metal (Steelox®) siding was removed, and stucco applied. The Steelox® roof is the only architectural feature retaining historic integrity. New doors and windows were installed in existing openings at the entrance (south) elevation. The building has been landscaped with shrubbery enclosed by a split-faced block retaining wall. This building appears to be well-maintained.

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: Original sliding metal doors have been removed. Exterior Steelox® siding removed and stucco applied.

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: Continues to be situated near fuels support buildings in an enclosed compound.

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: Steelox® roof is the only original exterior feature retained. According to Building 701 personnel, and the appearance of the new wall, floor, and ceiling finishes, very few original materials remain visible at the interior.

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:

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?

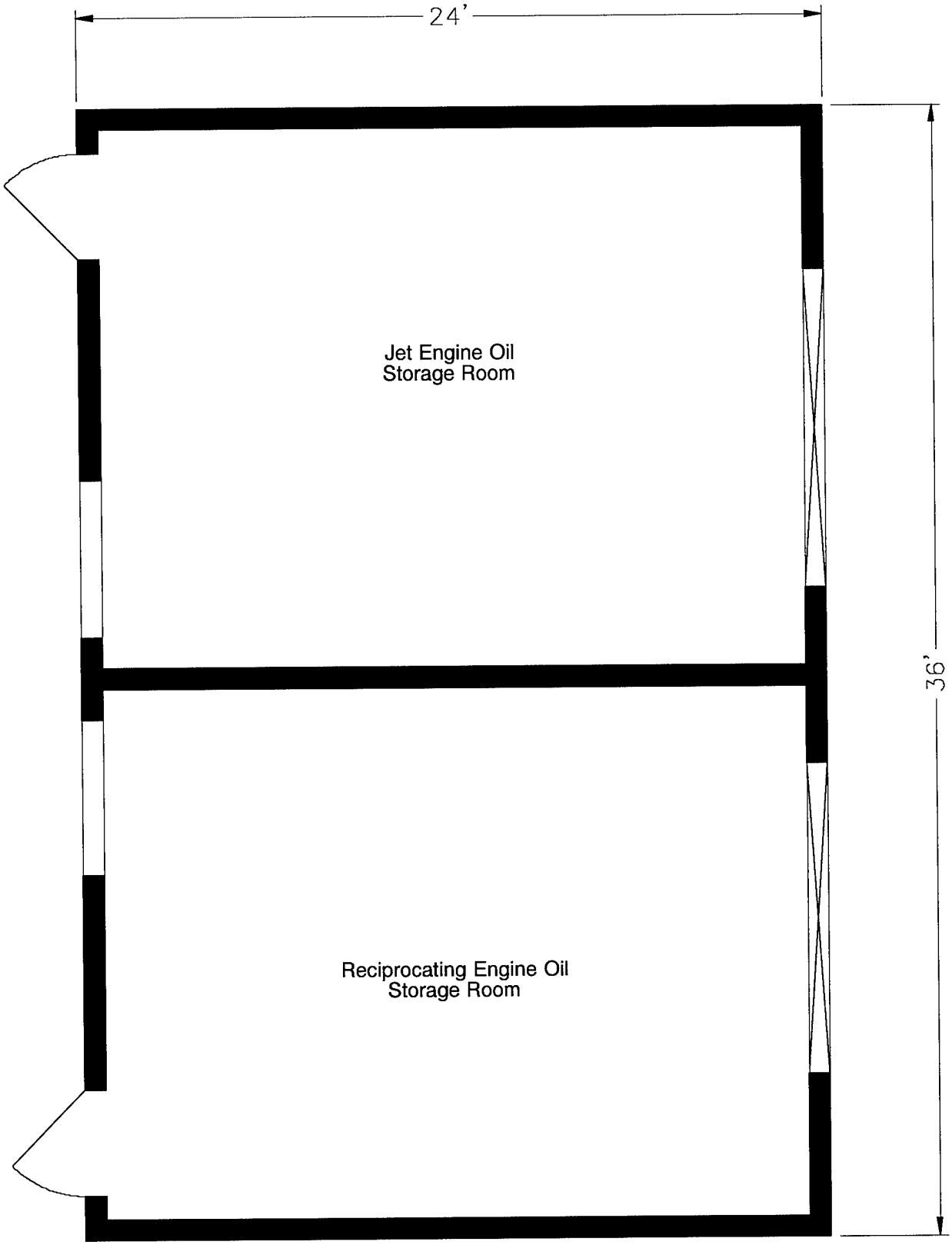
[ ] Unable to determine [x] Little or no integrity remains [ ] Some elements remain [ ] Retains integrity

Comments: Although Building 701 is still serving in a fuels support capacity, this facility has lost integrity of feeling and association as an oil drum storage area.

X. FURTHER INFORMATION:

Surveyed By:
Jean Fulton
Sonya Cooper
2500 Jordan Road
Las Cruces, NM 88001

HAFB Report Number: **CRM Publication #3**
Photograph Citation: **CD-ROM #2-Photo #32**
Negatives On File: **49 CES/CEV, 550 Tabosa Ave, HAFB**
Date of Field Visit: **SUMMER 1995**



Source: CE File #701-1 (c1954)

State of New Mexico Office of Cultural Affairs Historic Preservation Division	**BUILDING 701** Holloman Air Force Base Alamogordo, New Mexico	Project No. 35-95-HAFB-4	AutoCAD rendering by: *Steve Merrill* New Mexico State University **Sheet 1 of 1**	NEW MEXICO STATE UNIVERSITY

COLD WAR SURVEY: HOLLOMAN AIR FORCE BASE

NAME:
Current: Petroleum Operations, Base.
Historic: Petroleum Operations and Administration.
Street Address: 125 Delaware Avenue, HAFB, 88330-7705.

Building Number: 702

I. GENERAL INFORMATION:

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

Comments: Building 702 has recently been renovated.

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

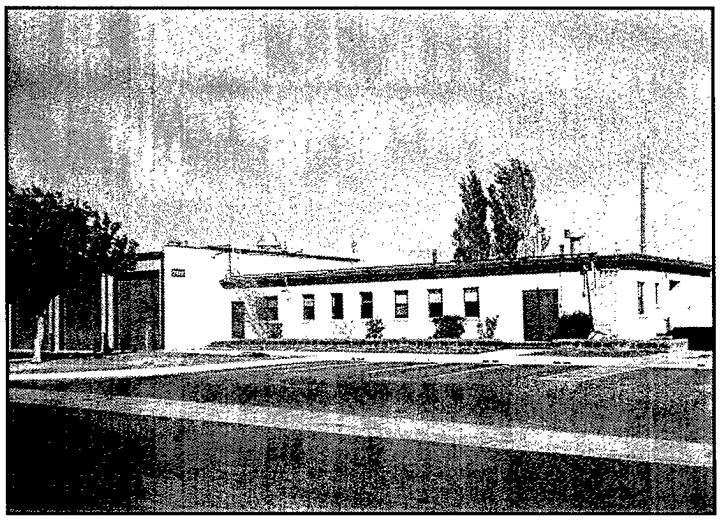
Comments: Although structure intact, architectural features altered.

Preliminary Determination of National or State Register Eligibility:

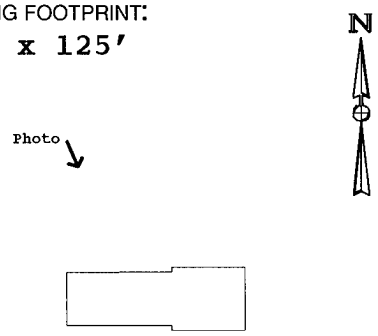
[ ] Exceptional importance [ ] Potentially eligible [ ] Further research recommended [x] Ineligible

Comments: Building 702 does not retain historic integrity.

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



BUILDING FOOTPRINT:
49′ x 125′



Date of completion: 1956

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.)

"As-built" construction drawings indicate that Building 702 was completed in 1956. Kenneth S. Clark (Santa Fe, NM) provided the architectural work. The builder is unknown. Renovations have altered the exterior appearance of this building. An open maintenance bay was enclosed (c1964: CE File #702-2), and the maintenance area itself was recently lengthened by ten feet (Personal communication with Building 702 personnel).

III. HISTORIC AND CURRENT USE:

Source: Real Property Accountable Record/702.

Current Function: Petroleum Operations, Base.

Original Function: Petroleum Operations and Administration.

Interim Functions: "POL Opr/Qlty Cntl" (n.d.); "POL Ops Q/C" (n.d.); "Petroleum Ops Bldg" (c1971).

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

Source: CE File #702-1 (c1954).

Foundation: Concrete wall footing with stem wall.

Exterior walls: Concrete masonry units (CMU).

Roof: Built-up roof on wood frame.

Notable interior features, including machinery: None noted.

V. CURRENT FEATURES IF DIFFERENT FROM ORIGINAL:

Source: Field visit Fall 1995.

Foundation:

Exterior walls:

Roof:

Notable interior features, including machinery: None noted.

VI. BRIEF STATEMENT OF HISTORIC SIGNIFICANCE:

Building 702 has provided petroleum operations support since it was constructed in 1956. Due to its ancillary function and the fact that it does not retain historic integrity, Building 702 is not eligible for the National Register of Historic Places.

VII. ASSOCIATED BUILDINGS:

Building 702 continues to be associated with surrounding petroleum support buildings, including Building 701.

VIII. ADDITIONAL COMMENTS AND MAINTENANCE RECOMMENDATIONS:

Although Building 702 has maintained a continuity of operations since it was originally constructed, the petroleum operations building has undergone several architectural and structural alterations.

The open maintenance area was enclosed using concrete masonry units (c1964: CE File 702-2). The maintenance area was recently lengthened by ten feet to accommodate longer fuel trucks (Personal communication with Building 702 personnel). Six metal, 4-light, double-hung windows at the north elevation on original "As-built" drawings are now 2-light, double-hung windows. One door canopy has been removed. Wood fascia has been wrapped with metal. Raised panel metal doors have been replaced with flush doors at three locations. Two windows at the south elevation have been removed. Interior room use has changed from providing direct support to the refueling operations, to administrative offices, including a lounge area. Interior finishes include sheetrock walls, wainscoting, dropped ceiling tile, and parged walls. These finishes obscure nearly all of the original interior finish materials.

Suggested routine maintenance: This building appears to be well-maintained. No routine maintenance items noted.

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: Open machine shop enclosed. Interior shops converted to office space. Stucco has been applied to exterior concrete masonry unit walls.

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

[ ] Unable to determine [x] Retains very little [ ] 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: Building 702 was landscaped c1995. New buildings located nearby.

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: Most of the original materials used to construct this building are either missing or obscured. Carpet replaces asphalt tile. CMU walls parged.

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: Originally constructed as an open maintenance area with supporting workshops and offices. Currently enclosed with administrative offices only.

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: Retains feeling as petroleum operations support building by its location near fueling yard.

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 [x] Some elements remain [ ] Retains integrity

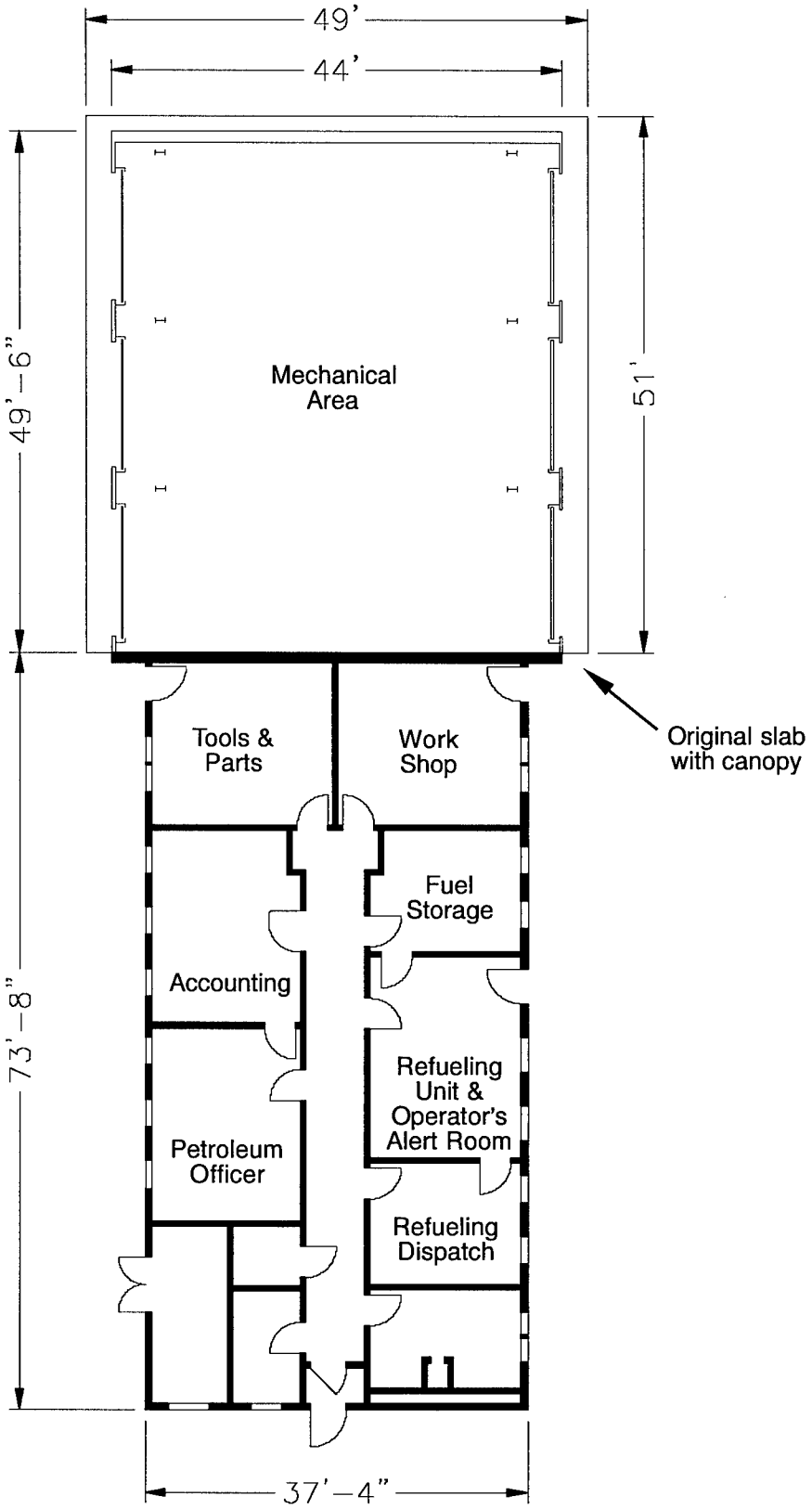
Comments: Building 702 continues to be associated with Base petroleum/refueling operations.

X. FURTHER INFORMATION:

Surveyed By:

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

HAFB Report Number: **CRM Publication #3**
Photograph Citation: **CD-ROM #2-Photo #85**
Negatives On File: **49 CES/CEV, 550 Tabosa Ave, HAFB**
Date of Field Visit: **FALL 1996**



Source: CE File #702-1 (c1954)

State of New Mexico Office of Cultural Affairs Historic Preservation Division	**BUILDING 702** Holloman Air Force Base Alamogordo, New Mexico	Project No. 35-95-HAFB-4	AutoCAD rendering by: *Mike Gardner* New Mexico State University **Sheet 1 of 1**	NEW MEXICO STATE UNIVERSITY

COLD WAR SURVEY: HOLLOMAN AIR FORCE BASE

NAME:
Current: Technical Lab/Fuels Analysis.
Historic: Aerospace Fuels Lab; Propulsion Lab.
Street Address: 1335 Tularosa Road, HAFB, 88330-7929.

Building Number: 837

I. GENERAL INFORMATION:

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

Comments: Building 837 is in need of routine maintenance.

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

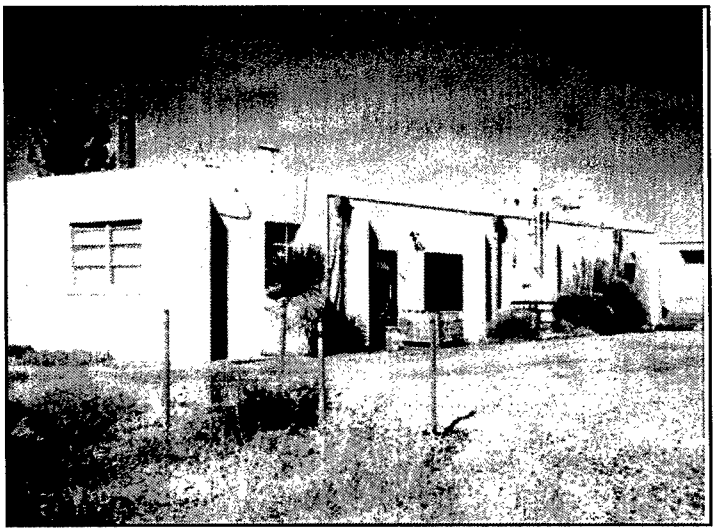
Comments: Alterations have resulted in a loss of historic integrity.

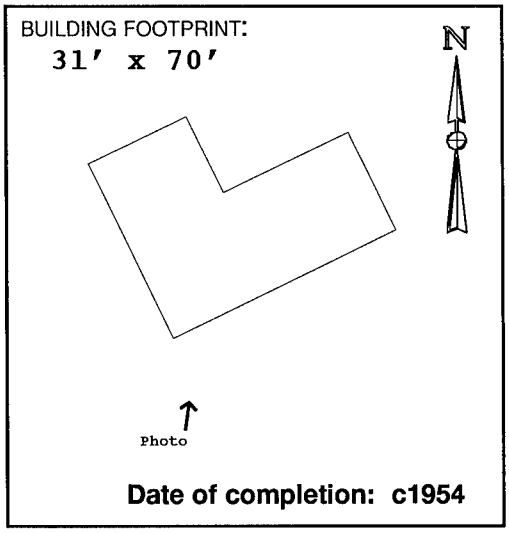
Preliminary Determination of National or State Register Eligibility:

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

Comments: Building 837 does not retain historic integrity.

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





Date of completion: c1954

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 837 is an L-shaped one-story block structure with a flat roof and parapet. All elevations show asymmetrical fenestration with a miscellaneous arrangement and sizing of doors and windows. An addition was constructed onto the original rectangular footprint in 1986 at the north elevation (CE File #837-3).

This facility operates a laboratory for testing aviation turbine fuels, diesels, heating fuels, gases, chemicals, lubricants, hydraulic fluids, as well as some environmental/hazardous waste samples (Real Property Accountable Record/837).

Neither the architect nor the builder is known.

III. HISTORIC AND CURRENT USE:

Source: Real Property Accountable Record/837.

Current Function: Technical Lab: Fuels Analysis.

Original Function: Propulsion Lab; Chemical Analysis.

Interim Functions: "SC Lab, Chem" (c1963); "Prtrol Ops Bldg" (c1973).

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

Source: CE File #837-1 (c1952).

Foundation: Concrete wall footings.

Exterior walls: Concrete masonry units (CMU).

Roof: BUR on rigid insulation; 3" ltwt concrete deck on lath supported by steel joists.

Notable interior features, including machinery: None noted.

V. CURRENT FEATURES IF DIFFERENT FROM ORIGINAL:

Source: Field visit Spring 1996.

Foundation:

Exterior walls:

Roof:

Notable interior features, including machinery: Original equipment replaced.

100

VI. BRIEF STATEMENT OF HISTORIC SIGNIFICANCE:

This facility has provided fuels analysis for Base operations since it was completed c1954. Building 837 is not eligible for the National Register because it has not retained historic integrity of design, materials, or workmanship.

VII. ASSOCIATED BUILDINGS:

Building 837 has no known historic association with any other facility.

VIII. ADDITIONAL COMMENTS AND MAINTENANCE RECOMMENDATIONS:

Building 837, although retaining historic integrity of feeling and association, has lost its integrity of design, materials, and workmanship. An addition at the north elevation necessitated the removal of three windows. Three additional windows have been removed from the west elevation. Original pressed metal frame with glass doors have been replaced with solid core wood doors. A second addition at the north elevation removed a set of double pressed metal doors. Cement floors have been carpeted or covered with vinyl tile. Mineral tile ceilings have been replaced. Original equipment has for the most part been replaced as well.

Two distinctive design features, the block pilasters and the parapet at the roof, remain intact. Although obscuring the original elevation, the addition at the north elevation reflects these key elements.

Suggested routine maintenance: Repair soffit at west elevation. Scrape, prime, and paint exterior concrete masonry unit walls. Temporarily remove landscaping, build up grade at foundation to promote positive drainage, and replace landscaping.

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

Comments: Two essential features remain visible, including (1) Exterior masonry pilasters, and (2) Flat roof with parapet. Additions and alterations to Building 837 have obscured most of the remaining design features.

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: Building continues to be situated near buildings constructed at about the same time. Building 837 has been landscaped since its completion.

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

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

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

Comments: Parapet roof, masonry pilasters, and painted CMU walls still intact. Two additions at exterior obscure original elevations. Doors replaced. Windows removed. Interior has been remodeled with new finishes and equipment.

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

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

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

Comments:

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 [ ] Some elements remain [x] Retains integrity

Comments:

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

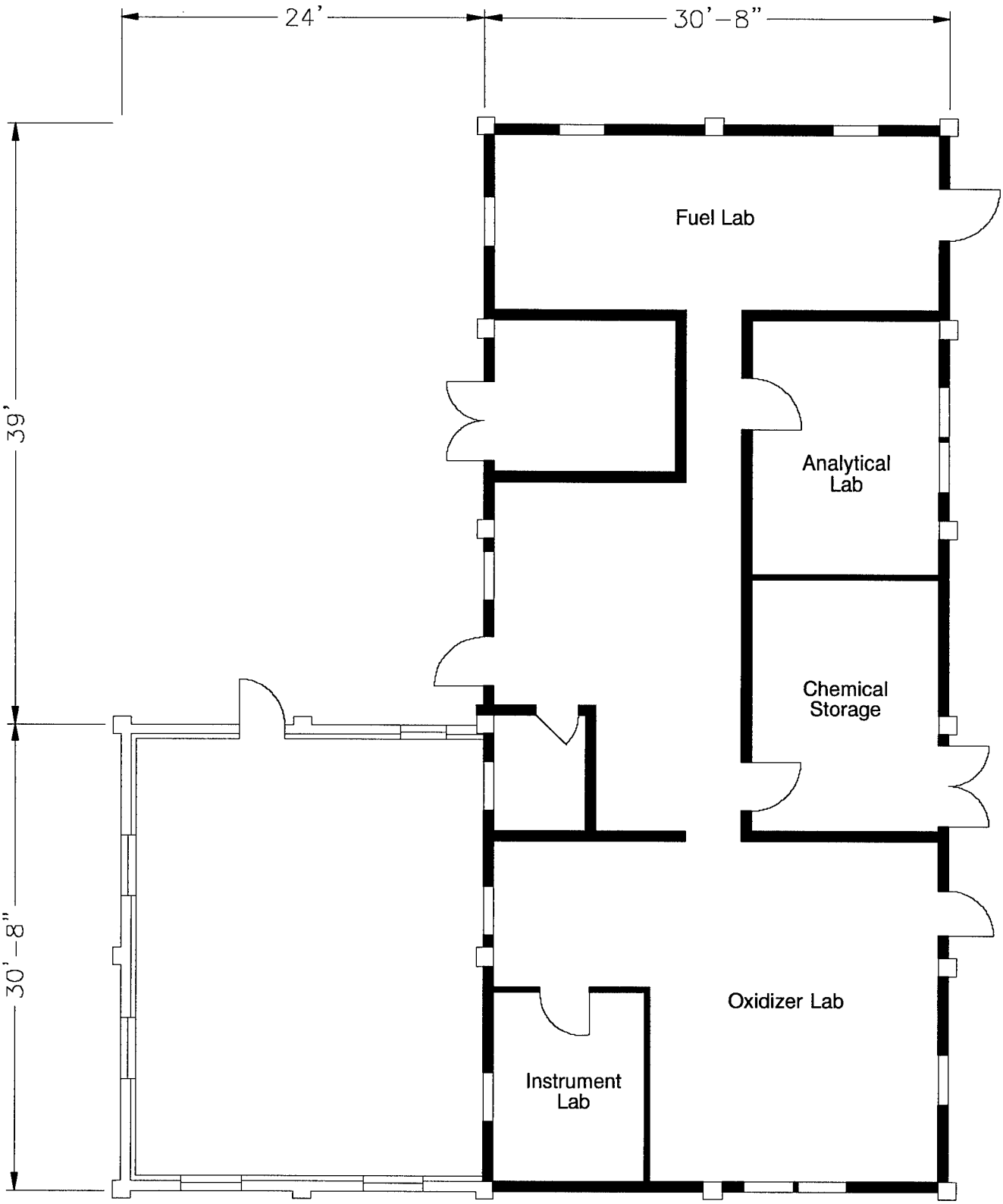
Comments: Building 837 continues to operate as a fuels analysis lab.

X. FURTHER INFORMATION:

Surveyed By:

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

HAFB Report Number: **CRM Publication #3**
Photograph Citation: **CD-ROM #-Photo #**
Negatives On File: **49 CES/CEV, 550 Tabosa Ave, HAFB**
Date of Field Visit: **SPRING 1996**



Source: CE File #837-1 (c1952)

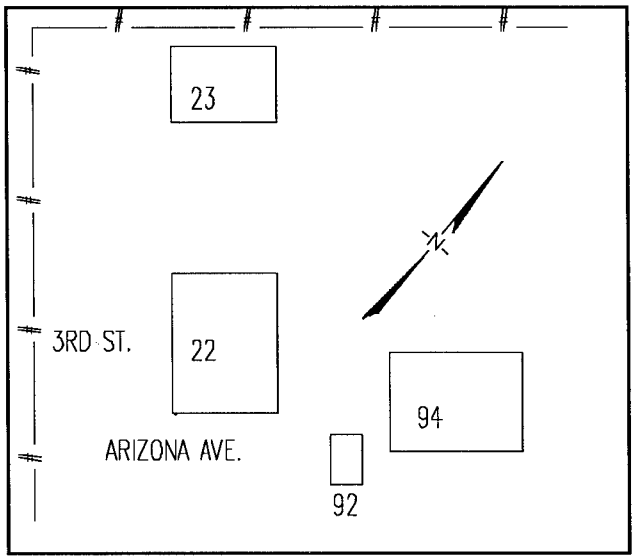
State of New Mexico Office of Cultural Affairs Historic Preservation Division	**BUILDING 837** Holloman Air Force Base Alamogordo, New Mexico	Project No. 35-95-HAFB-4	AutoCAD rendering by: *Mike Gardner* New Mexico State University **Sheet 1 of 1**	NEW MEXICO STATE UNIVERSITY

Field Survey: Operational and Support

I. Operational and Support Installations

- Base and Command Centers
  - -Building 571
- Missile Stations
- Launch Complexes
- Housing
  - -Building 330
  - -Building 331
  - -Building 333
- Storage
  - -Building 60
  - -Building 113
  - -Building 115
  - -Building 375
- Ground Vehicles/Equipment/Fuels*
  - -Building 197
  - -Building 198
  - -Building 701
  - -Building 702
  - -Building 837
- Base Retail
- Recreation
- **Infrastructure**
  - **-Building 22**
  - **-Building 840**
  - **-Building 1275**
- Mess/Social
  - -Building 332
- Memorial
- Communications
  - -Building 221
  - -Building 880
  - -Building 1097
  - -Building 1098
- Documentation
- Medical*
  - -Building 57

Infrastructure Bldgs 22, 840, 1275



Site plan. Building 22.

Infrastructure: Water in the Desert

And yet, despite all that was accomplished, the combined demand for water both at Holloman and in [Alamogordo] was always threatening to outstrip supply. Water alarms, shortages, and partial failures were a recurring feature of life, and so were the conservation programs set up to cope with them.

—Holloman AFB Historian David Bushnell

When shower bathing, turn water off while soaping; turn on again just long enough to rinse off soap. When shaving, run water only when rinsing razor, or washing soap from face.

—Letter from Holloman AFB Commander Kelly to Base personnel (9 May 1956).

Water in the Desert: 1940s

Although never officially established, the proposed World War II British training station near Alamogordo, NM necessitated reviewing the feasibility of bringing water to a desert installation. "The British never took possession of their proposed training station. Instead, after the United States had also entered the war, the Alamogordo site was taken over as a training field for American airmen" (Bushnell n.d.a.: 1). Early in 1942 the construction of the necessary water support facilities was initiated.

At first it was necessary to haul water to the training field by truck. "But at the same time work was rushed on a five-inch pipeline connecting the base with the town water system" (Bushnell n.d.a.: 7). A contract was signed on 30 March 1942 for the sale to the Air Force of 180,000 gallons of Alamogordo water per day. A new 10-inch pipe was put into service on 16 March 1943 (Bushnell n.d.a.: 8).

Air Force water use in the 1940s was based on servicing aircraft and domestic use. Special requirements included a base swimming pool, officially justified on the grounds that "...airmen who might later be forced down over the oceans should have a 'training tank' in which to practice disentangling themselves from their parachutes under realistic conditions" (Bushnell n.d.a.: 9).

Conservation Measures

Historian Bushnell's study of Holloman AFB water records indicates that domestic water use was greater than that of nearby Alamogordo, although Alamogordo used more water industrially due to the presence of railroad and sawmill operations (Bushnell n.d.a.: 9).

Base water records also document that water conservation measures were adopted out of necessity in the mid-1940s. These included limited lawn watering, the suspension of aircraft washings, and even a request that only cold water be used for showers in the hopes that showers would be kept short (Bushnell n.d.a.: 9).

The completion of new wells helped to alleviate the water shortage temporarily, although the drop in water demands at the close of World War II probably did more to solve the shortage than the new wells did.

Cold War

The lull in base activity came to an end in March 1947, when the Alamogordo airfield and installations were officially transferred to the Air Materiel Command for use in the Air Force missile program. This was the first step in a reorganization process that led finally to the establishment of Holloman Air Development Center in October 1952. The new program caused "...an acute revival of the water problem" (Bushnell n.d.a.: 19).

In addition to the increased population due to the influx of military personnel and their families, the missile program itself posed special demands for water. "Both actual launchings and static test firings entailed obvious fire hazards and thus called for a large reserve supply for fire fighting and prevention. The use of toxic fuels meant that still more water was needed for drenching the test or launching facilities after firing, both to protect personnel working in the vicinity and to check corrosion of the facilities themselves" (Bushnell n.d.a.: 21).

The North American Test Instrument Vehicle (*NATIV*) missile, for example, required at least 3,000 gallons of water per minute for five minutes to wash down the launching tower after every launching. The High Speed Test Track required "...many thousands of gallons each time for the operation of its water brakes." Although a small percentage of the braking water could be recycled, none of the contaminated washdown water could be reused (Bushnell n.d.a.: 21).

A prolonged dry spell in the summer of 1950 forced Alamogordo to make increasing use of water from the nearby town of La Luz. "That the use of La Luz water had some disadvantages became clear...when a curious outbreak of intestinal disorders occurred among Holloman personnel..." (Bushnell n.d.a.: 33). The direct cause of the epidemic was attributed to the exceptionally high mineral content of the water, likened to an unrequested dose of Epsom salts (Bushnell n.d.a.: 33).

Bonito Lake and Pipeline

The Bonito water system, like the town of Alamogordo, has its start as a by-product of the construction of the El Paso and Northeastern Railway and its El Paso and Rock Island affiliate in the early 1900s. As the railroad advanced further into New Mexico, water was diverted from a tributary in the Pecos system to the northern end of the Tularosa Basin to provide water for the locomotive boilers. A state permit for the construction of a dam and an artificial lake on the abandoned site of Bonito City was issued on 22 March 1928. The reservoir was completed in 1931 (Bushnell n.d.a.: 50).

Controversy erupted when the Southeastern New Mexico Water Protective Association called for a legal injunction against the El Paso and Rock Island Railway Company. The Association argued that the new reservoir at Bonito was depleting water supplies from the Roswell area. The New Mexico Supreme Court ruled on behalf of the railroad.

City of Alamogordo Agreement

By the early 1950s, railroad demands on area water supplies dropped dramatically due to the substitution of diesel for steam power. As railroad use declined, an increasing amount of the total water supply was sold to Carrizozo and other communities along the pipeline route. "The railroad was in danger of becoming what it had always sought not to be, a utility primarily engaged in supplying water to the general public...Southern Pacific naturally did not want to be bothered with such an undertaking" (Bushnell n.d.a.: 54).

Since outright abandonment of the Bonito Lake dam and pipeline was out of the question, the railroad offered to sell the water system, and then buy whatever water it needed back from the purchaser. The City of Alamogordo began negotiations with the railway in the Spring of 1954. In September 1952, the Alamogordo City Commission formally resolved, by unanimous vote, to enter a bid for acquisition of the Bonito water system (Bushnell n.d.a.: 57).

An agreement was made on 13 August 1954 between Southern Pacific Railroad, Alamogordo, Carrizozo and the Nogal Water Users Association defined the rights and duties of all parties concerned.

Federal Aid

This agreement was contingent upon Alamogordo receiving federal aid to construct a pipeline from Bonito to Alamogordo. Consequently, an urgent request was delivered by Holloman Air Force Base to Command Headquarters. On 20 September, a Memorandum of Understanding was signed, which put in writing the Air Force pledge (Congress willing) to build the Bonito pipeline. It was agreed that Holloman would also contribute annually to the maintenance of the pipeline (Bushnell n.d.a.: 65).

Bonito Pipeline Project

Ranchers who had long assailed the absorption of range land by the armed services were inclined to be suspicious of the Air Force role in the Bonito project, attacking the proposed pipeline project as an "attempted water grab by the United States Government" (*Lincoln County News*, 30 April 1954).

Although the Air Force was offering to expend in excess of three million dollars to assist Alamogordo in solving its water woes, many felt the Air Force was the source of the problem in the first place (*Lincoln County News,* 8 October 1953).

Discord

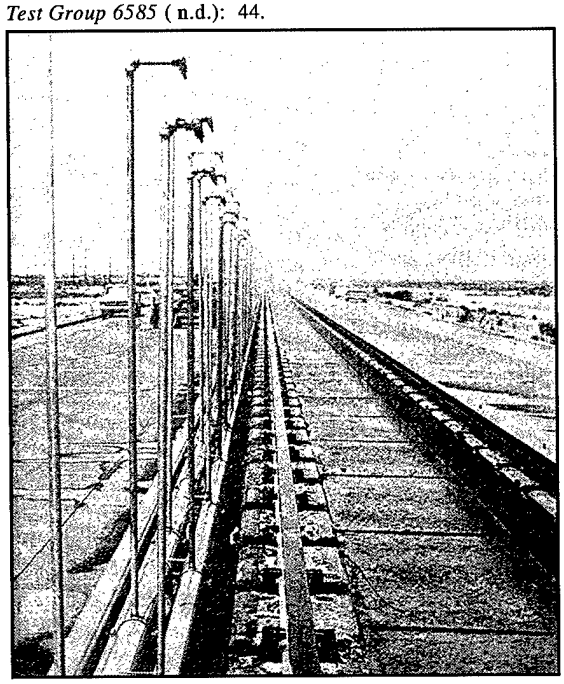
Local editorials vigorously opposed piping water out of the county for use at Alamogordo and Holloman, with the *Ruidoso News* calling the idea "criminal" (*Ruidoso News,* 29 October 1954). Another perennial source of discord between Holloman and the surrounding communities was the unsubstantiated rumor that Bonito Lake was slated to become an exclusive resort for top military officials (Bushnell n.d.a.: 76).

During all of the protracted legal squabbling, however, the Bonito pipeline appropriations bill was slowly wending its way through Congress, finally becoming law in the summer of 1955. In January 1956, the Brodie Construction Company of Amarillo, TX was awarded the pipeline construction contract (Bushnell n.d.a.: 97).

Conclusion

The completion of the Bonito pipeline in the late 1950s has served the Alamogordo and Holloman communities ever since. Comments Holloman historian David Bushnell, "...the water history of Holloman may be summarized as a vicious circle of increased demand, leading to a frantic search for new supplies, which is no sooner successful, then demand outstrips supply and the search must begin again" (Bushnell n.d.a.: 111). The task of supplying water to the desert for Holloman's domestic demands, and its unusual research requirements, has been a prodigious one.

Test Group 6585 (n.d.): 44.



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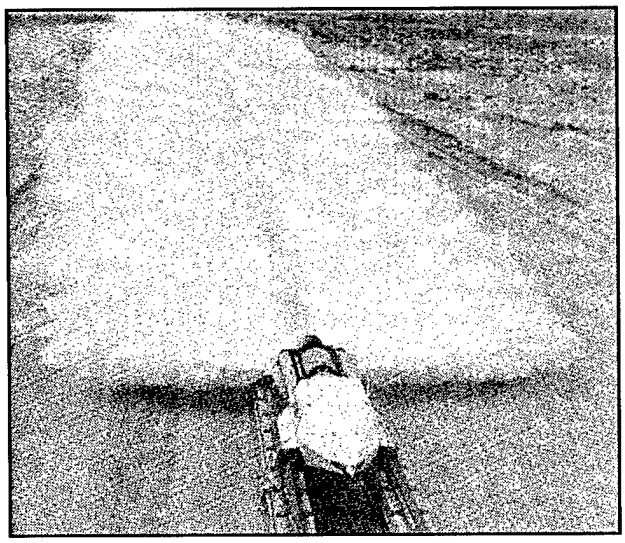
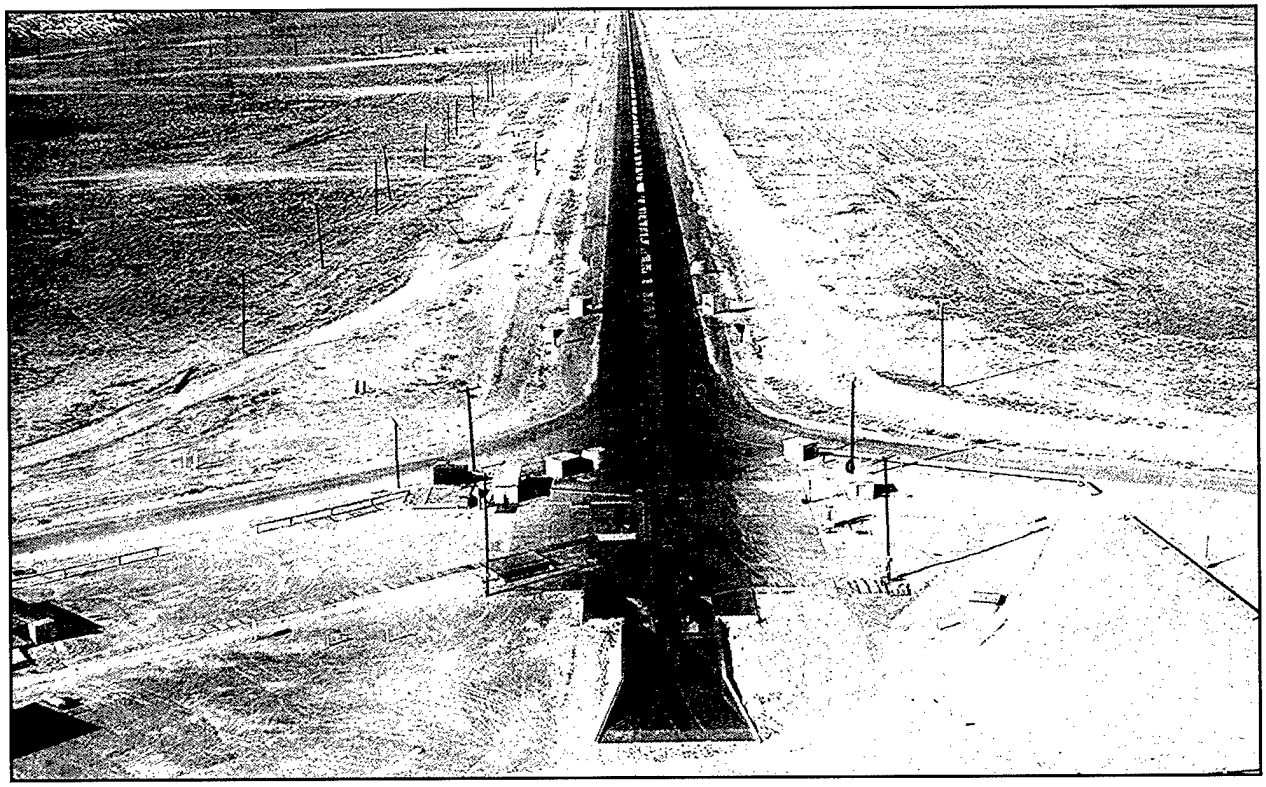


(Above) Large test sled is decelerated by water brake at Holloman, AFB. (Left) Simulated rain environment, High Speed Test Track.



RG 342-B. Vol. II. 06-042. Archives II.

"Holloman's 35,000 foot High Speed Test Track. Water is used between the tracks to brake the test sleds. A 6,000-foot stretch of the track has been fitted with 24,000 feet of aluminum pipe and 1,500 nozzles in order to pour 5,000 gallons of water per minute on rocket sleds in tests to evaluate rain erosion effects on missile nose cones and re-entry vehicles." U. S. Air Force Photo 10 Sept 1962.

COLD WAR SURVEY: HOLLOMAN AIR FORCE BASE

NAME:
Current: Water Pump Station.
Historic: Water Pump Station.
Street Address: 520 Tabosa Avenue, HAFB, 88330-8458.

Building Number: 22

I. GENERAL INFORMATION:

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

Comments: Routine maintenance required.

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

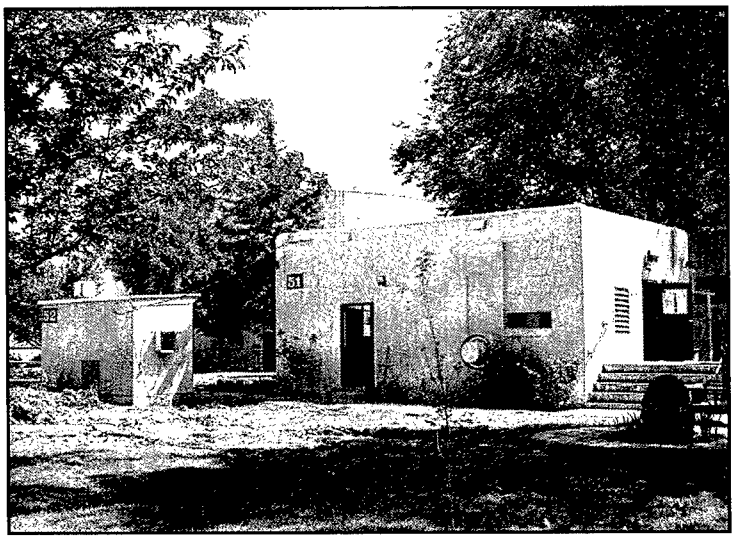
Comments: Remains essentially as it was originally constructed.

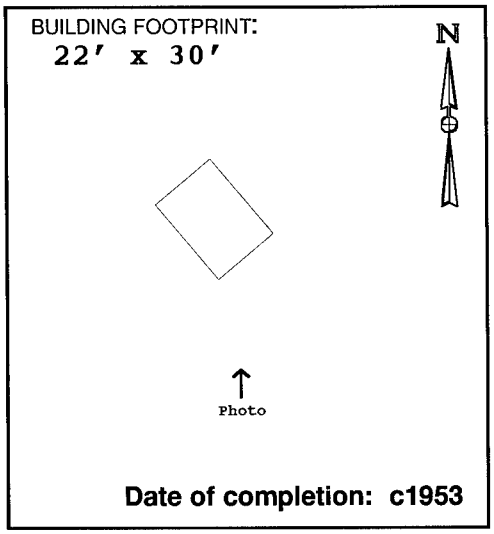
Preliminary Determination of National or State Register Eligibility:

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

Comments: Not eligible for the National Register as an individual property.

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





Date of completion: c1953

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 22 is a simple one-story concrete frame structure, rectangular in plan, with asymmetrical placement of doors and windows. This is constructed over a concrete wet-well, with the main floor partitioned into two spaces: the pump room and the chlorinator room. The concrete column and beam frame support the pump equipment hoist.

According to Real Property Accountable Record/22, this building was constructed c1953. Both the architect and the builder are unknown. No structural modifications were noted.

III. HISTORIC AND CURRENT USE:

Source: Real Property Accountable Record/22.

Current Function: Water Pump Station.

Original Function: Water Pump Station.

Interim Functions:

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

Source: Real Property Accountable Record/22; CE File #22-2 (c1952).

Foundation: Concrete grade beams and 12-inch thick wet well walls.

Exterior walls: Concrete Masonry Unit. Concrete columns support roof beams.

Roof: Built-up gravel roof on rigid insulation over 4" concrete slab.

Notable interior features, including machinery: Wet well (12' x 20') located below main room. Pumps, chlorinators.

V. CURRENT FEATURES IF DIFFERENT FROM ORIGINAL:

Source: Site visit Fall 1995.

Foundation:

Exterior walls:

Roof:

Notable interior features, including machinery:

Johnson pumps serial #TH21613, and #TH21614. Chlorinator system. One-ton Wright model hoist (York, PA). Wet well located below main room.

VI. BRIEF STATEMENT OF HISTORIC SIGNIFICANCE:

Although Building 22 maintains all aspects of historic integrity, this ancillary structure does not meet National Register criteria as an individual property. This pumphouse could be considered as a contributing feature should a Basewide Cold War-era Multiple Property nomination be prepared, however, for its association with the Bonito Pipeline, and its support of important Cold War missions.

VII. ASSOCIATED BUILDINGS:

Building 22 continues to be associated with an original 500,000-gallon underground concrete reservoir, and the historic Bonito Pipeline. Currently also associated with two underground steel storage tanks (combined capacity 16 million gallons), two above-ground water tanks, one nearby pumphouse (Building 92), and several water towers.

VIII. ADDITIONAL COMMENTS AND MAINTENANCE RECOMMENDATIONS:

This 1953 water pump station continues to supply the entire Holloman Air Force Base population. Routine upgrades and replacements of valves, pumps, and piping have occurred regularly. Routine equipment and pipeline upgrades are in keeping with this building's original design intent. At least one above-ground water storage tank was constructed for the Atlas Missile project, c1956. This project was cancelled, and the tank was moved to its current location south of Building 22. Main water lines, originally constructed of cast iron, are currently made of transite. One interior door is blocked, and a room originally constructed as a latrine has been converted to a tool room. Modifications to the original structure, including architectural features, are minimal.

Suggested routine maintenance: Replace broken window glass. Prune trees. Install downspouts. Repair concrete slab. Scrape and paint entire structure. Regrade planting beds to promote positive drainage.

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 in original location, situated just south of a 500,000-gallon underground reservoir.

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: Minor modifications to the original structural and architectural features have occurred.

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

[ ] Unable to determine [X] Retains very little [ ] 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: Buildings and a park post-date the construction of Building 22. No longer situated in a remote setting. Continues to be located near underground reservoir and above-ground tanks.

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

Comments: Nearly all of the original materials used to construct this building remain evident.

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

Comments: Upgrades to pumps, piping, valves, chlorination system, etc. are in keeping with original design intent. A chain-link enclosure partially obscures the south elevation.

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 [ ] Some elements remain [X] Retains integrity

Comments: Although recently landscaped and surrounded by newer buildings, this building continues to retain feeling as a water pump station.

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

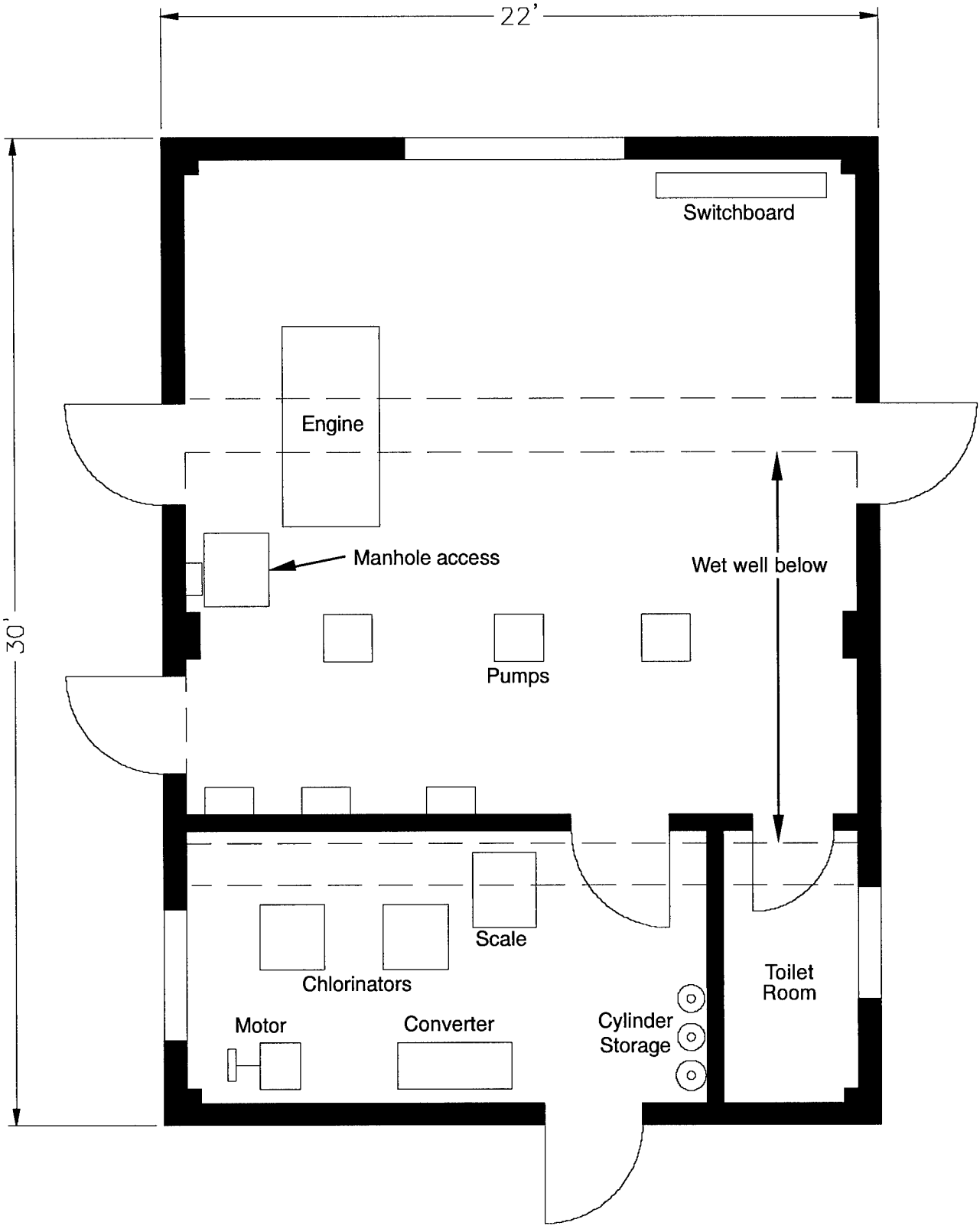
[ ] Unable to determine [ ] Little or no integrity of feeling remains [ ] Some elements remain [X] Retains integrity

Comments: Building 22 retains all elements of historic integrity. It continues to function as it was originally designed.

X. FURTHER INFORMATION:

Surveyed By: Jean Fulton
Sonya Cooper
2500 Jordan Road
Las Cruces, NM 88001

HAFB Report Number: **CRM Publication #3**
Photograph Citation: **CD-ROM #2-Photo #84**
Negatives On File: **49 CES/CEV, 550 Tabosa Ave, HAFB**
Date of Field Visit: **FALL 1995**



Source: CE File #22-2 (c1952)

State of New Mexico Office of Cultural Affairs Historic Preservation Division	**BUILDING 22** Holloman Air Force Base Alamogordo, New Mexico	Project No. 35-95-HAFB-4	AutoCAD rendering by: *Mike Gardner* New Mexico State University **Sheet 1 of 1**	

COLD WAR SURVEY: HOLLOMAN AIR FORCE BASE

NAME:
Current: Sanitary Sewage Pump Station.
Historic: Sanitary Sewage Pump Station.
Street Address: 1331 Tularosa Rd., HAFB, 88330-7929.

Building Number: 840

I. GENERAL INFORMATION:

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

Comments: In need of routine maintenance.

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

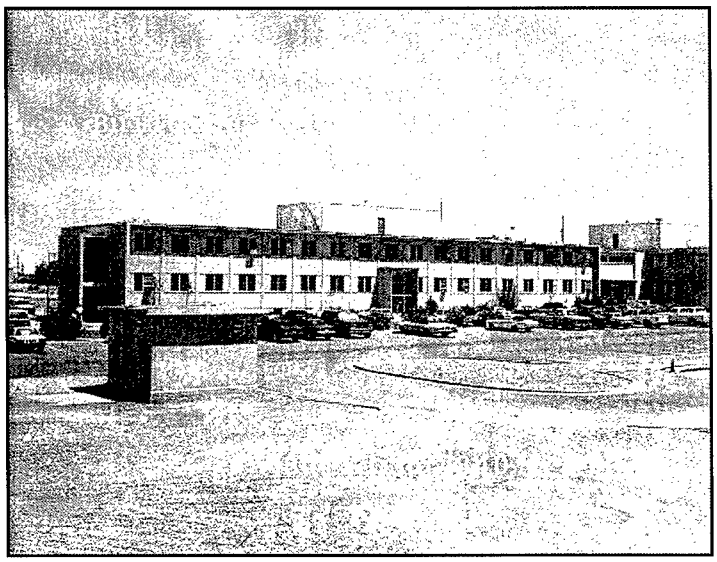
Comments: Piping has been removed.

Preliminary Determination of National or State Register Eligibility:

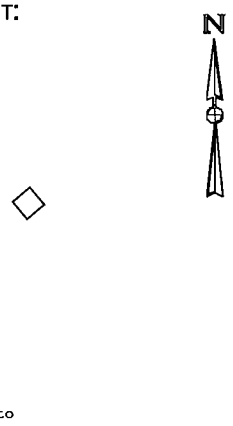
[ ] Exceptional importance [ ] Potentially eligible [ ] Further research recommended [x] Ineligible

Comments: Does not meet National Register criteria for significance.

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



BUILDING FOOTPRINT:
14′ x 14′



Date of completion: 1952

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 840 is a single-room, single-story sewage pump station made of concrete masonry units with a flat, concrete, built up roof, and one personnel access door. There is a center concrete beam at the interior to support the pump installation. According to "As-Built" drawings, the sewage station was completed in 1952 (1952: CE File #840-1). Real Property Accountable Record/ 840 indicates that subsequent improvements were made to the building until c1957. Although the builder is unknown, W. C. Kruger (Santa Fe, NM) was the architect. "As-Built" drawings show that the sewer line was replaced in February 1969 (1969: CE File #840). Currently, it appears that this building is abandoned, with all piping removed, and the holes patched. Electrical wiring has been removed at the circuit panel except the light and vent circuits.

III. HISTORIC AND CURRENT USE:

Source: Real Property Accountable Record/840.

Current Function: Vacant.

Original Function: Sewage Pumping Station.

Interim Functions: Sewage Pumping Station.

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

Source: CE File #840-1 (1952).

Foundation: 10" cast-in-place concrete foundation wall.

Exterior walls: Concrete masonry units (CMU).

Roof: 4-ply built-up roof (BUR) on concrete roof deck.

Notable interior features, including machinery:
Compressors and pumps documented in CE File #840-1. (Date c1951).

V. CURRENT FEATURES IF DIFFERENT FROM ORIGINAL:

Source: Field visit Fall 1995.

Foundation:

Exterior walls:

Roof:

114 Notable interior features, including machinery:
Compressors and pumps have been removed.

VI. BRIEF STATEMENT OF HISTORIC SIGNIFICANCE:

Building 840 does not meet National Register of Historic Places criteria for historic significance as an individual property.

VII. ASSOCIATED BUILDINGS:

Instead of serving individual buildings, Building 840 appears to have served two main sewage lines (1952 and c1969: CE File #840-1, -2).

VIII. ADDITIONAL COMMENTS AND MAINTENANCE RECOMMENDATIONS:

Originally, Building 840 was fed sewage influent from gravity systems and then pumped through an eight-inch force main that runs east-west and terminates at a manhole east of Corporal Ave. Effluent is then discharged into a gravity system that runs south to a collection area near Forty-Niner Ave. According to 1969 drawings (CE File #840-2), the force main was abandoned and all piping to and from Building 840 removed and the holes patched. These drawings also note that all electrical wiring was removed from the panel except for the light and vent circuits. This indicates that Building 840 no longer served as a sewage pumping station after 1969. Also see "Master Plan Sanitary Sewer System" CE File Tab G-2, Sheets 2,3. Although retaining historic integrity, Building 840 does not meet National Register criteria for being a distinctive example of a particular period or type of craftsmanship.

Suggested routine maintenance: Scrape, prime, and paint exterior. Reglaze window.

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

Comments: Most of the equipment and the piping has been removed.

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: Most of the surrounding buildings were constructed around the same time as Building 840.

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

Comments: Concrete floor, metal grating, sump access ladder, and handrail, double metal doors, eye hook in ceiling beam, and original window are intact.

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

Comments: All original construction materials remain visible.

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:

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 of feeling remains [x] Some elements remain [ ] Retains integrity

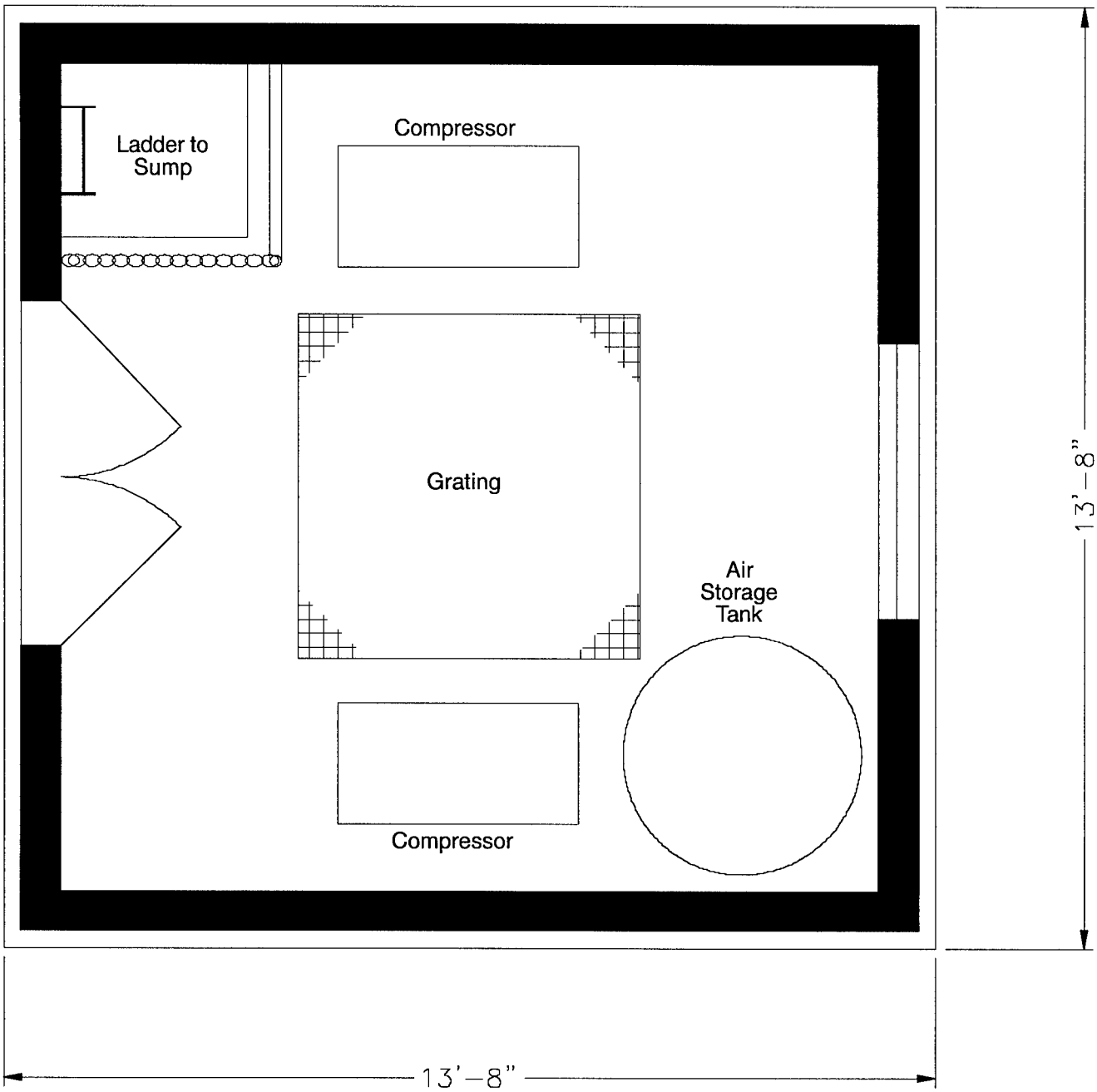
Comments: The small floorplan, metal grating and sump chambers contribute to this building's association as a pumping station. All original equipment has been removed.

X. FURTHER INFORMATION:

Surveyed By:

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

HAFB Report Number: **CRM Publication #3**
Photograph Citation: **CD-ROM #2-Photo #108**
Negatives On File: **49 CES/CEV, 550 Tabosa Ave, HAFB**
Date of Field Visit: **FALL 1995**



Source: CE File #840-1 (1952)

State of New Mexico Office of Cultural Affairs Historic Preservation Division	**BUILDING 840** Holloman Air Force Base Alamogordo, New Mexico	Project No. 35-95-HAFB-4	AutoCAD rendering by: *Mike Gardner* New Mexico State University **Sheet 1 of 1**	NEW MEXICO STATE UNIVERSITY

COLD WAR SURVEY: HOLLOMAN AIR FORCE BASE

NAME:
Current: Small Arms Ammunition Storage.
Historic: Water Supply Building.
Street Address: 1712 Vandergrift Rd, HAFB, 88330-7852.

Building Number: 1275

I. GENERAL INFORMATION:

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

Comments: Building 1275 is in need of minor routine maintenance.

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

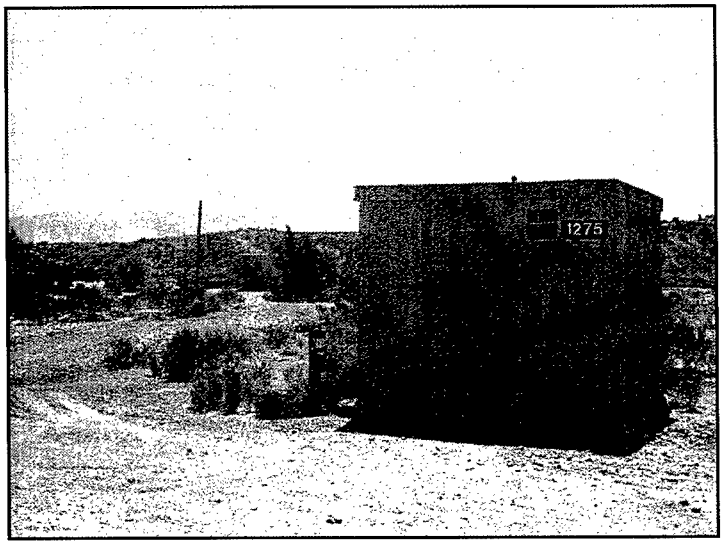
Comments: Degree of alteration is unknown. Blueprints not located.

Preliminary Determination of National or State Register Eligibility:

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

Comments: Does not meet National Register criteria for significance.

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



BUILDING FOOTPRINT:
8′ x 8′

Photo

Date of completion: c1952

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 1275 is a single room, single story, poured concrete water supply building situated directly on grade near the Base firing range and currently used to store ammunition for small arms. According to Real Property Accountable Record/1275, Building 1275 was constructed c1952 as a water supply building near Boles Wells and relocated to its present location c1959.

The sole entrance faces southwest, and shows a metal door. There are two 4″ x 8″ blocked openings at the rear (northeast) elevation, and one 10″ x 10″ opening at the principal facade. The roof is a slightly pitched, removable concrete slab. The floor to ceiling height is approximately 6′-2″ (Field visit Summer 1996). No construction drawings for this facility were located. No structural modifications noted. Neither the builder nor the architect is known.

III. HISTORIC AND CURRENT USE:

Source: Real Property Accountable Record/1275.

Current Function: Small Arms Ammunition Storage Facility.

Original Function: Water Supply Building.

Interim Functions: "Stor, Bse S/Arms Ammo" (c1959); "Stor, Mag AG A,B&c" (n.d.).

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

Source: Real Property Accountable Record/1275.

Foundation: Earth.

Exterior walls: Concrete.

Roof: Removable concrete.

Notable interior features, including machinery: None noted.

V. CURRENT FEATURES IF DIFFERENT FROM ORIGINAL:

Source: Field visit Summer 1996.

Foundation:

Exterior walls:

Roof:

Notable interior features, including machinery: None noted.

VI. BRIEF STATEMENT OF HISTORIC SIGNIFICANCE:

Building 1275 was originally constructed near Boles Wells as a small water supply building. As an ancillary operations and support facility that has been relocated from it original location, Building 1275 does not meet National Register criteria for significance as an individual property.

VII. ASSOCIATED BUILDINGS:

Building 1275 was referred to as Building 748 when it was located at Boles Wells (Real Property Accountable Record/1275). This structure may originally have been associated with other infrastructure facilities, including Water Pump Station Building 22.

VIII. ADDITIONAL COMMENTS AND MAINTENANCE RECOMMENDATIONS:

Building 1275 was constructed as a water supply building c1952 at a total cost of $1,406.40 (Real Property Accountable Record/1275). Originally referred to as Building 748, this facility was relocated from Boles Wells to its current location c1959. Located near a small arms firing range, Building 1275 has been used to store small arms ammunition since it was relocated.

This facility does not meet National Register of Historic Places criteria for significance, although it does appear to retain historic integrity of design, materials, and workmanship. No further management consideration is warranted.

Suggested routine maintenance: Remove vegetation at foundation.

IX. ASSESSMENT OF HISTORIC INTEGRITY:

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

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

Comments: Originally referred to as Building 748 and constructed near Boles Wells. Entire facility relocated to its current location.

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

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

Comments: Original blueprints were not located for this facility. Design elements appear, however, to be original. No structural or architectural modifications are apparent.

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

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

Comments: This facility has been relocated from its original location. This relocation occurred c1959, approximately seven years after its construction.

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: The materials used to construct Building 1275 match the description documented in Real Property Accountable Record/1275.

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

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

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

Comments: Although the workmanship appears to be original, this observation could not be verified through blueprints or early photographs.

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 convey a sense of its original function as a utilitarian infrastructure support facility.

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

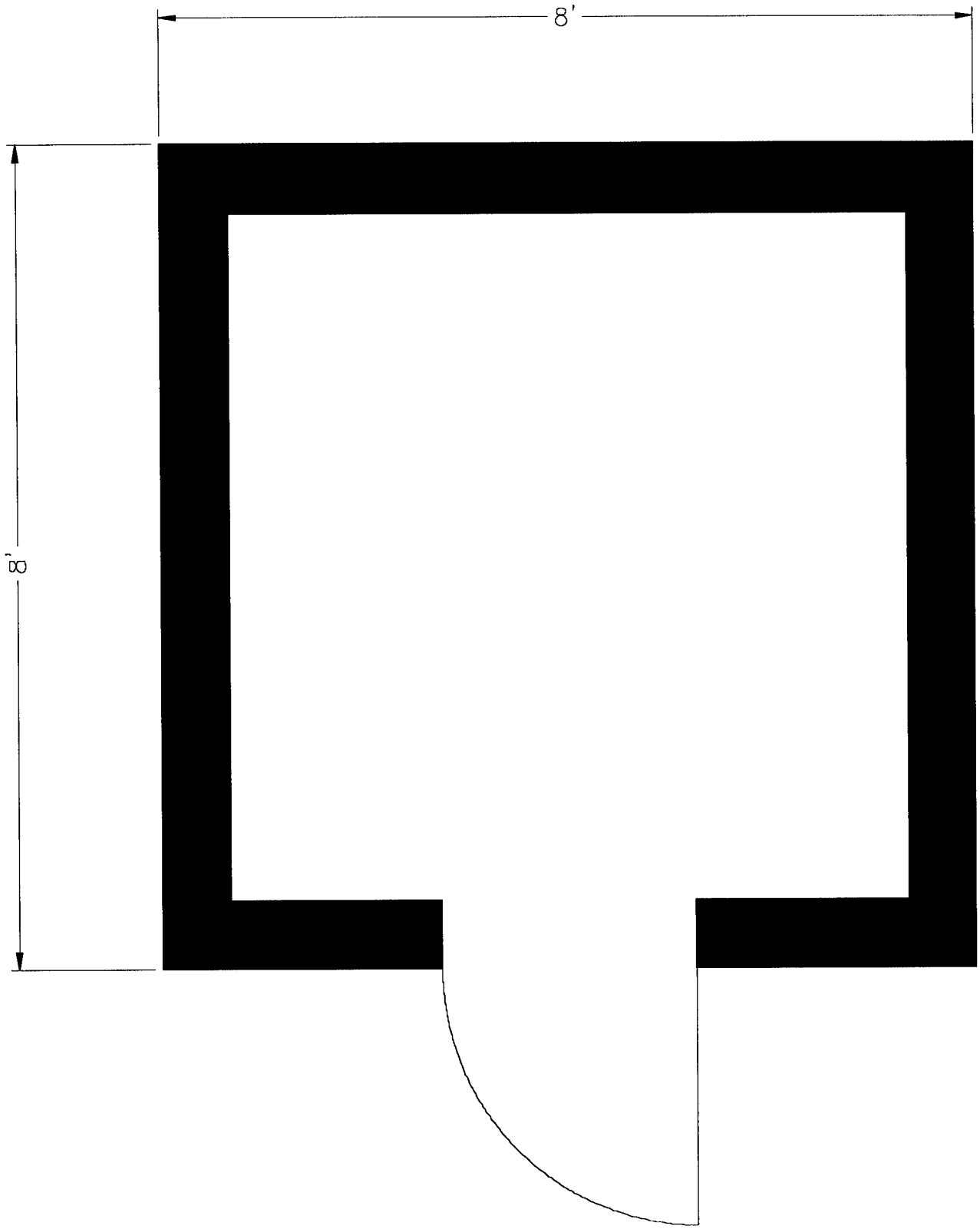
Comments: Although its original function has changed, Building 1275 continues to store ammunition as it has since c1959.

X. FURTHER INFORMATION:

Surveyed By:

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

HAFB Report Number: **CRM Publication #3**
Photograph Citation: **CD-ROM #1-Photo #73**
Negatives On File: **49 CES/CEV, 550 Tabosa Ave, HAFB**
Date of Field Visit: **FALL 1996**



Source: Real Property Accountable Record/1275

State of New Mexico Office of Cultural Affairs Historic Preservation Division	**BUILDING 1275** Holloman Air Force Base Alamogordo, New Mexico	Project No. 35-95-HAFB-4	AutoCAD rendering by: *Eugene N. Kilmer* *(505) 323-0641* Mag Drafting **Sheet 1 of 1**

Field Survey: Operational and Support

Mess/Social Bldg 332

I. Operational and Support Installations

- Base and Command Centers
  - -Building 571
- Missile Stations
- Launch Complexes
- Housing
  - -Building 330
  - -Building 331
  - -Building 333
- Storage
  - -Building 60
  - -Building 113
  - -Building 115
  - -Building 375
- Ground Vehicles/Equipment/Fuels*
  - -Building 197
  - -Building 198
  - -Building 701
  - -Building 702
  - -Building 837
- Base Retail
- Recreation
- Infrastructure
  - -Building 22
  - -Building 840
  - -Building 1275
- **Mess/Social**
  - **-Building 332**
- Memorial
- Communications
  - -Building 221
  - -Building 880
  - -Building 1097
  - -Building 1098
  - -Building 1121
- Documentation
- Medical*
  - -Building 57

COLD WAR SURVEY: HOLLOMAN AIR FORCE BASE

NAME:
Current: Audio-Visual Facility.
Historic: Airman's Dining Hall.
Street Address: 721 Delaware Ave., HAFB, 88330-8015.

Building Number: 332

I. GENERAL INFORMATION:

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

Comments: Building 332 is in need of minor routine maintenance.

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

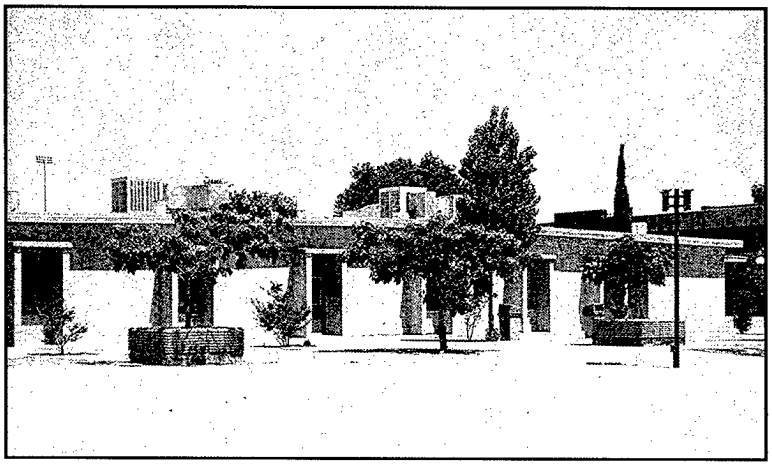
Comments: Minor structural changes. Extensive architectural modifications.

Preliminary Determination of National or State Register Eligibility:

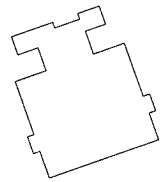
[ ] Exceptional importance [ ] Potentially eligible [ ] Further research recommended [x] Ineligible

Comments: Building 332 has lost historic integrity.

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



BUILDING FOOTPRINT:
112' x 141'



N

Photo

Date of completion: c1953

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 332 is an "I" shaped concrete masonry unit structure exhibiting a flat roof, and showing an asymmetrical placement of doors and windows. Real Property Accountable Record/332 indicates that the date of completion for this building was c1953. Neither the architect nor the builder is known.

A new, 5-ply built-up roof was added in 1985, and the mechanical rooms removed (CE File #332-5). The exterior foyers and several openings were removed c1978 (CE File #332-5).

III. HISTORIC AND CURRENT USE:

Source: Real Property Accountable Record/332.

Current Function: Audio-Visual; Mailroom; Offices (c1983-present).

Original Function: Airman's Dining Hall (c1953-c1970s).

Interim Functions: "Store, Cloth" (c1973); "Clothing Store" (n.d.); "Audio-Visual Fclty" (c1983).

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

Source: CE File #332-1 (c1956).

Foundation: Concrete footings and stem wall.

Exterior walls: Painted (CMU) between concrete frame.

Roof: Concrete slab (Real Property Accountable Record/332).

Notable interior features, including machinery: Blueprints dated 1956, 1962, and 1969 show sinks, "clipper" rooms with dishwashers, work tables, cabinets, dining room tables, and brick partition walls with redwood lattice panels (CE Files #332).

V. CURRENT FEATURES IF DIFFERENT FROM ORIGINAL:

Source: Field visit Fall 1995.

Foundation:

Exterior walls:

Roof: Built-up Roof (BUR).

Notable interior features, including machinery: Hallways created by long banks of numbered post office boxes. The box doors are glass, framed with brass. Audio-visual facility includes darkrooms, copiers, film library, and an Ozalid room.

VI. BRIEF STATEMENT OF HISTORIC SIGNIFICANCE:

Building 332 has served as an operations and support installation since its completion c1952 although its function has been transformed from an airman's dining hall into a multi-purpose facility. Building 332 has not retained historic integrity, and is therefore not eligible for the National Register.

VII. ASSOCIATED BUILDINGS:

Building 339 also served as an airman's dining hall.

VIII. ADDITIONAL COMMENTS AND MAINTENANCE RECOMMENDATIONS:

Except for a roof replacement in 1985, structural modifications have been kept to a minimum. Architecturally, however Building 332 has been extensively renovated. This building no longer bears any resemblance to its original use as an airman's dining hall.

At least three windows were removed and blocked in. At least four windows were replaced with smaller windows. One louvered window and sill has been added. At least two exterior doors have been added. Some 25 windows shown on early blueprints are currently obscured by heavy security mesh. Two mechanical penthouses and two enclosed entrance foyers have been removed. The administrative area has been converted to a mail room/post office box area. The open area has been partitioned for offices. The airman's dining area now serves as a customer service/graphics/studio area for the Audio-Visual facility. Photographic storerooms and darkrooms occupy what was once the kitchen area.

Suggested routine maintenance: Replace columns at loading dock. Replace broken window panes. Cover access to crawl space. Repair soffit vent, porch columns.

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: This building continues to be located near dormitories and other dining halls.

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: Windows and doors have been added and removed. New roof covering added. Interior partitioning added. All dinding room and kitchen equipment has been removed.

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

[ ] Unable to determine [x] Retains very little [ ] 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: Continues to serve military personnel in a residential section of the base. Functions now as a mailroom and audio-visual facility, not a dining hall.

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

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

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

Comments: Foundation, structural framing, and wall materials essentially intact. Acoustical tile ceilings, interior gypsum panel walls added. Floor finishes have changed.

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

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

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

Comments: Exterior walls intact. Tilework has been removed. Windows and doors removed. Mechanical rooms, foyers removed. Redwood partition panels removed.

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: Food is no longer prepared in this building. Open space originally designed for dining is partitioned off.

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

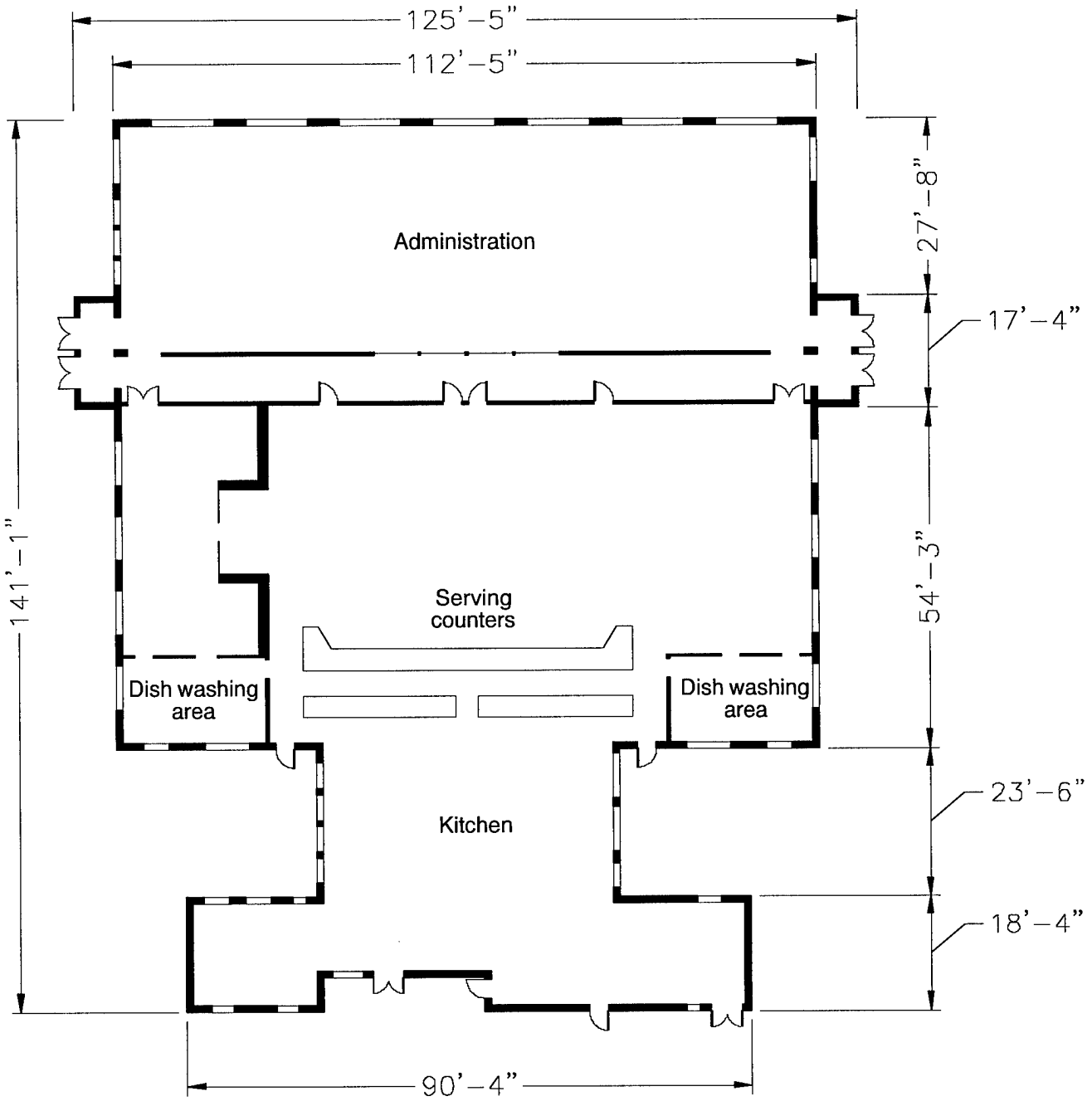
Comments: A visitor would never guess that this building ever served as a dining hall.

X. FURTHER INFORMATION:

Surveyed By:

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

HAFB Report Number: **CRM Publication #3**
Photograph Citation: **CD-ROM #2-Photo #105**
Negatives On File: **49 CES/CEV, 550 Tabosa Ave, HAFB**
Date of Field Visit: **FALL 1995**



Source: CE File #332-6 (1962)

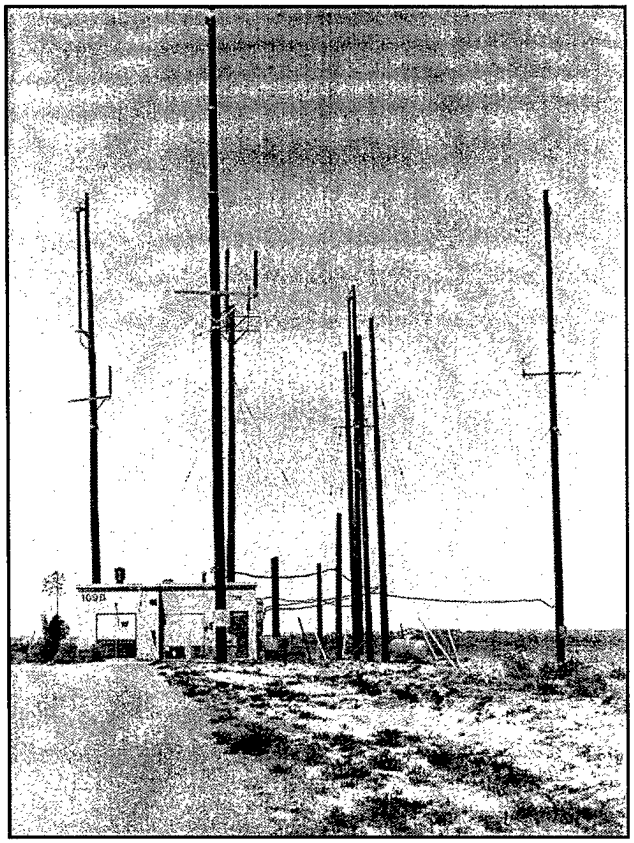
State of New Mexico Office of Cultural Affairs Historic Preservation Division	**BUILDING 332** Holloman Air Force Base Alamogordo, New Mexico	Project No. 35-95-HAFB-4	AutoCAD rendering by: *Eugene N. Kilmer* *(505) 323-0641* Mag Drafting **Sheet 1 of 1**

Field Survey: Operational and Support

I. Operational and Support Installations

- Base and Command Centers
  - -Building 571
- Missile Stations
- Launch Complexes
- Housing
  - -Building 330
  - -Building 331
  - -Building 333
- Storage
  - -Building 60
  - -Building 113
  - -Building 115
  - -Building 375
- Ground Vehicles/Equipment/Fuels*
  - -Building 197
  - -Building 198
  - -Building 701
  - -Building 702
  - -Building 837
- Base Retail
- Recreation
- Infrastructure
  - -Building 22
  - -Building 840
  - -Building 1275
- Mess/Social
  - -Building 332
- Memorial
- **Communications**
  - **-Building 221**
  - **-Building 880**
  - **-Building 1097**
  - **-Building 1098**
- Documentation
- Medical*
  - -Building 57

Communications Bldgs 221, 880, 1097, 1098



Communications Building 1098. Summer 1995.

COLD WAR SURVEY: HOLLOMAN AIR FORCE BASE

NAME:
Current: Communications Facility.
Historic: Communications Facility.
Street Address: 520 New Mexico Ave., HAFB, 88330-8281.

Building Number: 221

I. GENERAL INFORMATION:

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

Comments: Building has been neglected, and is in need of repairs.

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

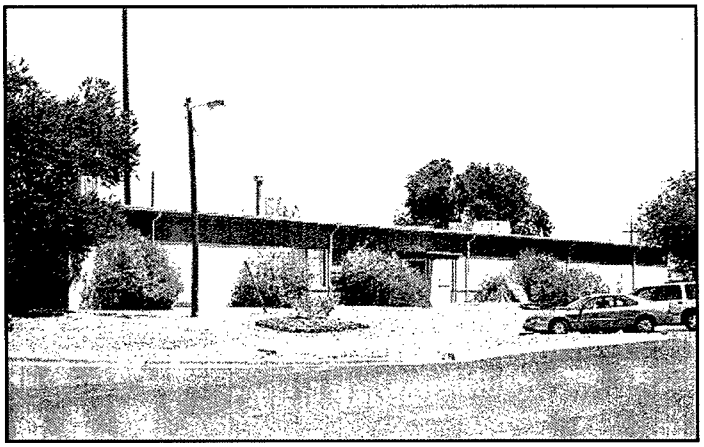
Comments:

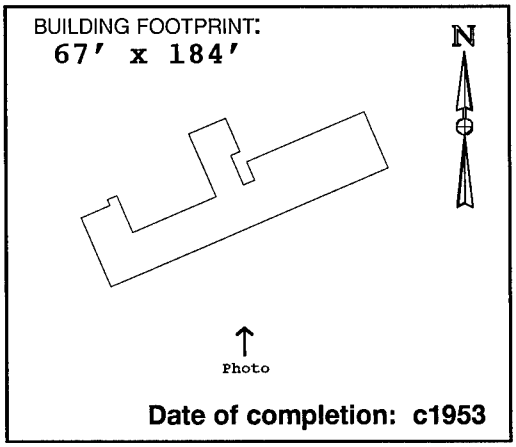
Preliminary Determination of National or State Register Eligibility:

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

Comments: Modifications have resulted in the loss of historic integrity.

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





Date of completion: c1953

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 221 is a single-story, concrete masonry unit structure with a flat roof. The principal elevation faces south. Access is gained through a set of double doors at the center of the principal elevation. This building is asymmetrically fenestrated. Real Property Accountable Record/221 lists a completion date of c1953. "As-built" drawings are available for this building in CE File #221-1. Both the architect and the builder are unknown. Structural modifications include an addition at the east end of the north elevation (1968: CE File #221-3), and an addition at the west end of the north elevation (1968: CE File #221-3).

III. HISTORIC AND CURRENT USE:

Source: Real Property Accountable Record/221.

Current Function: Base Communications.

Original Function: Base Communications.

Interim Functions: "Comm, Cen" (c1971); "Telecom Cen" (c1971); "Tele Exch" (c1977); "Comm Fclty" (c1980).

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

Source: CE File #221-1 (c1952).

Foundation: Concrete wall footings. Concrete column footings.

Exterior walls: CMU between concrete-filled block columns.

Roof: Built-up roof on structural slab.

Notable interior features, including machinery: Originally equipped with a "crypto" room, a Western Union office, an incinerator, a vault, a battery room, and a large room for housing communications cable.

V. CURRENT FEATURES IF DIFFERENT FROM ORIGINAL:

Source: Field visit Fall 1995.

Foundation:

Exterior walls:

Roof:

Notable interior features, including machinery: Changes is technology have resulted in the removal of the original communications equipment, and partitioning at the main cable room.

VI. BRIEF STATEMENT OF HISTORIC SIGNIFICANCE:

This operations and support installation has provided communications capability for Holloman AFB since its construction c1952. Building 221 has not maintained historic integrity of design, materials, or workmanship and is therefore not eligible for the National Register.

VII. ASSOCIATED BUILDINGS:

Although it is unclear which buildings were associated with Building 221 during its period of historic significance, Buildings 1097 and 1098 are shown on early construction drawings together with Building 221.

VIII. ADDITIONAL COMMENTS AND MAINTENANCE RECOMMENDATIONS:

Building 221 was constructed c1953 as the Base Communications facility, and continues to operate in that capacity. Extensive modifications to the building have resulted in a loss of historic integrity in terms of design, materials, and workmanship. Early room use included offices for Western Union, a teletype, and a cryptographer. A vault and an incinerator (removed) may attest to the relaying of sensitive communications. Changes in communications technology played a role in the modifications to Building 221: one large room constructed to house cables has been partitioned into other uses with the installation of smaller cables. Additions at the north (rear) elevation obscure the original. Five of the eight original windows at the principal elevation have been removed and blocked in. Interior carpeting, dropped ceilings, and wall coverings obscure original finishes. This building is showing signs of disrepair due to neglect. Suggested routine maintenance: Prune trees away from building. Repair cracked concrete. Regrade to promote positive drainage. Scrape, prime, and paint exterior walls and architectural features. Monitor stress fractures and patchwork at main facade. Repair main porch roof.

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: Located near the center of the base at the junction of two main thoroughfares. Visitors must be escorted.

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:

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:

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

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

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

Comments: Original doors and windows removed. Interior finishes obscure most of the original asphalt tile, painted CMU walls, and ceilings.

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

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

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

Comments: Additions to the exterior and interior remodeling obscure most of the original design, materials, and workmanship.

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 [ ] Some elements remain [x] Retains integrity

Comments:

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

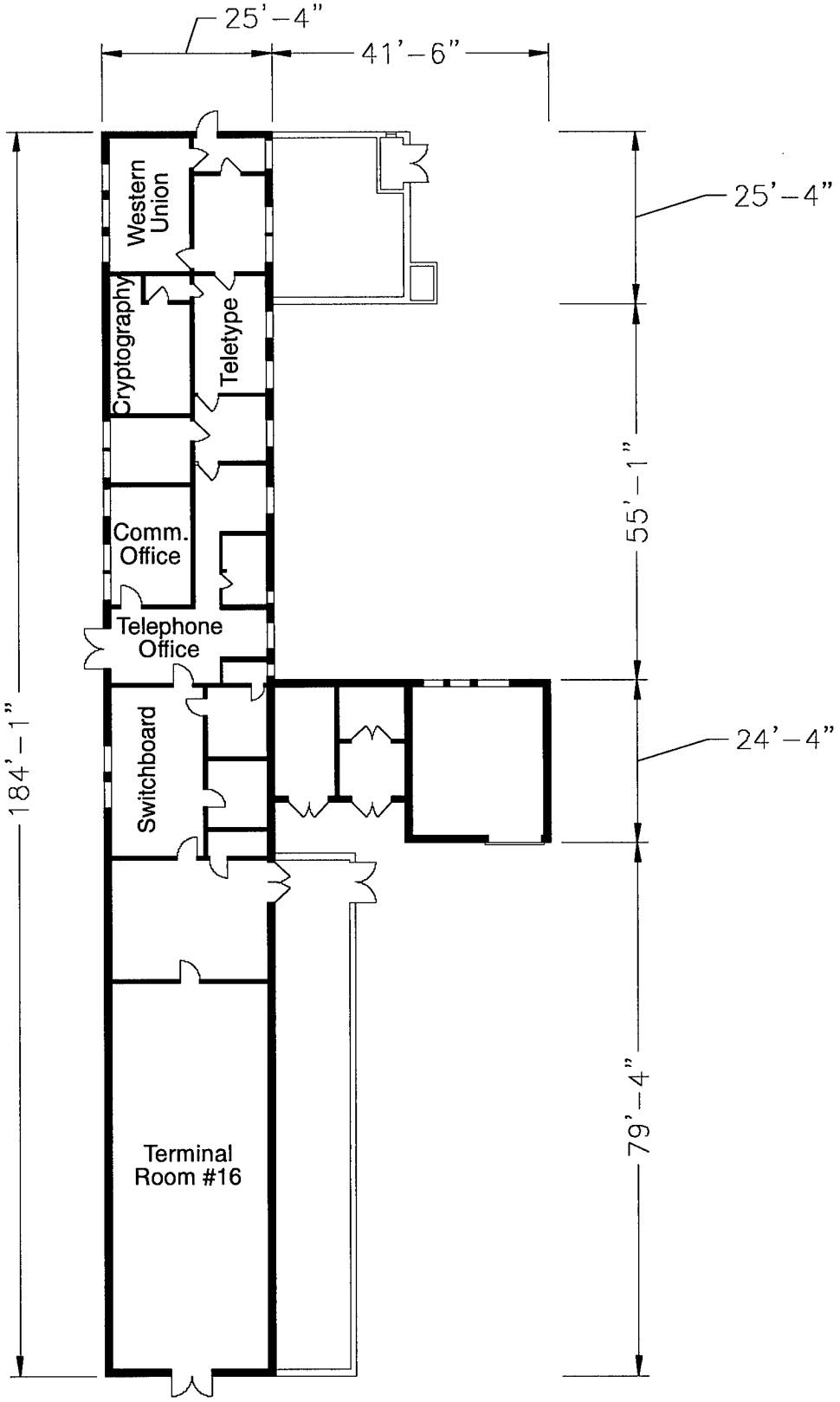
Comments: Building 221 continues to house base communications, as it was originally designed to do.

X. FURTHER INFORMATION:

Surveyed By:

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

HAFB Report Number: **CRM Publication #3**
Photograph Citation: **CD-ROM #2-Photo #103**
Negatives On File: **49 CES/CEV, 550 Tabosa Ave, HAFB**
Date of Field Visit: **FALL 1995**



Source: CE File #221-1 (c1952)

State of New Mexico Office of Cultural Affairs Historic Preservation Division	**BUILDING 221** Holloman Air Force Base Alamogordo, New Mexico	Project No. 35-95-HAFB-4	AutoCAD rendering by: *Mike Gardner* New Mexico State University **Sheet 1 of 1**	NEW MEXICO STATE UNIVERSITY

COLD WAR SURVEY: HOLLOMAN AIR FORCE BASE

NAME:
Current: Communications, Transmitter.
Historic: Transmitter Building.
Street Address: 1241 Moroni Drive, HAFB, 88330-7927.

Building Number: 880

I. GENERAL INFORMATION:

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

Comments: Building 880 is in need of minor routine maintenance.

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

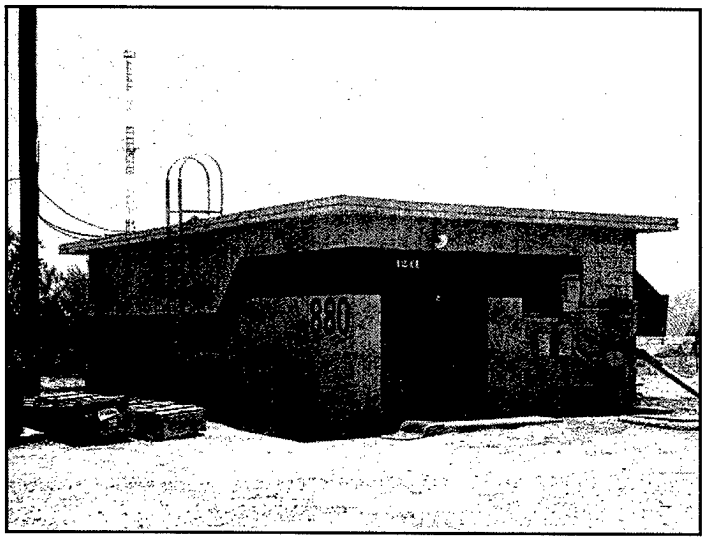
Comments: Addition added to south elevation, c1967.

Preliminary Determination of National or State Register Eligibility:

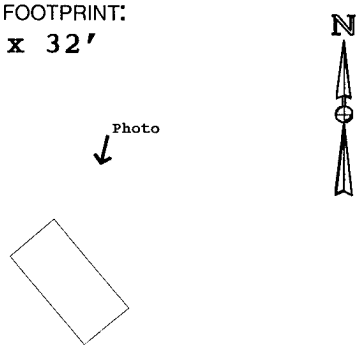
[ ] Exceptional importance [ ] Potentially eligible [ ] Further research recommended [x] Ineligible

Comments: Does not meet National Register criteria for significance.

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



BUILDING FOOTPRINT:
16′ x 32′



Date of completion: c1955

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 880 is a simple one-story, two room block utilitarian structure showing a flat roof. The original building, 16′ x 12′ in plan, was constructed c1955 (Real Property Accountable Record/880). A 16′ x 20′ addition was constructed at the south elevation c1967 (CE File #880-2). One set of double doors and a small window at the north elevation of the original building still remain. Neither the architect nor the builder is known.

III. HISTORIC AND CURRENT USE:

Source: Real Property Accountable Record/880.

Current Function: The Amateur Radio Club uses Building 880.

Original Function: Communications/Transmitter.

Interim Functions:

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

Source: (1954: CE File #880-0).

Foundation: Concrete wall footings.

Exterior walls: Painted concrete masonry units (CMU).

Roof: Built-up roof on 6" pre-cast concrete slab.

Notable interior features, including machinery: None noted.

V. CURRENT FEATURES IF DIFFERENT FROM ORIGINAL:

Source: Field visit Spring 1996.

Foundation:

Exterior walls:

Roof:

Notable interior features, including machinery: None noted.

VI. BRIEF STATEMENT OF HISTORIC SIGNIFICANCE:

Building 880 does not meet National Register of Historic Places criteria for significance as an individual property, and does not retain historic integrity.

VII. ASSOCIATED BUILDINGS:

Building 880 appears to have been associated with other Base communications buildings, including Buildings 1097, 1098, and 221.

VIII. ADDITIONAL COMMENTS AND MAINTENANCE RECOMMENDATIONS:

Building 880 does not meet National Register criteria for either significance or integrity. Another room was added to the building twelve years after it was originally constructed. Building 880 no longer functions as a transmitter building. Original equipment has been removed.

Suggested routine maintenance: Replace wood veneer door. Scrape, prime, and paint exterior concrete masonry unit walls. Remove vegetation and debris from the building perimeter. Fill and compact under concrete stoops at north end.

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

Comments: The original floor plan consisted of one 12' x 16' room. This room remains intact. Subsequent improvements provided an additional room.

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

[ ] Unable to determine [x] Retains very little [ ] 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: An original site plan shows Building 880 in a remote setting, accessed by dirt roads. What was probably an unobstructed view has been altered by a fenced-in storage area for mobile vans and vehicles and improved roads.

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

Comments: Most original materials still remain. The original exterior door is shown on drawings as being of metal (CE File #880-2). Existing doors are of wood.

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

Comments: Carpet was installed in the 1966 addition.

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:

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

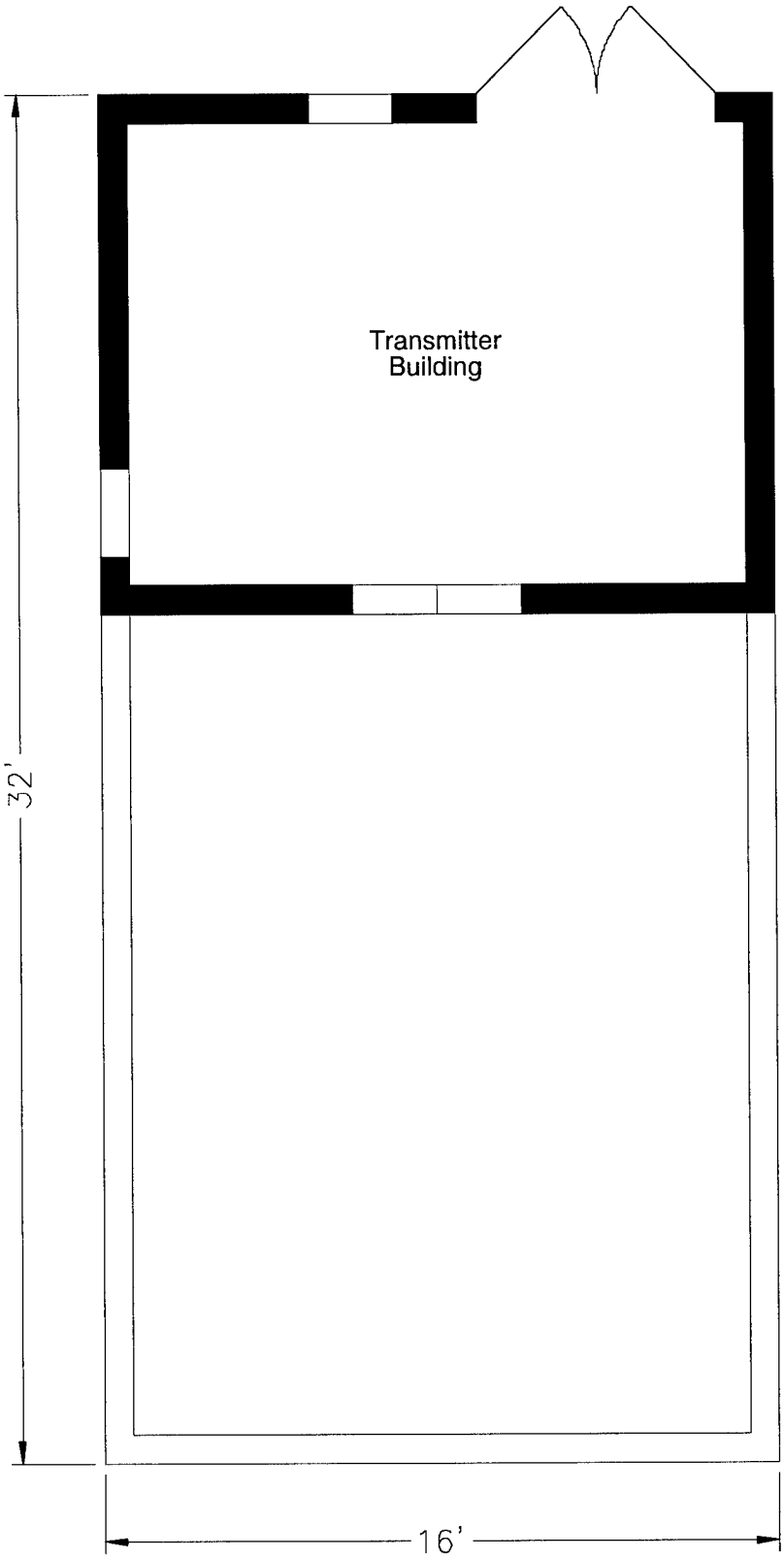
Comments:

X. FURTHER INFORMATION:

Surveyed By:

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

HAFB Report Number: **CRM Publication #3**
Photograph Citation: **CD-ROM #2-Photo #68**
Negatives On File: **49 CES/CEV, 550 Tabosa Ave, HAFB**
Date of Field Visit: **SPRING 1996**



Source: CE File #880-0 (c1954)

State of New Mexico Office of Cultural Affairs Historic Preservation Division	**BUILDING 880** Holloman Air Force Base Alamogordo, New Mexico	Project No. 35-95-HAFB-4	AutoCAD rendering by: *Eugene N. Kilmer* *(505) 323-0641* Mag Drafting **Sheet 1 of 1**

COLD WAR SURVEY: HOLLOMAN AIR FORCE BASE

NAME:
Current: Communications, Receiver.
Historic: Transmitter/Receiver.
Street Address: 1432 Sabre Road, HAFB, 88330-7842.

Building Number: 1097

I. GENERAL INFORMATION:

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

Comments: In need of routine maintenance.

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

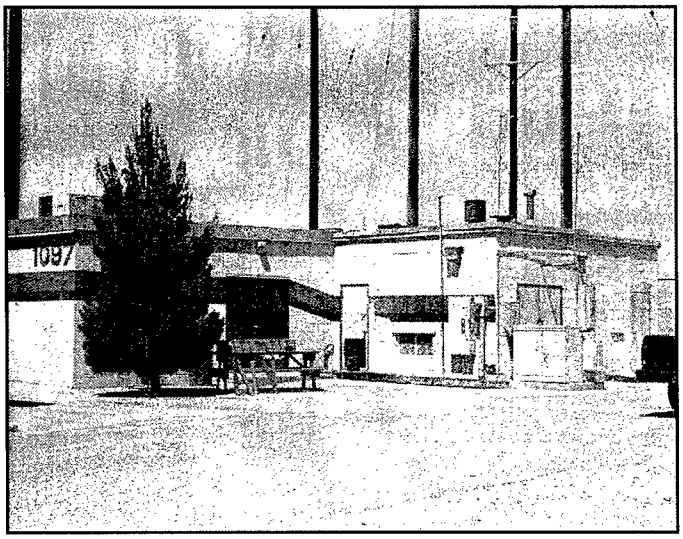
Comments:

Preliminary Determination of National or State Register Eligibility:

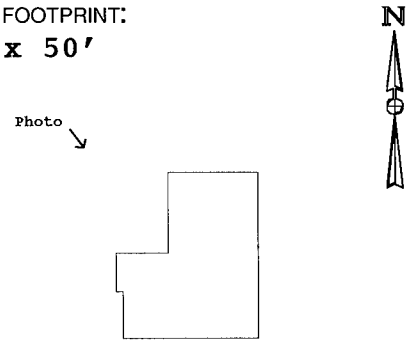
[ ] Exceptional importance [ ] Potentially eligible [ ] Further research recommended [x] Ineligible

Comments: Building 1097 has not retained historic integrity.

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



BUILDING FOOTPRINT:
40′ x 50′



Date of completion: c1953

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 1097 is a small transmitter building designed with few embellishments for utilitarian use only. Building 1097 originally had a rectangular footprint identical to Building 1098 and Building 1095. The original floor plan was sectioned into 4 rooms. An addition was constructed at the west elevation in 1986 using compatible structural and architectural components (CE File #1097-1). Both the builder and the architect are unknown.

III. HISTORIC AND CURRENT USE:

Source: Real Property Accountable Record/1097.

Current Function: Receiver/Air Traffic Control/Radio Control.

Original Function: Transmitter/Receiving/Communications.

Interim Functions:

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

Source: CE File #1098-1 (c1952).

Foundation: Concrete wall footing. Concrete slab on granular fill.

Exterior walls: Painted concrete masonary units (CMU).

Roof: BUR on 2" rigid insul.; 2" poured gypsum on gyp board sup. by steel joists.

Notable interior features, including machinery:
Construction drawings document *"UHF Radio Air/Ground Facilities AN/GRC-27"*.

V. CURRENT FEATURES IF DIFFERENT FROM ORIGINAL:

Source: Field visit Summer 1995.

Foundation:

Exterior walls:

Roof:

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Notable interior features, including machinery:
Continues to function as a communications facility/receiver site.

VI. BRIEF STATEMENT OF HISTORIC SIGNIFICANCE:

Building 1097 has served as a Base communications facility since its completion c1953. Several renovations have resulted in a loss of historic integrity for this building. Building 1097 is no longer eligible for the National Register of Historic Places.

VII. ASSOCIATED BUILDINGS:

Location plan CE File #1098-2 identifies at least three north area transmitter sites. Building 1097 was associated with transmitter Building 1098. This facility is also associated with the flightline, and with communications Building 221.

VIII. ADDITIONAL COMMENTS AND MAINTENANCE RECOMMENDATIONS:

Building #1097 retains its original function as a radio receiver facility, however it has been modified to accommodate electrical, mechanical, and equipment additions and change-outs. Original equipment has been replaced.

Office space was added to the south elevation (1986: CE File #1097-1). All six windows at the north, east and west elevations have been blocked in. Original doors have been replaced. Vinyl floor tile covers original tile throughout. Dropped ceilings have been added.

This building, although retaining historic significance as a receiving site, has lost integrity of design, materials, workmanship, and association with its period of significance. Note: A Sgt. Boots (extension 3132) was identified by Building 1097 personnel as being a possible source for oral history research concerning specific activities associated with this facility.

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

Comments: Office space added to the west elevation (c1986: CE File #1097-1).

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

[ ] Unable to determine [x] Retains very little [ ] 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: Construction of adjacent buildings has altered viewshed.

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

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

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

Comments: Windows have been blocked in.

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

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

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

Comments: An addition obscures the original west elevation. The original window treatments removed. Dropped ceilings added. Original asphalt floor tile covered.

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 [ ] Some elements remain [x] Retains integrity

Comments: The presence of interior communications equipment and exterior poles contribute to the integrity of feeling as a radio site.

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 [x] Some elements remain [ ] Retains integrity

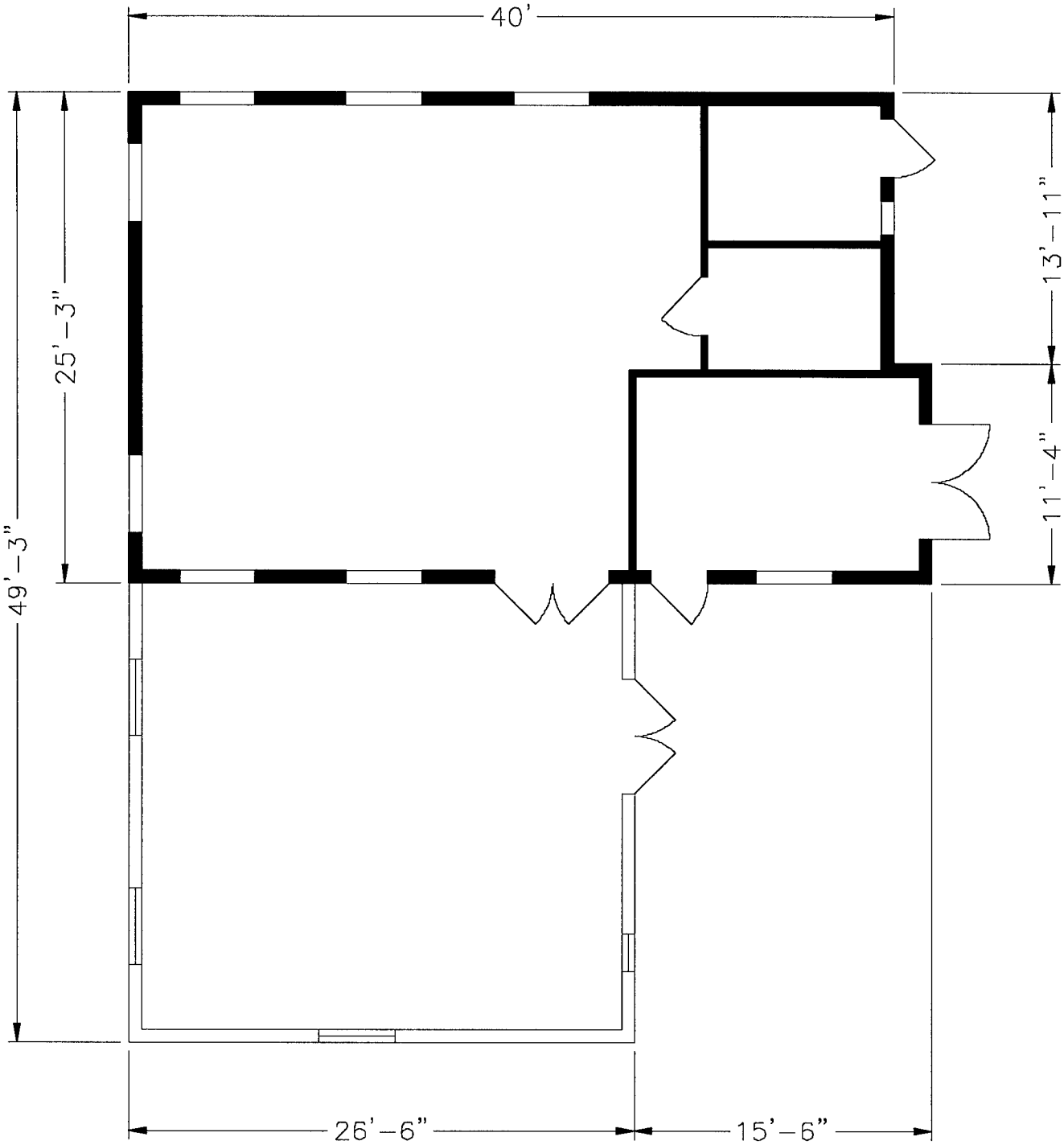
Comments: Original equipment has all been replaced.

X. FURTHER INFORMATION:

Surveyed By:

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

HAFB Report Number: **CRM Publication #3**
Photograph Citation: **CD-ROM #2-Photo #81**
Negatives On File: **49 CES/CEV, 550 Tabosa Ave, HAFB**
Date of Field Visit: **SUMMER 1995**



Source: CE File #1098-2 (c1971)

State of New Mexico Office of Cultural Affairs Historic Preservation Division	**BUILDING 1097** Holloman Air Force Base Alamogordo, New Mexico	Project No. 35-95-HAFB-4	AutoCAD rendering by: *Steve Merrill* New Mexico State University **Sheet 1 of 1**	NEW MEXICO STATE UNIVERSITY

COLD WAR SURVEY: HOLLOMAN AIR FORCE BASE

NAME:
Current: Transmitter Building.
Historic: Transmitter Building.
Street Address: 1473 Sabre Rd., HAFB, 88330-7843.

Building Number: 1098

I. GENERAL INFORMATION:

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

Comments: This building is in need of routine maintenance.

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

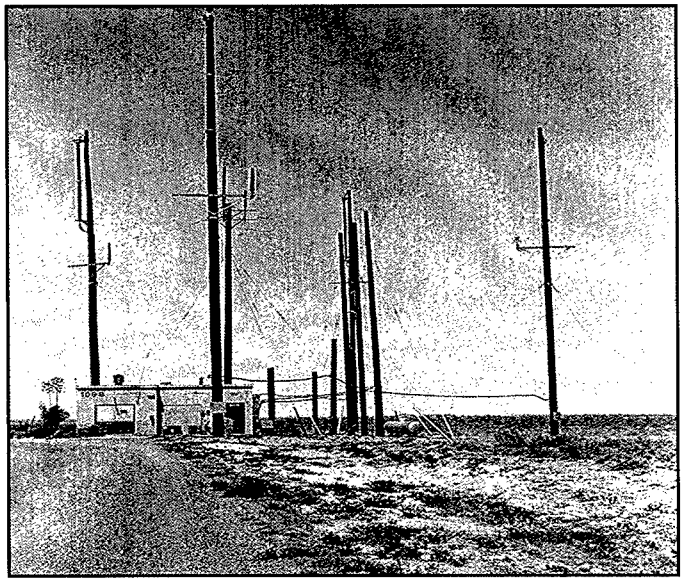
Comments: Elevations changed due to the removal of original windows.

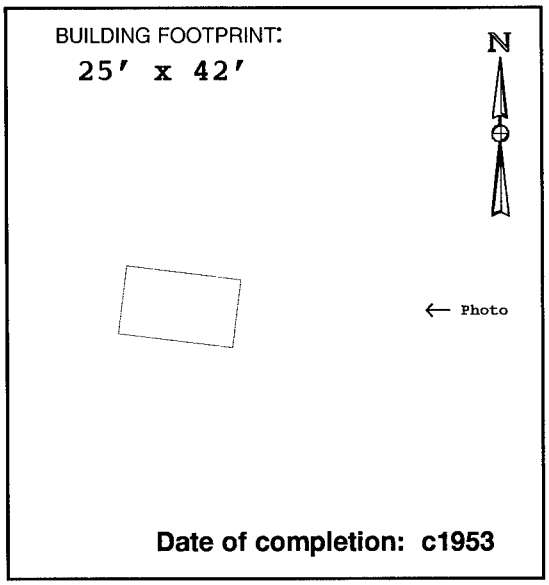
Preliminary Determination of National or State Register Eligibility:

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

Comments: Building 1098 has not retained historic integrity.

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





Date of completion: c1953

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.)

This single story, utilitarian, concrete masonry unit structure exhibits a flat roof, and is asymmetrically fenestrated. The principal elevation faces southeast. Building 1098 shares the same floor plan as the original Building 1097. Real Property Accountable Record/1098 gives an estimated completion date of 1953. Both the builder and the architect are unknown. No structural modifications to the building were noted.

III. HISTORIC AND CURRENT USE:

Source: Real Property Accountable Record/1098.

Current Function: Communications: Transmitter

Original Function: Communications: Transmitter (UHF Radio Air/Ground)

Interim Functions:

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

Source: CE File #1098-2 (c1952).

Foundation: Concrete wall footings/concrete slab on granular fill.

Exterior walls: Painted concrete masonry units (CMU).

Roof: BUR on 2" rigid insulation and 2" poured gypsum on gyp board, supported by steel joists.

Notable interior features, including machinery:
Construction drawings document *"UHF Radio Air/Ground Facilities AN/GRC-27"*.

V. CURRENT FEATURES IF DIFFERENT FROM ORIGINAL:

Source: Field visit Summer 1995.

Foundation:

Exterior walls:

Roof:

142 Notable interior features, including machinery: None noted.

VI. BRIEF STATEMENT OF HISTORIC SIGNIFICANCE:

Building 1098 does not meet National Register criteria for significance as an individual property. The elevations have been altered due to the removal of original windows.

VII. ASSOCIATED BUILDINGS:

Associated with transmitter Building 1097 and communications Building 221.

VIII. ADDITIONAL COMMENTS AND MAINTENANCE RECOMMENDATIONS:

Building 1098 was constructed using the same specifications as the original Building 1097. Although all of the windows have been blocked in, this building has not been altered to the extent Building 1097 has. As ancillary facilities, neither transmitter building meets National Register criteria for significance as an individual Cold War-era property. Neither retains enough of the original design, workmanship, or materials to be eligible for the National Register.

The original floor covering and cable trench that runs in the floor are still visible. Steel joists that support the roof are exposed. Construction drawings dated c1952 (CE File #1098-1) show four interior functions, including a transmitter room, a heater room, a store room, and a generator room. These functions remain essentially the same. Communications equipment currently in use replaces original communications equipment.

Suggested routine maintenance: Prune plantings at southeast corner of building, or replace with smaller varieties. Remove sandbags from the roof.

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

Comments: Elevations altered due to blocked-in window openings.

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

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

Comments: Continues to be situated in a somewhat remote setting.

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

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

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

Comments: Windows blocked in. Original tile, cable trench, walls, and structural roof framing remain visible.

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

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

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

Comments: Original windows including trim are missing.

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 [ ] Some elements remain [x] Retains integrity

Comments:

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

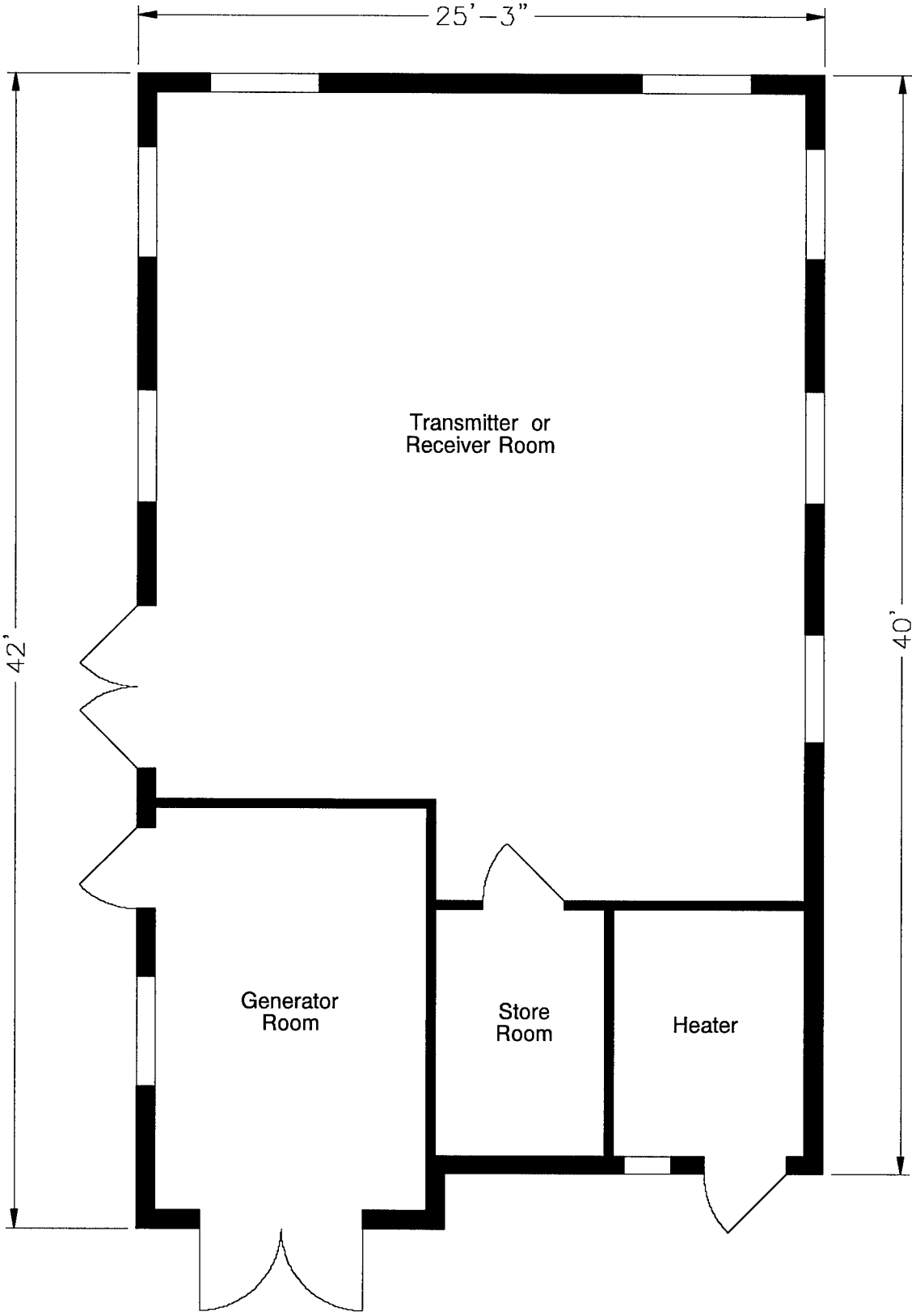
Comments: Although still used as a transmitting facility, original equipment has been replaced.

X. FURTHER INFORMATION:

Surveyed By:

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

HAFB Report Number: **CRM Publication #3**
Photograph Citation: **CD-ROM #2-Photo #72**
Negatives On File: **49 CES/CEV, 550 Tabosa Ave, HAFB**
Date of Field Visit: **SUMMER 1995**



Source: CE File #1098-2 (c1972)

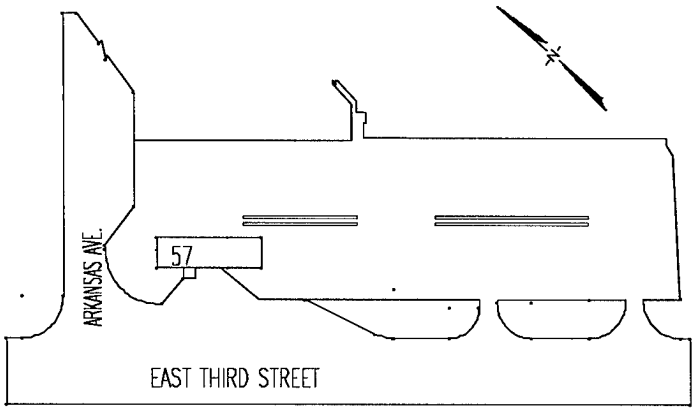
State of New Mexico Office of Cultural Affairs Historic Preservation Division	**BUILDING 1098** Holloman Air Force Base Alamogordo, New Mexico	Project No. 35-95-HAFB-4	AutoCAD rendering by: *Steve Merrill* New Mexico State University **Sheet 1 of 1**	NEW MEXICO STATE UNIVERSITY

Field Survey: Operational and Support

I. Operational and Support Installations

- Base and Command Centers
  - -Building 571
- Missile Stations
- Launch Complexes
- Housing
  - -Building 330
  - -Building 331
  - -Building 333
- Storage
  - -Building 60
  - -Building 113
  - -Building 115
  - -Building 375
- Ground Vehicles/Equipment/Fuels*
  - -Building 197
  - -Building 198
  - -Building 701
  - -Building 702
  - -Building 837
- Base Retail
- Recreation
- Infrastructure
  - -Building 22
  - -Building 840
  - -Building 1275
- Mess/Social
  - -Building 332
- Memorial
- Communications
  - -Building 221
  - -Building 880
  - -Building 1097
  - -Building 1098
- Documentation
- **Medical***
  - **-Building 57**

Veterinary Bldg 57



Site plan. Building 57.

COLD WAR SURVEY: HOLLOMAN AIR FORCE BASE

NAME:
Current: Environmental Health.
Historic: Veterinary Facility.
Street Address: 560 Tabosa Ave., HAFB, 88330-8457.

Building Number: 57

I. GENERAL INFORMATION:

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

Comments: Evidence of interior water damage. Repair & maintenance needed.

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

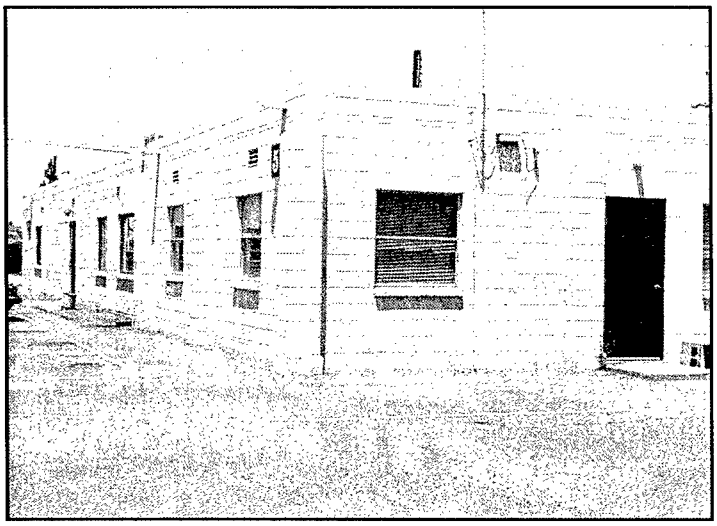
Comments: Removal of architectural features. Addition at south.

Preliminary Determination of National or State Register Eligibility:

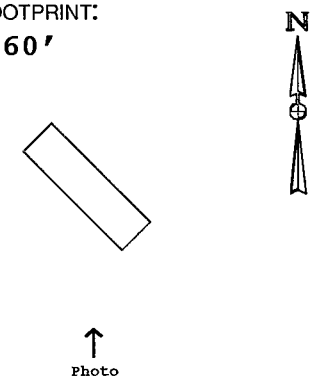
[ ] Exceptional importance [ ] Potentially eligible [ ] Further research recommended [x] Ineligible

Comments: Building 57 no longer retains historic integrity.

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



BUILDING FOOTPRINT:
26′ x 60′



Date of completion: c1954

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 57 is a rectangular, single-story concrete masonry unit structure showing a flat roof with a parapet, exterior masonry pilasters, and asymmetrical fenestration. Real Property Accountable Record/57 indicates that this building was completed c1954. Both the architect and the builder are unknown.

A 28′ x 26′ addition using compatible design elements and materials was constructed at the south elevation, obscuring the original elevation (1972: CE File #57-2).

III. HISTORIC AND CURRENT USE:

Source: Real Property Accountable Record/57.

Current Function: Offices, storage for Environmental Health (since c1980).

Original Function: Veterinary and Sanitation Facility (c1954-c1958).

Interim Functions: Medical Lab: Food Inspection (c1958-c1980).

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

Source: CE File #57-1.

Foundation: Concrete footing and stem wall.

Exterior walls: Painted concrete masonry units (CMU).

Roof: BUR over concrete deck supported by metal lath and steel joists.

Notable interior features, including machinery: None noted.

V. CURRENT FEATURES IF DIFFERENT FROM ORIGINAL:

Source: Field visit Fall 1995.

Foundation:

Exterior walls:

Roof:

Notable interior features, including machinery:

Metal cabinets with sliding glass doors, sink, countertop and vent hood remain in area originally designated as the food inspection and preventive medicine laboratory.

VI. BRIEF STATEMENT OF HISTORIC SIGNIFICANCE:

Although Building 57 may have been eligible for the National Register under Criterion C at one time, this building has since lost its historic integrity and is therefore not eligible.

VII. ASSOCIATED BUILDINGS:

It is unclear whether or not the veterinary activities at Building 57 supported the aeromedical facilities.

VIII. ADDITIONAL COMMENTS AND MAINTENANCE RECOMMENDATIONS:

Structural and architectural modifications to Building 57 render it ineligible for the National Register of Historic Places. Similar materials and design features from the original structure were incorporated into an addition at the south elevation (1973: CE File #57-2). Every original window, shown on early drawings as 12- and 16-light metal windows, has been replaced with double-hung, 2-light, aluminum frame windows matching the addition. One original door is blocked from use. At least three interior doors have been removed. Sheetrock® covers the original painted block walls at the interior. Remnants of plaster ceilings, glazed tile in the latrines, and mineral tile in the lab room are the only notable interior finishes remaining.

Suggested routine maintenance: Extensive water damage evident at the dropped ceiling, and at the base of several block walls indicate that repairs to the roof may be necessary. Replace torn window screens. Replace broken window and door panes. Patch holes in wall to the left of the main entrance. Clean curb gutter. Scrape, prime, and paint exterior. Replace wooden platform at air conditioning unit. Regrade at foundation to promote positive drainage.

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

Comments: Most of the original doors and windows have been removed. Interior wing walls removed. Interior equipment removed. Dropped ceiling, interior finishes added. Entrance and exit patterns have changed.

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

[ ] Unable to determine [x] Retains very little [ ] 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: Several relatively new buildings now located near Building 57. No known buildings historically associated with this building.

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

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

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

Comments: Exterior foundation and walls remain intact. Very few original architectural features remain. Very few interior finishes remain visible.

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

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

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

Comments: Original south elevation obscured by the addition. Original windows removed. Several original finishes including glazed tile, plaster ceiling, and mineral tile remain evident in isolated areas.

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: Several pieces of equipment and original furnishings remain in one room of this building, including cabinets, countertop, and vent hood.

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

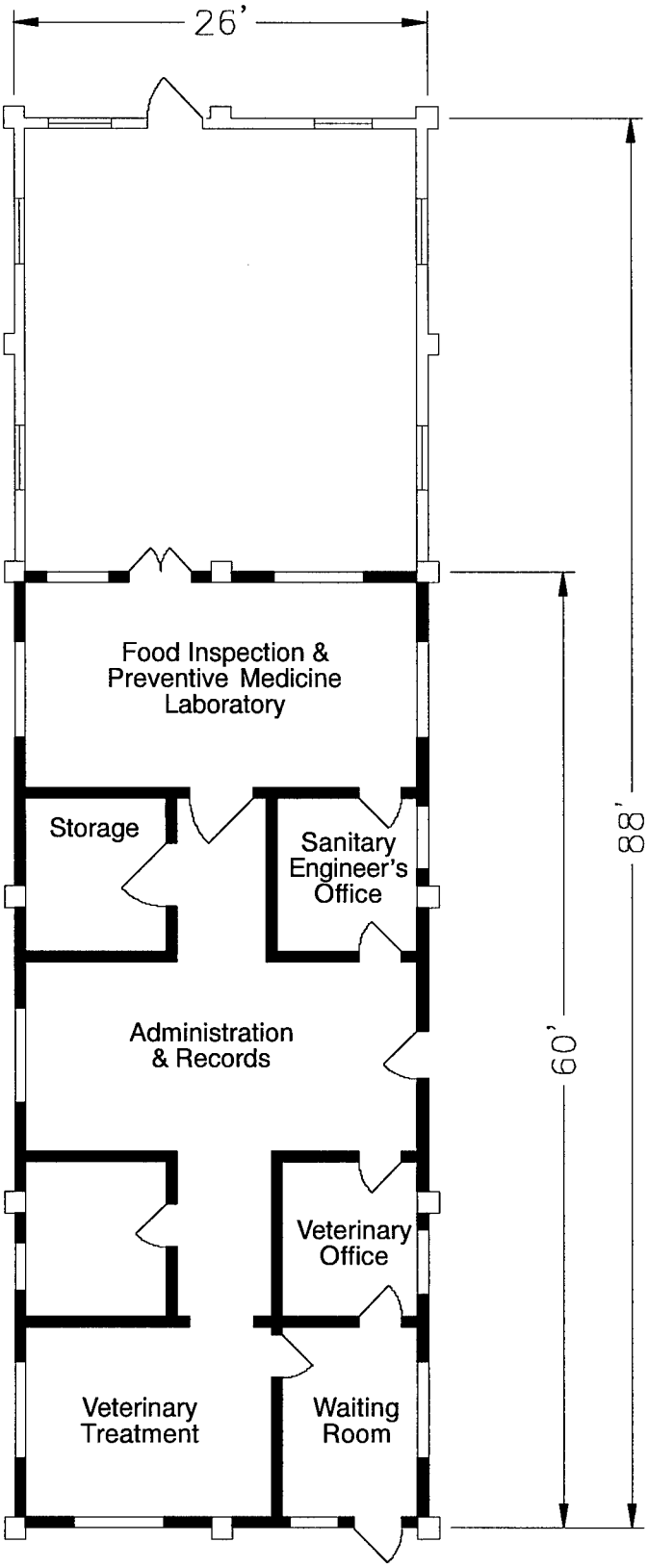
Comments: Building 57 no longer retains integrity of association with its historic function as a veterinary clinic. Retains minimal evidence of its use as a laboratory for conducting food inspection tests.

X. FURTHER INFORMATION:

Surveyed By:

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

HAFB Report Number: **CRM Publication #3**
Photograph Citation: **CD-ROM #1-Photo #34**
Negatives On File: **49 CES/CEV, 550 Tabosa Ave, HAFB**
Date of Field Visit: **FALL 1995**



Source: CE File #57-1 (c1954)

150

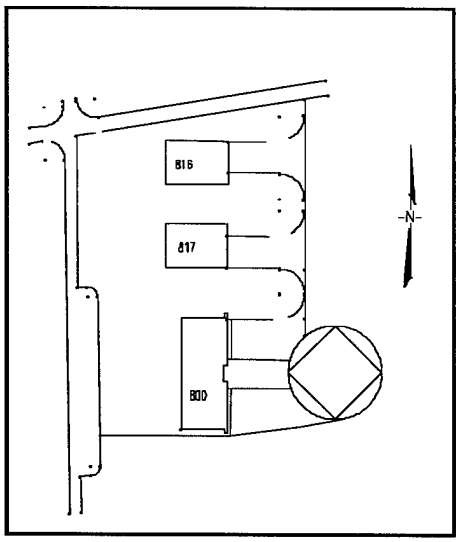
State of New Mexico Office of Cultural Affairs Historic Preservation Division	**BUILDING 57** Holloman Air Force Base Alamogordo, New Mexico	Project No. 35-95-HAFB-4	AutoCAD rendering by: *Steve Merrill* New Mexico State University **Sheet 1 of 1**	NEW MEXICO STATE UNIVERSITY

Field Survey: Combat Weapons and Support Systems

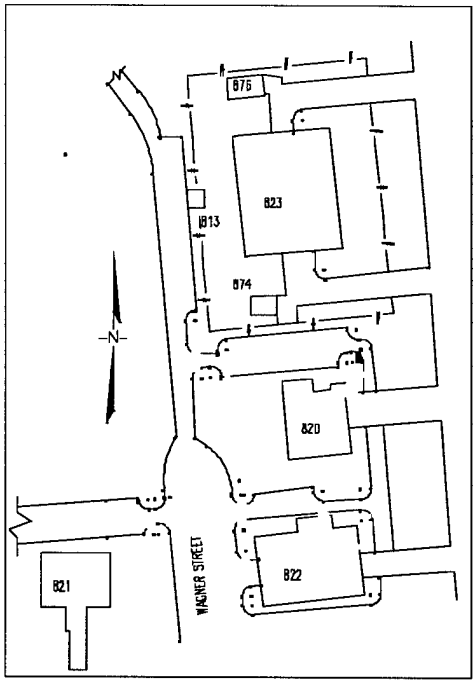
II. Combat Weapons and Support Systems

- **Missiles**
  - **-Building 800**
  - **-Building 820**
  - **-Building 822**
  - **-Building 823**
  - **-Building 824**
  - **-Building 882**
  - **-Building 885**
  - **-Building 886**
  - **-Building 887**
  - **-Building 1264**
- Check Stands/Unconventional Fuels
  - -Building 1190
  - -Building 1193
  - -Building 1194
  - -Building 1195
- Alert Facilities
- Maintenance Docks/Hangars
  - -Building 500
  - -Building 816
  - -Building 817
  - -Building 825
- Communications
- Storage
  - -Building 1197
  - -Building 1198
- Memorial
- Weapons Platforms
- Documentation

Missile Bldgs 800, 820, 822-824, 882, 885-887, 1264



Site plan. Building 800.



Site plan. Missile facilities.

Guided Missiles

The following is a brief summary of some of the major missile programs conducted at the Air Force Missile Development Center (Holloman AFB) during the early phases of the Cold War military build-up. Sources for this summary are cited on page 157.

Ground-to-Air Pilotless Aircraft (GAPA)

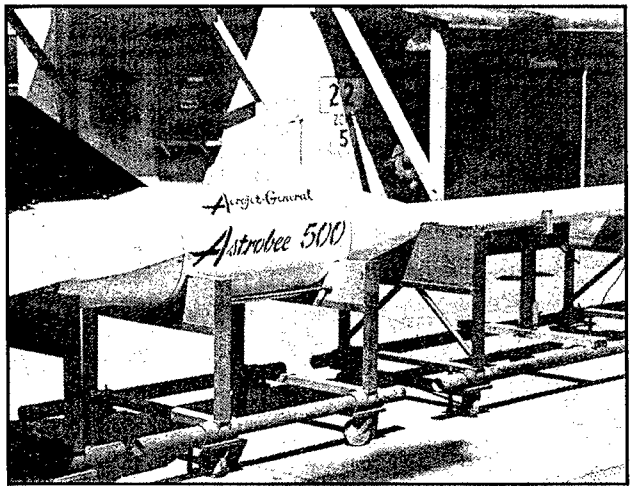
July 1947-August 1950:

The Ground-to-Air Pilotless Aircraft (GAPA) was an experimental, high velocity test vehicle developed by the Boeing Aircraft Company. Officially designated as the MX-606 program, 72 launches were conducted at Holloman AFB between 1946 and 1950. GAPA missiles ranged up to 16 feet in length and reached speeds of up to 1,500 miles per hour. Although GAPA never entered production, the design and test experiments provided the foundation for the Boeing-USAF IM-99 BOMARC interceptor missile deployment.

JB-2 (Jet Bomb 2)

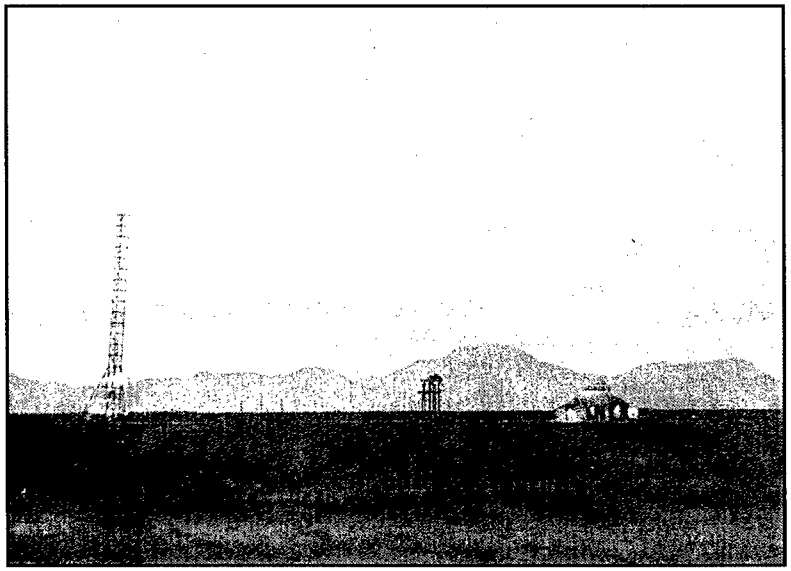
May 1948-October 1948:

The JB-2 was an American version of the German V-1, or "buzz-bomb." The missile was initially fired at Wendover Field, Utah. The missile project, along with the trained personnel, were transferred to Holloman in 1947. The missile was launched from a 400-foot, earthen ramp constructed northeast of the main Base. The remains of this ramp are visible, although the tracks have been removed. The first launch took place at Holloman in May 1948. The final of 11 launches took place on 28 October 1948.



RG 342-B. Vol. I. 02-001. Archives II.

"Astrobee 500 is a rocket manufactured by Aerojet General Corporation for lifting upper atmosphere research instrumentation. It is designed to lift payloads from 30 to 100 pounds, 400 to 700 miles high." U. S. Air Force photo c1961.



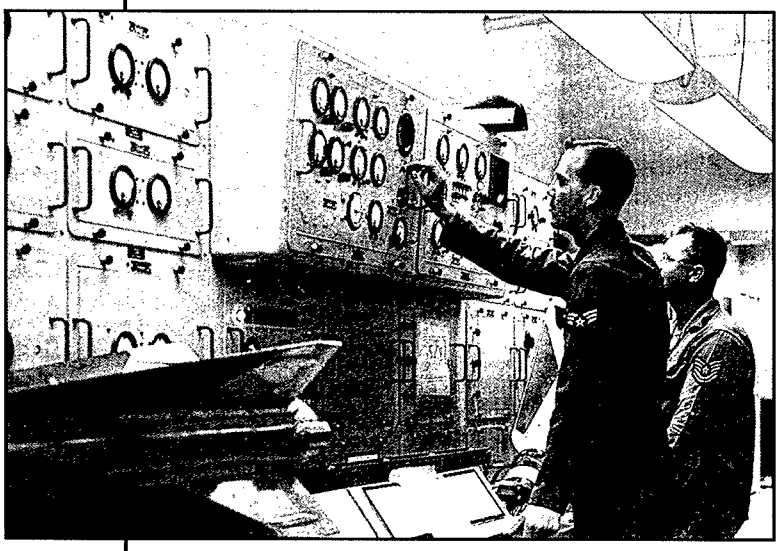
RG 342-B. Vol. I. 06-011. Archives II.

This U. S. Air Force photograph showing an X-8 Aerobee guided missile launch was taken c1955.

NATIV

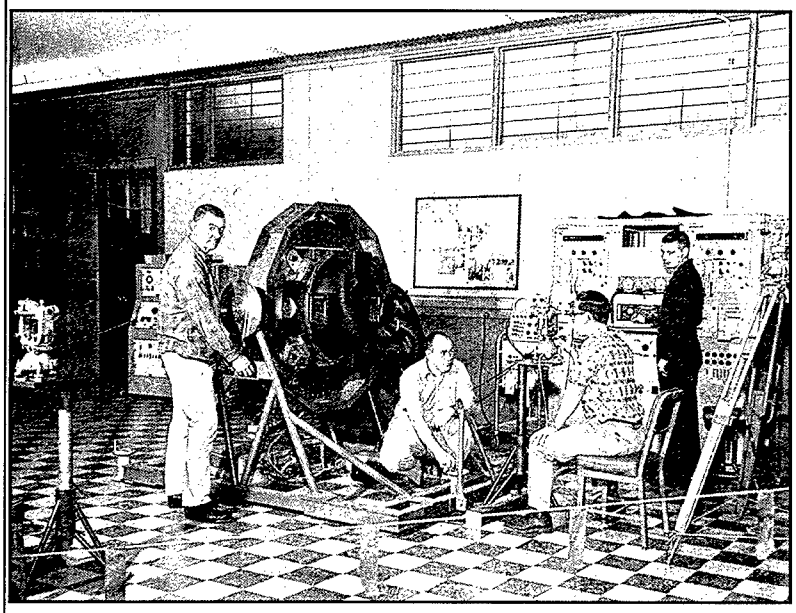
January 1948-1949

The North American Test Instrumentation Vehicle (NATIV) was officially designated as the MX-773 program. The NATIV missile was approximately 14 feet long, weighing 1,260 pounds, with a range of some 25 miles and was launched using a 182-foot tall launch tower. Successful flights throughout 1948 eventually led to the development of the X-10 test vehicles and the Navaho XSM-64 program. The NATIV program was terminated in 1949. What remains of the NATIV complex is located 1,000 feet northeast of the Ground-to-Air Pilotless Aircraft (GAPA) complex overlooking Lost River.



RG 342-B. Vol. II. 06-042. Archives II.

(Above) "U. S. Air Force personnel check out a Hughes GAR-1 'Falcon' air-to-air guided missile on a test table at Holloman Air Development Center, Holloman Air Force Base, NM 18 October 1955." U. S. Air Force photo. News releases at this time broadcasted the results of Holloman AFB tests using the Falcon GAR-2A to successfully intercept another guided missile, the Matador TM-61A.



RG 342-B. Vol. I. 03-057. Archives II.

In this U. S. Air Force photograph dated 18 January 1963, a missile guidance package is being aligned and calibrated prior to being mounted into the forebody of sled for a High Speed Test Track run.

Aerobee and Firebee

December 1949-1959:

Built by Aerojet-General Corporation and used principally for research projects of the Air Force Cambridge Research Center, the Aerobee research rocket was first fired at Holloman in December 1949. A total of 109 Aerobees was launched by the Air Force from Holloman's Aerobee Tower before the project was discontinued in mid-1959. Although Aerobee firings at Holloman were terminated, the same rocket was fired by the Navy on White Sands Missile Range, and by the Air Force from Eglin AFB, Florida. Holloman's Aerobee Tower was dismantled and shipped to White Sands Missile Range in January 1965 for continued use in launching Aerobees. The Q-2 or "Firebee," was one of the early drone targets to undergo testing and development at about the same time as the Aerobee program. It was a "high subsonic" vehicle, less than half the size of current jet fighters. Before 1 September 1952, 42 launches were conducted. After 1952 the launch rate increased tremendously. By 30 June 1959, some 450 Firebee launches had occurred.

Matador/Mace

December 1948-December 1961:

One of the first missiles tested at Holloman was the Matador, a subsonic pilotless tactical bomber, produced by the Martin Company. The first model launch took place in December 1948. The advanced version became Mace in 1957. Flights of the older Matador continued in the role of a target drone. The Matador/Mace project, directed by Martin, worked closely with the Goodyear guidance system for use in both missiles. Goodyear's efforts terminated at Holloman on 31 December 1961 with the expiration of their contract.

Rascal

May 1949-October 1957:

The Rascal project, another of the early missile efforts at Holloman, sought to develop an air-to-ground strategic bombing missile. Operations were conducted at Holloman by Bell, in the role of contractor, with Wright Air Development Center as the cognizant agency.

XQ-1

February 1950-1953:

The XQ-1 was an early aerial target manufactured by Radioplane Company, Van Nuys, California. Also referred to as a pilotless aircraft, the XQ-1 was a pilotless, pulse-jet-propelled, high-speed, remotely-controlled aerial target, used in anti-aircraft and air-to-air gunnery training. The drone was first launched at Holloman in February 1950, with the project terminating in 1953. The XQ-1 was eventually incorporated into the GAM-67 Crossbow program.

X-7

September 1952-July 1960:

The X-7 was a test vehicle manufactured by Lockheed and flown at Holloman by a Lockheed test organization. Two main versions of the vehicle were flown: the X-7A, a ramjet test vehicle, and the X-7B, a guidance test vehicle. The Q-5 drone is a model of the X-7. The period between September 1952 and July 1960 saw at least 143 X-7 Project launches. This estimate includes full-scale flights, and scale model launches.

Crossbow

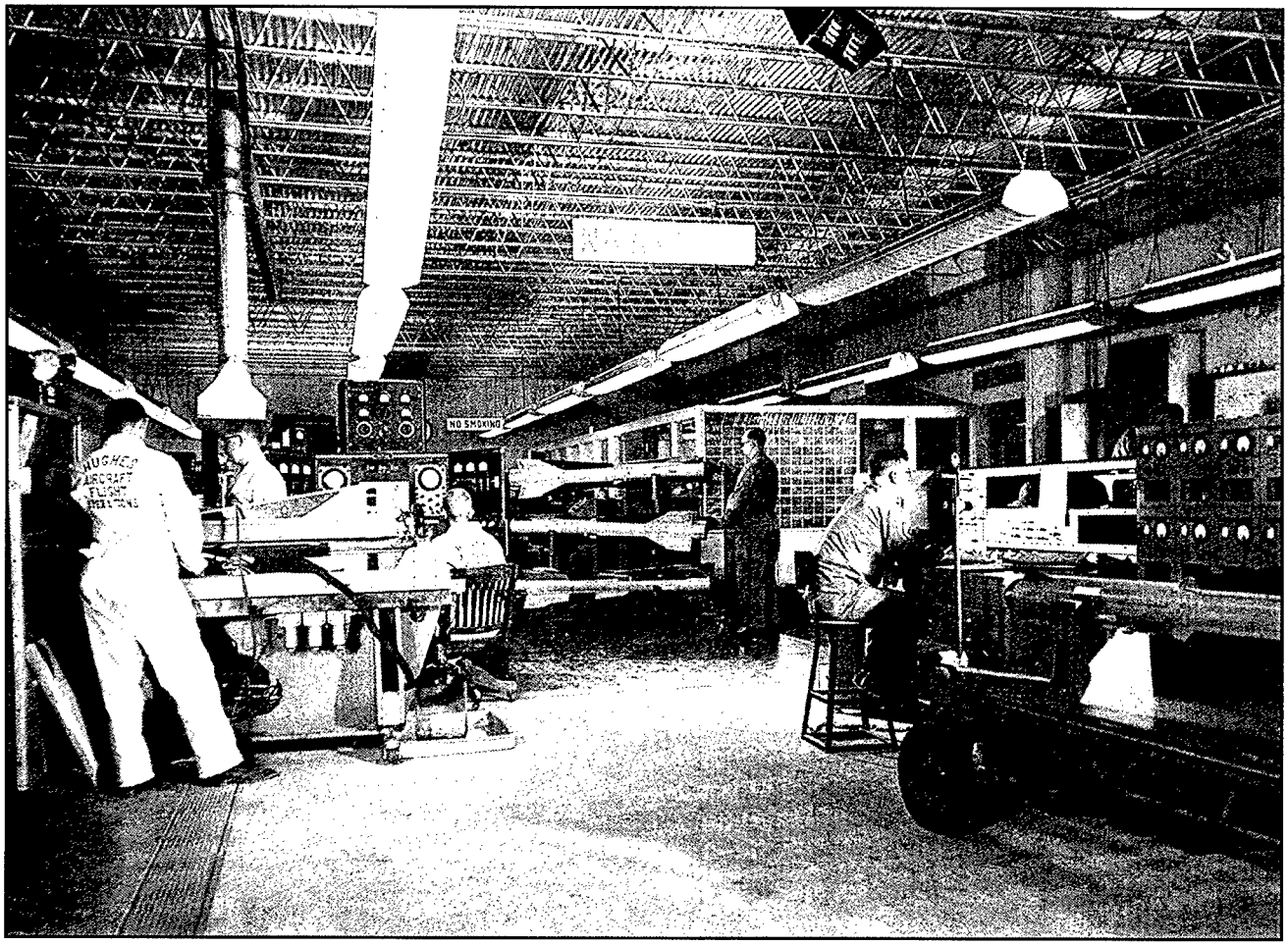
October 1953-June 1958:

The Crossbow missile was designed to home in on and destroy enemy radar installations. Wright Air Development Center formed the cognizant agency. Tests were conducted at Holloman AFB by the contractor company, Radioplane. Most of the testing activity consisted of captive tests and guidance flights. A total of 33 launches were made.

Hypersonic Test Vehicle (HTV)

November 1954 - July 1960:

The Hypersonic Test Vehicle is a small, two-stage research rocket developed by Aerophysics Development Corporation for the Wright Development Center. The first launching at the Air Force Missile Development Center (Holloman AFB) took place on 18 November 1954. Total firings through the final launch date numbered 59 (not including balloon-launched rocket programs).



RG 342-B. Vol. II. 06-042. Archives II.

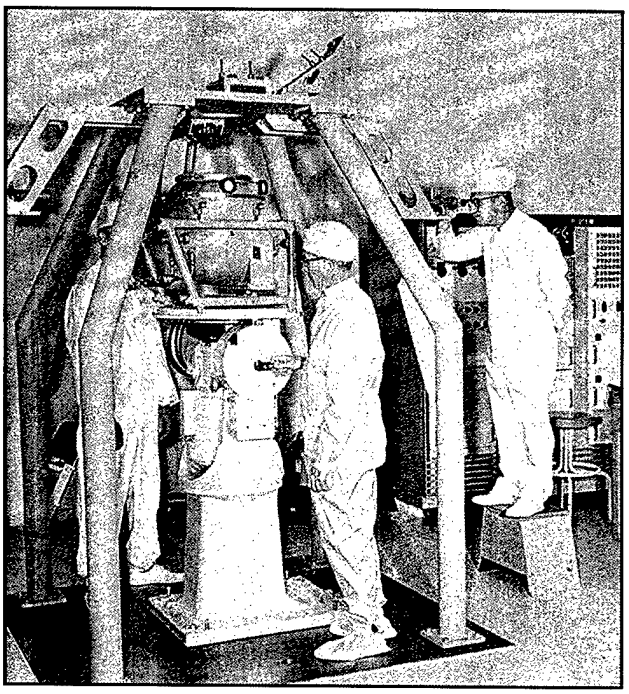
"Hughes Aircraft Company technicians and Air Force personnel work on a GAR-1 'Falcon' air-to-air guided missile in the test laboratory at Holloman Air Development Center, Holloman AFB, NM 21 October 1955." U. S. Air Force photograph.

Quail (GAM-72)

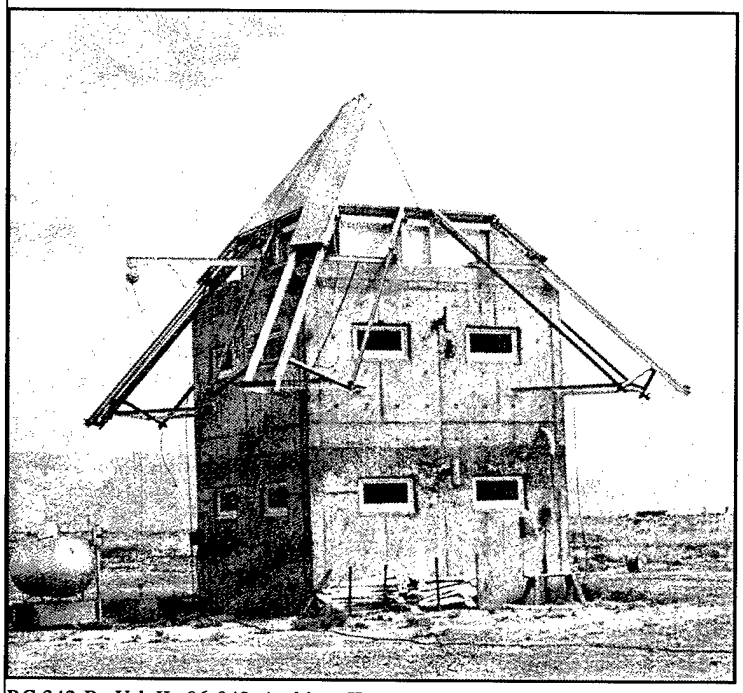
July 1957-November 1960:

Green Quail was a small air-launched decoy missile for the defense of bomber aircraft. The final shot in the program took place on 18 November 1960 with the flight of a long-range GAM-72A over the Eglin Gulf Test Range. There were some 171 captive (recoverable) flights, 7 glide flights, and 29 free (non-recoverable) flights.

(Right) "As the first step in the construction of a Celestial-Inertial Test Complex at the Air Force Missile Development Center, Holloman AFB, NM a package unit 37 feet 8 inches square by 14 feet high was built inside the high-bay area of the Central Inertial Guidence Facility. Here, Controlled Environmental Area personnel are at work on calibration prodedures 25 March 1963." U. S. Air Force Photo.



RG 342-B. Vol. II. 06-011. Archives II.



RG 342-B. Vol. II. 06-042. Archives II.

(Left) Cinetheodolite shelters with moveable roof sections were constructed to provide visual tracking of guidance missile flights. This photograph was taken on 8 October 1955. U. S. Air Force photo.

SOURCES:

Unless otherwise noted, all photographs for this section were obtained from the National Archives II in College Park, MD. Photo captions are cited verbatim from the actual photographs. A handout prepared to accompany a public missile display (author unknown) on file at the 49 FW/HO was consulted for information pertaining to specific missiles. The information for this brief summary was also gathered from a 1958 AFMDC Yearbook, and HAFB Cultural Resource Publication #3 prepared by Wayne O. Mattson and Martyn D. Tagg.

COLD WAR SURVEY: HOLLOMAN AIR FORCE BASE

NAME:
Current: Shop, Jet Engine I/Maintenance.
Historic: Missile Assembly Building #5.
Street Address: 1208 Wagner Street, HAFB, 88330-7930.

Building Number: 800

I. GENERAL INFORMATION:

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

Comments: Although well-maintained, building is in need of minor repairs.

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

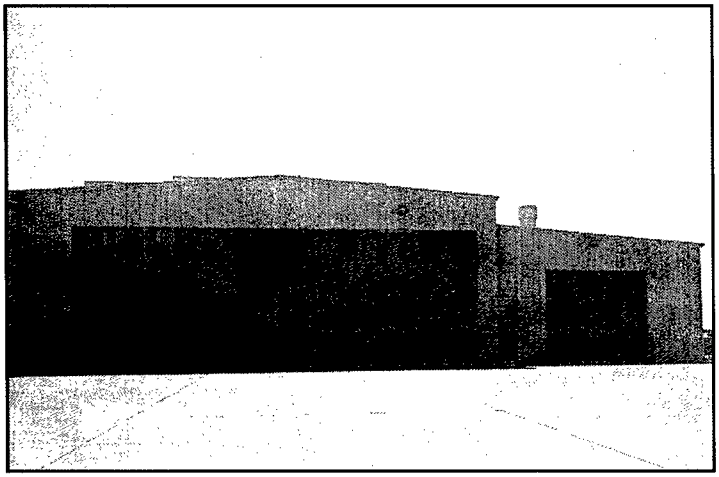
Comments: Principal facade and missile assembly areas remain intact.

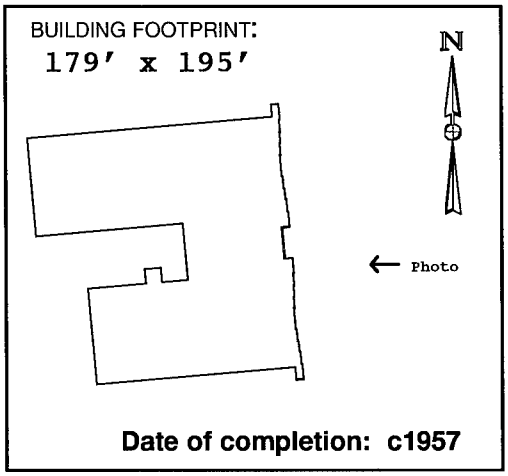
Preliminary Determination of National or State Register Eligibility:

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

Comments: Does not meet "exceptional importance" rule. See Section VIII.

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 800 is a large, C-shaped, two-story steel frame structure with concrete masonry unit (CMU) and metal panel curtain walls. The original footprint was rectangular in shape, with large open bays at the north and south ends, and two stories of offices and labs in the central area. Additions to both bays at the west elevation form the current "C" footprint. The east elevation maintains the original symmetrical fenestration, consisting of large, metal hangar doors at the ends, and a row of awning windows and a single door at the center.

Real Property Accountable Record/800 indicates that Building 800 was completed c1957. Although the builder is not known, W. C. Kruger and Associates (Santa Fe, NM) provided the architectural work. The addition at the southwest corner was constructed in 1968 (CE File #800-2). The addition at the northwest corner was constructed in 1985 (CE File #800-4). A modular structure within the 1968 addition was constructed in 1989 (CE File #800-5).

III. HISTORIC AND CURRENT USE:

Source: Real Property Accountable Record/800.

Current Function: Jet engine maintenance/repair shop (c1977-present).

Original Function: Missile assembly facility.

Interim Functions: Aircraft engine shop (c1962-73); Base warehouse (c1973-77).

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

Source: Real Property Accountable Record/800. CE File #800-1.

Foundation: *Columns*: Concrete spread footing. *Walls*: Concrete grade beam.

Exterior walls: *First story*: 8" Concrete masonry units; *Second story*: Metal panels.

Roof: Built-up roof on gypsum deck supported by steel trusses.

Notable interior features, including machinery: Steel trusses with chord and web members made of rolled shapes and Pratt-type design.

V. CURRENT FEATURES IF DIFFERENT FROM ORIGINAL:

Source: Field visit Spring 1996.

Foundation:

Exterior walls:

Roof:

Notable interior features, including machinery: Hoist and crane in high bay areas.

VI. BRIEF STATEMENT OF HISTORIC SIGNIFICANCE:

This building does not meet the "exceptional importance" standard imposed on structures built within the last fifty years. Building 800 is potentially eligible, however, (under Criteria A and/or C) once the fifty-year construction date is met in the year 2007.

VII. ASSOCIATED BUILDINGS:

Associated with at least four other missile assembly buildings, including Buildings 822, 823, 824, and 1264.

VIII. ADDITIONAL COMMENTS AND MAINTENANCE RECOMMENDATIONS:

Although the principal (east) elevation remains essentially as it was constructed c1957, the west elevation has been altered by the construction of two additions and the installation of a modular building. Trees, shrubs, and groundcover were added in 1985. The characteristic features of this missile assembly building include electrically-operated metal hangar doors, and two open "modification and assembly" bay areas exhibiting concrete floors, painted CMU walls, and exposed steel purlins and trusses. These essential features, including original doors and windows, remain intact. The interior offices have been remodeled: carpeting replaces original asphalt tile, baseboard and shoe molding has been removed, and the ceilings dropped. The fact that the essential features of the missile assembly areas and the principal facade have been retained allow Building 800 to retain historic integrity, despite the additions. It should be noted that this building may be eligible for the National Register once it is fifty years old (in the year 2007). In the meantime, recommend that Building 800 be considered as one of the most distinctive missile assembly buildings on Base, and that photo-documentation be conducted prior to modifications which will alter any essential features.

Suggested routine maintenance: This building appears to be well-maintained. Minor scraping, priming, and painting required at the exterior. Repair broken window panes.

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 provide flightline/aircraft engine support.

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

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

Comments: Although the west elevation has been altered considerably, the essential features of the principal facade and the interior remain intact.

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: This facility was landscaped in 1985. Continues to be located on the flightline.

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

Comments: With the exception of the additions at the west elevation and minor interior modifications, the concrete, concrete masonry units (CMU), corrugated metal, and architectural features remain intact.

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

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

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

Comments: Most of the west elevation is obscured by two additions and one removable (modular) unit.

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 [ ] Some elements remain [x] Retains integrity

Comments:

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

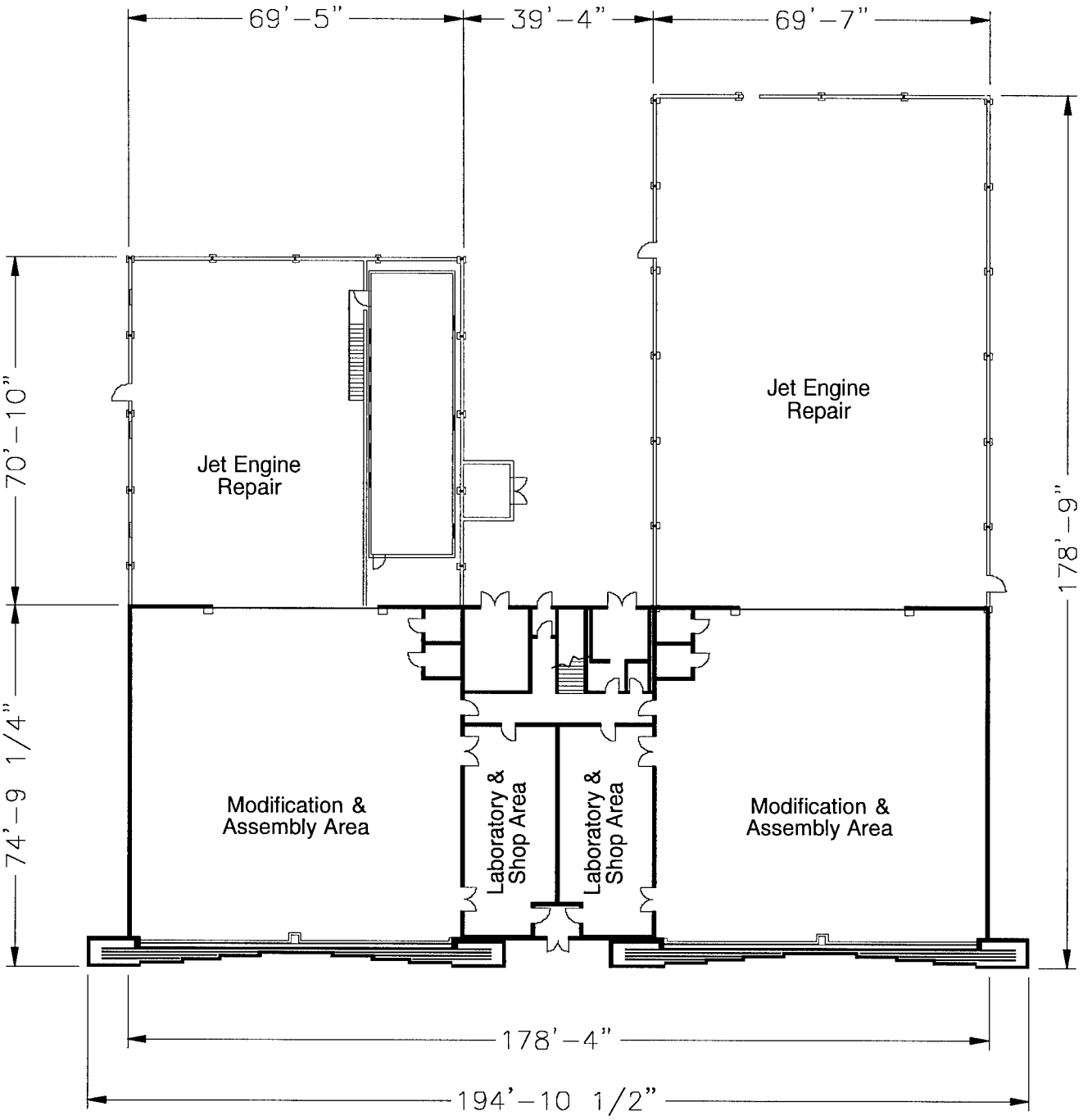
Comments: The principal facade and the large modification and assembly areas remain as they were originally constructed. The large slider doors, open bays, and second floor offices have evolved from supporting missile assembly operations to providing aircraft support.

X. FURTHER INFORMATION:

Surveyed By:

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

HAFB Report Number: **CRM Publication #3**
Photograph Citation: **CD-ROM #2-Photo #2**
Negatives On File: **49 CES/CEV, 550 Tabosa Ave, HAFB**
Date of Field Visit: **SPRING 1996**



Source: CE File #800-1 (c1955)

State of New Mexico Office of Cultural Affairs Historic Preservation Division	**BUILDING 800** Holloman Air Force Base Alamogordo, New Mexico	Project No. 35-95-HAFB-4	AutoCAD rendering by: *Mike Gardner* New Mexico State University **Sheet 1 of 1**	New Mexico State University

COLD WAR SURVEY: HOLLOMAN AIR FORCE BASE

NAME:
Current: Shop, Aircraft. General purpose.
Historic: Missile Vehicle Check-Out Building.
Street Address: 1254 Wagner Street, HAFB, 88330-7904.

Building Number: 820

I. GENERAL INFORMATION:

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

Comments: Building 820 is in need of routine maintenance.

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

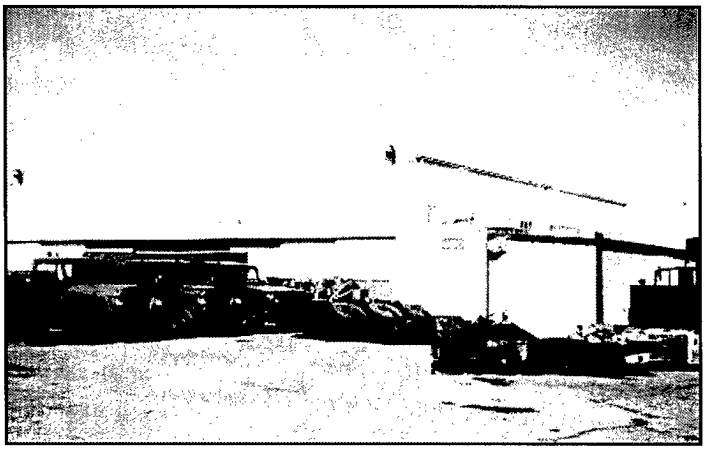
Comments: At least four additions have been constructed at Building 820.

Preliminary Determination of National or State Register Eligibility:

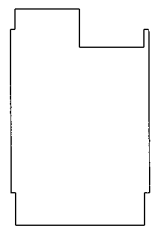
[ ] Exceptional importance [ ] Potentially eligible [ ] Further research recommended [x] Ineligible

Comments: Building 820 does not retain historic integrity.

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



BUILDING FOOTPRINT:
80′ x 135′



Date of completion: c1954

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.)

The original Building 820 was a gable-roofed, prefabricated, metal structure, square in plan, showing large, sliding doors at the gable ends. The original structure was built c1954. A latrine was added to the west end of the north elevation c1957. Lean-to structures were added onto the north and south elevations c1959. These plans were prepared by Hughes Aircraft Company (CE File #820-1). A steel frame, open grate, steel deck mezzanine structure was installed in the original open interior bay c1978. A block addition was recently constructed at the north elevation to enclose a large materials autoclave (oven). Different door and window types exist at all elevations due to miscellaneous additions (Real Property Accountable Record/ 820; CE File #820-2). Neither the architect nor the builder is known.

III. HISTORIC AND CURRENT USE:

Source: Real Property Accountable Record/820.

Current Function: General purpose/sheet metal shop. Warehouse and supply.

Original Function: Guided missile check-out station.

Interim Functions: "Msl R/T Shp" (n.d.); "Shp, AGE" (c1974).

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

Source: CE File #820-1 (c1953).

Foundation: Concrete grade beams and column footings. 6" Concrete slab.

Exterior walls: Corrugated metal siding on steel frame.

Roof: Metal roof on steel trusses.

Notable interior features, including machinery: None noted.

V. CURRENT FEATURES IF DIFFERENT FROM ORIGINAL:

Source: Field visit Fall 1995.

Foundation:

Exterior walls:

Roof:

Notable interior features, including machinery: Steel mezzanine insert.

VI. BRIEF STATEMENT OF HISTORIC SIGNIFICANCE:

Building 820 does not meet National Register criteria for significance as an individual property. Building 820 does not retain historic integrity.

VII. ASSOCIATED BUILDINGS:

It is unclear what particular missile check-out stations Building 820 was historically associated with.

VIII. ADDITIONAL COMMENTS AND MAINTENANCE RECOMMENDATIONS:

The only visible links associating Building 820 as a missile check-out facility are its location adjacent to an airfield taxiway, and the large slider doors required for missile access and egress. There have been many additions to the original floorplan. Renovations at the exterior were occurring at the time of this field visit. Drawings dated c1958 show an addition at the north and south elevations as being a "New Maintenance Lean-to." These lean-to additions may be considered to be subsequent improvements to the original building. A concrete masonry block addition was recently constructed at the north elevation to enclose a large autoclave for fiberglass parts. The interior has been renovated, obscuring original finishes.

Suggested routine maintenance: Scrape, prime, and paint the metal siding. Sand, prime, and paint the wood corner trim. At the west elevation, replace the rotted wood above the window, and correct the drainage problem at the doorway. Correct the downspout drainage problem at the north elevation.

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

Comments: The large open floor plan has been turned into a 2-story storage area with the addition of a prefabricted steel mezzanine system.

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: An early site plan (CE File #820-1) shows Building 820 situated between Buildings 822 and 823, adjacent to the aircraft taxiway. This setting has been retained, although Wagner Street has been widened, and new landscaping installed.

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

Comments: Most of the original materials used to construct Building 820 have been retained, though many are obscured by renovations.

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

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

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

Comments: A row of windows at the north and south elevations are now obscured by the lean-to structures and a new block autoclave enclosure. The office spaces have been renovated.

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: Several additions, a new split-faced block wall at the exterior, new landscaping, and the addition of a mezzanine have altered Building 820; it no longer retains integrity of feeling as a missile check-out station.

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 [x] Some elements remain [ ] Retains integrity

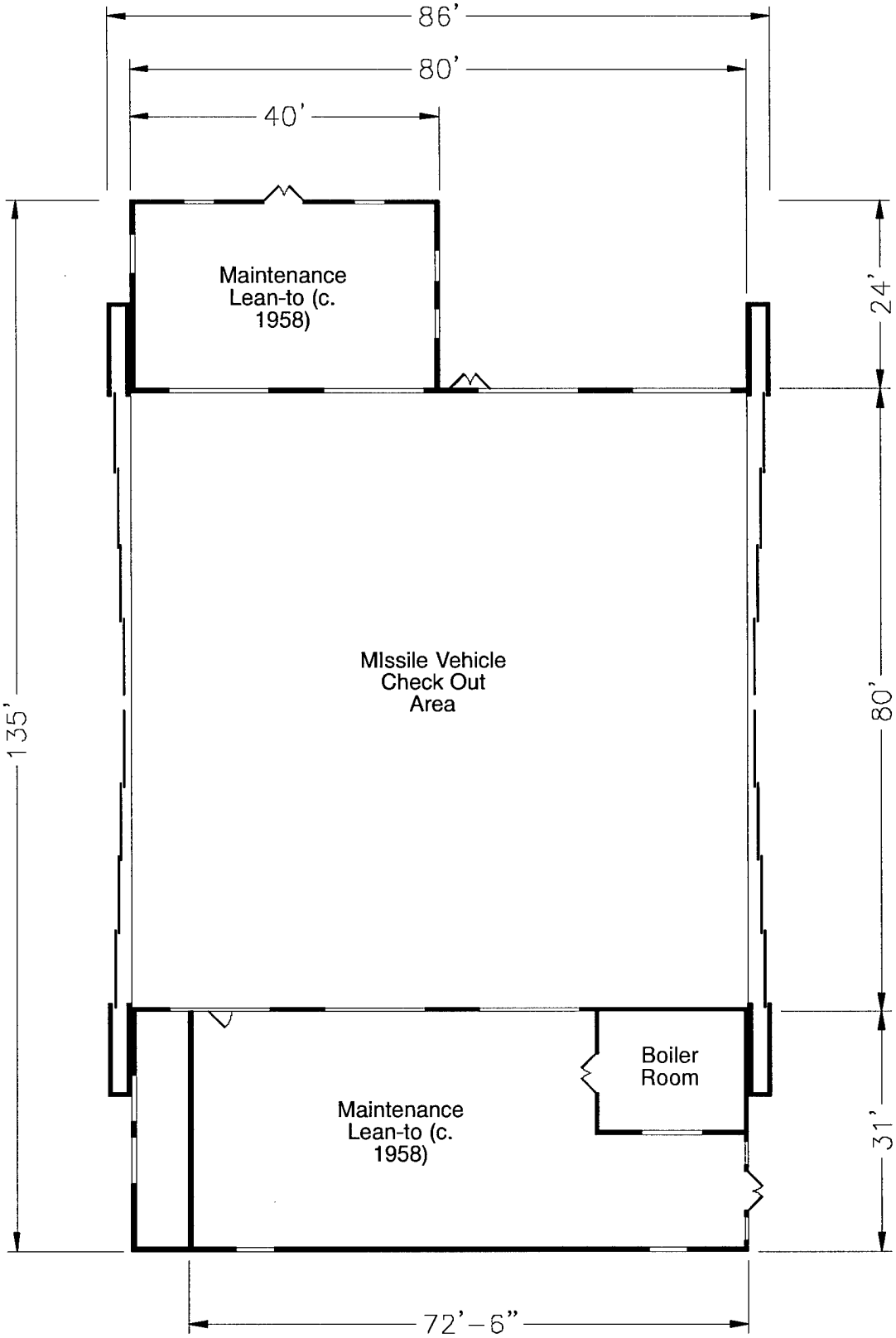
Comments: Building 820 continues to be situated near the flightline, near other historic missile check-out stations. Large slider doors remain intact.

X. FURTHER INFORMATION:

Surveyed By:

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

HAFB Report Number: **CRM Publication #3**
Photograph Citation: **CD-ROM #2-Photo #19**
Negatives On File: **49 CES/CEV, 550 Tabosa Ave, HAFB**
Date of Field Visit: **FALL 1995**



Source: CE File #820-1 (c1953)

State of New Mexico Office of Cultural Affairs Historic Preservation Division	**BUILDING 820** Holloman Air Force Base Alamogordo, New Mexico	Project No. 35-95-HAFB-4	AutoCAD rendering by: *Eugene N. Kilmer* *(505) 323-0641* Mag Drafting **Sheet 1 of 1**

COLD WAR SURVEY: HOLLOMAN AIR FORCE BASE

NAME:
Current: Shop and Storage Facility.
Historic: Missile Assembly Building.
Street Address: 1244 Wagner Street, HAFB, 88330-7904.

Building Number: 822

I. GENERAL INFORMATION:

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

Comments: In need of routine maintenance, particularly at exterior walls.

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

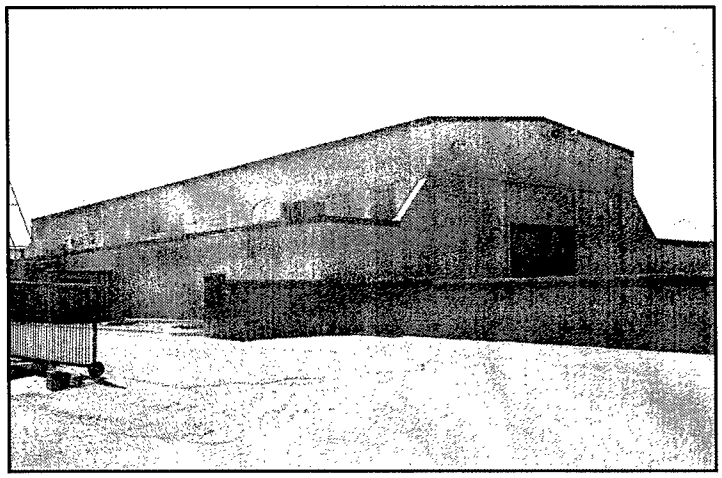
Comments: Modifications do not significantly alter original design features.

Preliminary Determination of National or State Register Eligibility:

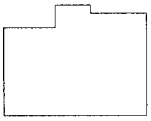
[ ] Exceptional importance [ ] Potentially eligible [x] Further research recommended [ ] Ineligible

Comments: Does not meet "exceptional importance" rule. See Section VIII.

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



BUILDING FOOTPRINT:
125′ x 161′



N

Photo

Date of completion: c1952

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.)

The original Building 822 was a two-story, rectangular-shaped facility with offices and workshops flanking a central, open bay area. Building 822 was completed c1952 (Real Property Accountable Record/822).

Symmetrically-placed glass block windows run the length of the second story at the north and south elevations. The gable roof shows a slight pitch. Smaller roll-up doors have been cut into the original metal roll-up doors at each gable end. A one story, full-length addition was built at the north elevation (1953: CE File #822-2).

Construction drawings in CE File #822 were consulted. Although stamped "As-Built," the stamp was not placed within the revision block. Both the architect and the builder are unknown.

III. HISTORIC AND CURRENT USE:

Source: Real Property Accountable Record/822.

Current Function: Shop/Storage Facility (c1977-present).

Original Function: Missile Assembly and Test Facility.

Interim Functions: "Shp AGE/Stor Fclty" (n.d.); "M/Assembly Test Bldg" (c1962); "Msl Asmb Tst Bldg" (n.d.); "Msl R-L Engrg" (c1969); "Msl/Space Rsch Eng" (c1970); "Whse Sup & Equip Bse" (n.d.); "Shp AGE/ Stor Fclty" (c1977).

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

Source: CE File 822-1 (c1950).

Foundation: Concrete footing and stem wall. Concrete spread footings for columns.

Exterior walls: 12" structural clay tile. Poured concrete at E and W elevations.

Roof: Steel trusses at clerestory. Bar joists at wings. B/U roof on concrete deck.

Notable interior features, including machinery: Overhead crane runs full length of the bay area. Truss system is a Quadrangle design.

V. CURRENT FEATURES IF DIFFERENT FROM ORIGINAL:

Source: Field visit Spring 1996.

Foundation:

Exterior walls:

Roof:

Notable interior features, including machinery: The overhead hoist is still intact. A blast wall with explosion-proof glass and solid metal door is still intact in test room.

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VI. BRIEF STATEMENT OF HISTORIC SIGNIFICANCE

Although Building 822 does not meet the "exceptional importance" criteria imposed on buildings constructed within the last fifty years, this building does retain historic integrity, and may qualify for the National Register under Criteria A or C once the fifty-year construction date is met in the year 2002.

VII. ASSOCIATED BUILDINGS:

Building 822 may have historically been associated with at least four other missile assembly facilities, including Buildings 821, 823, 824, and 1264.

VIII. ADDITIONAL COMMENTS AND MAINTENANCE RECOMMENDATIONS:

None of the construction drawings for Building 822 are correctly stamped "As-Built." Modifications to the original structure are evident, however, at each elevation, and at the interior. At the gable ends, the original roll-ups have been framed in and covered with fiberboard sheathing. Smaller roll-up doors have been cut into the original doors. Most of the original access doors have been replaced with new doors or removed completely. Several new doors have been added to the exterior. A steel smokestack has been removed from the west elevation. Early improvements include a single-story addition at the north elevation. This improvement was subsequently partitioned at the interior. Despite the modifications, most of the original design and materials remain evident. The most prominent features include the glass block windows at the second level, and the exposed steel trusses in the high bay area. Recommend that this building be reassessed once the fifty-year construction date is reached in the year 2002, and that modifications in the interim do not irrevocably alter any essential design features.

Suggested routine maintenance: Interior water damage may indicate failure at the roof. Re-grade at foundation to promote positive drainage. Repair exterior concrete masonry unit and structural tile walls. Repair metal louvers, fascia, and wood trim.

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: Originally constructed in 1952. Subsequent improvements through 1957, including single-story addition at the north elevation.

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

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

Comments: Building continues to exhibit test room with blast wall and windows, exposed ceiling trusses, and an open high bay area with crane beam. Glass block windows at the second story allow sunlight in. Floor layout essentially as originally constructed.

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: Continues to be associated with flightline. Split-faced block security wall and recent landscaping alters external appearance.

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

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

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

Comments: Original glass block windows, CMU, clay tile, exposed trusses, high bay, and crane system still evident. Roll-up doors framed in, interior partitioning, doors removed. Gable ends faced with brick (n.d.).

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

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

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

Comments: Although modified, most of the essential original features remain evident. The large roll-up doors have been framed in. One of the few building surveyed that retains original, unpainted, glass block windows at the clerestory.

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 [ ] Some elements remain [x] Retains integrity

Comments: 6x12-light glass block windows, exposed trusses, open bay area, and roll-up doors are reminiscent of use as a missile assembly building.

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

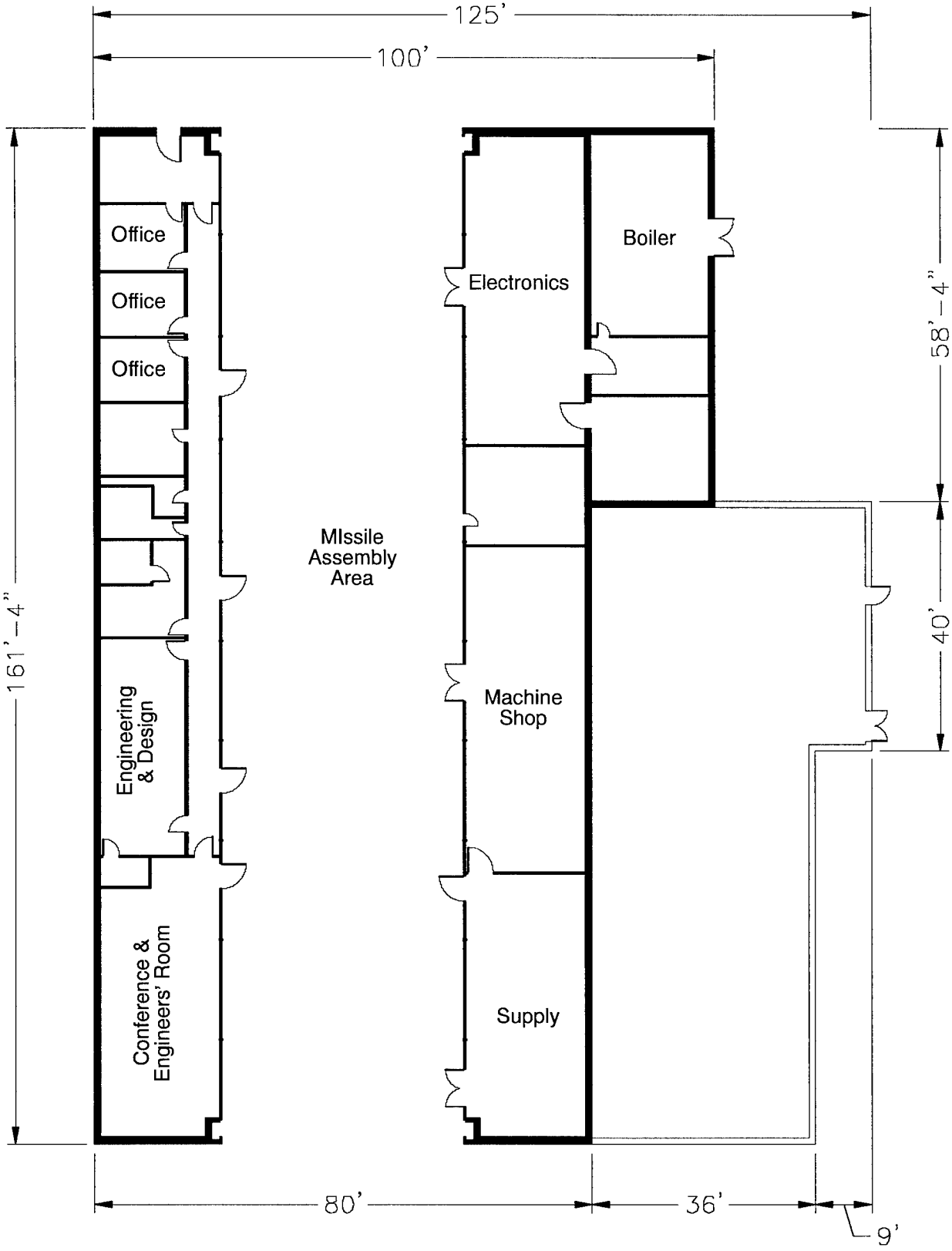
[ ] Unable to determine [ ] Little or no integrity of feeling remains [ ] Some elements remain [x] Retains integrity

X. FURTHER INFORMATION:

Surveyed By:

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

HAFB Report Number: **CRM Publication #3**
Photograph Citation: **CD-ROM #2-Photo #7**
Negatives On File: **49 CES/CEV, 550 Tabosa Ave, HAFB**
Date of Field Visit: **SPRING 1996**



Source: CE File #822-1 (c1950)

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State of New Mexico Office of Cultural Affairs Historic Preservation Division	**BUILDING 822** Holloman Air Force Base Alamogordo, New Mexico	Project No. 35-95-HAFB-4	AutoCAD rendering by: *Eugene N. Kilmer* *(505) 323-0641* Mag Drafting **Sheet 1 of 1**

COLD WAR SURVEY: HOLLOMAN AIR FORCE BASE

NAME:
Current: Avionics Shop.
Historic: Missile Assembly Building.
Street Address: 1258 Wagner Street, HAFB, 88330-7904.

Building Number: 823

I. GENERAL INFORMATION:

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

Comments: Building 823 is in need of minor routine maintenance.

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

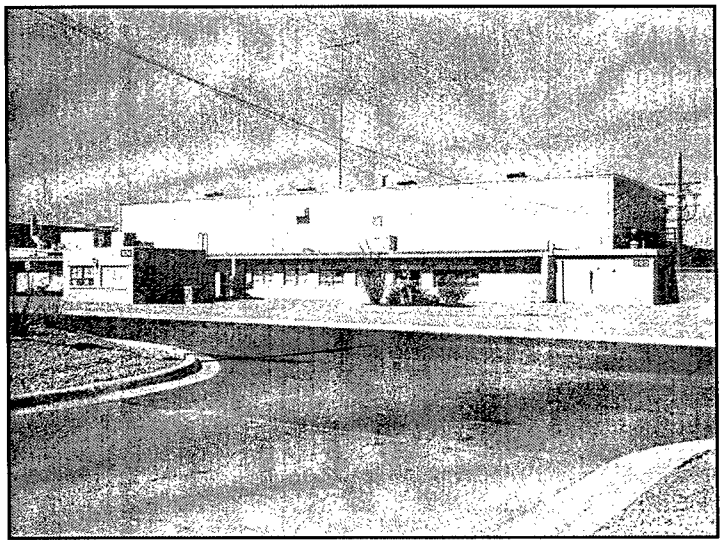
Comments: Extensive alterations have occurred at exterior and interior.

Preliminary Determination of National or State Register Eligibility:

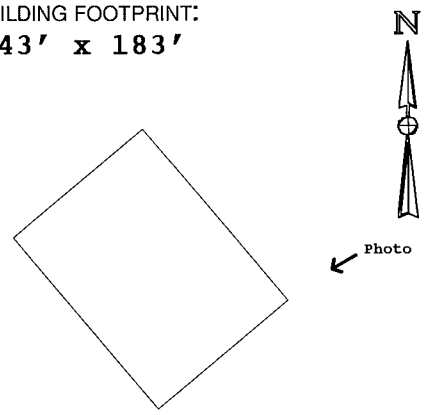
[ ] Exceptional importance [ ] Potentially eligible [ ] Further research recommended [x] Ineligible

Comments: Building 823 does not retain historic integrity.

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



BUILDING FOOTPRINT:
143' x 183'



Date of completion: 1952

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 823 has a rectangular floor plan with a varied roof profile along the short axis of the rectangle (east-west). This profile is sectioned into three roof elevations with a high two-story roof in the center, a one-story roof at the west elevation, and a one and one-half story roof at the east elevation. All high bay windows have been blocked in. The fenestration at the one-story west elevation is symmetrical, with a double glass door at the center and a row of awning windows on either side. Large roll-up doors exist at the high bay, south elevation. Three metal double doors and a boiler room addition were added c1962 at the east elevation (Real Property Accountable Record/823). Three doors of varying types are shown at the north elevation. W. C. Kruger Company (Santa Fe, NM) provided the architectural drawings. The builder is unknown.

III. HISTORIC AND CURRENT USE:

Source: Real Property Accountable Record/823.

Current Function: Avionics Shop and Office Space.

Original Function: Missile Assembly and Test Facility.

Interim Functions: "M/Assembly Test Bldg" (c1962); "Shop, Comm & Elect" (c1966); "Shp, Comm & Elect" (n.d.); "Msl R/T Shop" (c1969); "Msl/Space Rsch Tst" (c1970); "Whse Sup & Equip Bse" (n.d.).

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

Source: CE File #823-2 (c1956).

Foundation: Concrete wall footings; Concrete column footings.

Exterior walls: Concrete masonry units (CMU); Steel wind frame.

Roof: B/U on rigid insulation & gyp planks sup by steel joists.

Notable interior features, including machinery: None noted.

V. CURRENT FEATURES IF DIFFERENT FROM ORIGINAL:

Source: Field visit Fall 1995; CE File #832-2 (c1956).

Foundation:

Exterior walls:

Roof: Lightweight concrete deck over gypsum planks (west bay only).

Notable interior features, including machinery: None noted.

VI. BRIEF STATEMENT OF HISTORIC SIGNIFICANCE:

Building 823 provided guided missile assembly capabilities during Holloman AFB's early Cold War materiel development phase. Due to a series of renovations to the exterior and the interior, Building 823 no longer retains historic integrity and is therefore not eligible for inclusion on the National Register.

VII. ASSOCIATED BUILDINGS:

Building 823 shared an identical original floor plan with Building 824, and was situated between Buildings 874 and 876. It is unclear whether or not these buildings were historically associated with one another.

VIII. ADDITIONAL COMMENTS AND MAINTENANCE RECOMMENDATIONS:

Building 823 has undergone extensive renovations since its original construction as a missile assembly facility c1952 (Real Property Accountable Record/823). Original elevations show windows extending at the second level across the entire principal facade (west) and east elevations. These windows have subsequently been removed. A storage shed has been added at the east elevation. At least three sets of fixed-sash windows have been removed from the south elevation. The doors, and glass surrounds, at the main entryway have been removed. Drawings prepared by the Boeing Airplane Company (Wichita, KA) show that interior remodeling was accomplished in 1958. Minor alterations consisted mainly of the addition of partition walls. A letter from Lt. Col. Butler, Installations, dated 4 December 1957, confirms that Building 823 was used to support the B-52 aircraft (Real Property Accountable Record/823). Renovations in c1977 and c1989 removed and replaced original floor finishes and wall coverings. Suspended ceilings were added to at least half of the building. Original solid-core doors, including Dutch doors, were replaced with metal doors.

Suggested routine maintenance: Residue at metal fascia may indicate failure at built-up roof. Plug and paint sign holes at front entrance. Scrape, prime, and paint masonry foundations, and exterior walls. Fix drainage problem at north elevation. Remove vegetation at foundation.

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 adjacent to active 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: The rows of windows, front entryway, and open bay areas represent essential original design features which have been substantially altered.

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:

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

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

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

Comments: Most of the original doors and windows have been removed and/or replaced. Vinyl flooring, wainscoting, baseboard and dropped ceilings obscure original interior finish materials.

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

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

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

Comments: At least three renovation phases have removed or obscured most of the original workmanship.

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

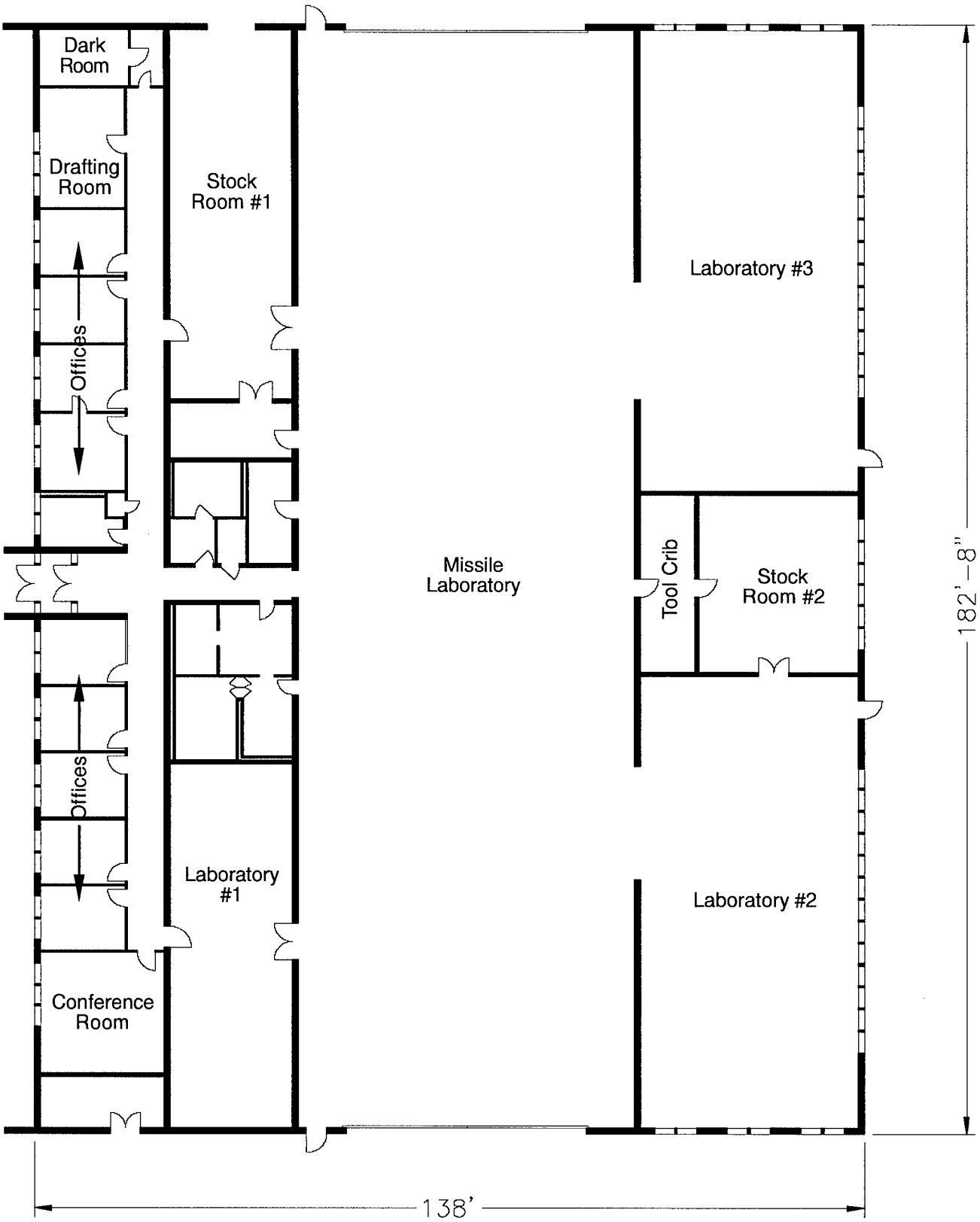
Comments: Aside from its proximity to the flightline, few elements remain of this building's association with either missile assembly or B-52 support roles.

X. FURTHER INFORMATION:

Surveyed By:

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

HAFB Report Number: **CRM Publication #3**
Photograph Citation: **CD-ROM #2-Photo #18**
Negatives On File: **49 CES/CEV, 550 Tabosa Ave, HAFB**
Date of Field Visit: **FALL 1995**



Source: CE File #823-1 (1952)

State of New Mexico Office of Cultural Affairs Historic Preservation Division	**BUILDING 823** Holloman Air Force Base Alamogordo, New Mexico	Project No. 35-95-HAFB-4	AutoCAD rendering by: *Mike Gardner* New Mexico State University **Sheet 1 of 1**	New Mexico State University

COLD WAR SURVEY: HOLLOMAN AIR FORCE BASE

NAME:
Current: Base Warehouse; Supply & Equipment.
Historic: Missile Assembly Building #3.
Street Address: 1274 Wagner Street, HAFB, 88330-7904.

Building Number: 824

I. GENERAL INFORMATION:

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

Comments: Building 824 is in need of minor routine maintenance.

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

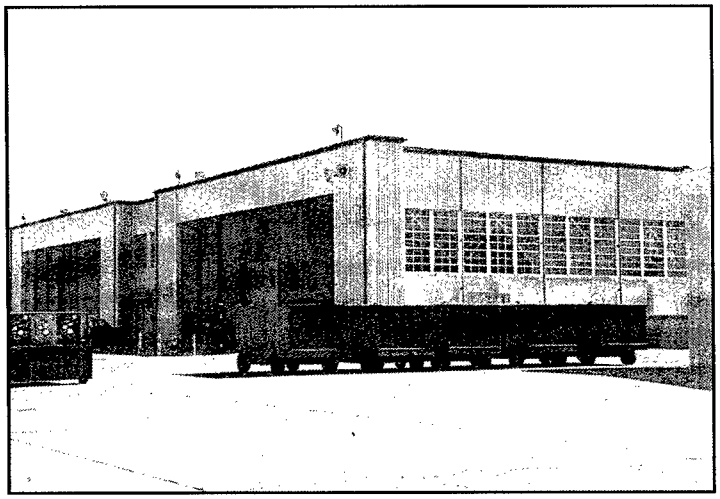
Comments: Several additions and renovations obscure original design.

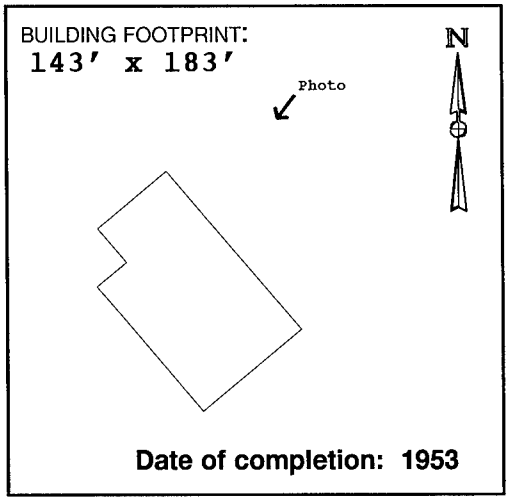
Preliminary Determination of National or State Register Eligibility:

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

Comments: Building 824 no longer retains historic integrity.

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





Date of completion: 1953

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 824 has a rectangular floor plan with an offset at the north elevation. An east-west cross-section through the building shows a high-bay in the center, a one-story roof the at the west elevation, and a 1-1/2 story roof at the east elevation. All three roofs are flat. The fenestration at the east and west elevations consists of an uninterrupted row of windows the length of the building at the high bay. Windows have been blocked in at the lower east elevation, and a row of double-hung windows exists at the lower west elevation. Large overhead doors are centered at the south elevation high bay, with two sets of double doors at one end. An addition was constructed at the north elevation c1970 (CE File #824-1). "As-built" drawings date the completion of Building 824 as being 1953. Neither the builder nor the architect is known.

III. HISTORIC AND CURRENT USE:

Source: Real Property Accountable Record/824.

Current Function: Office and storage space. F-117 warehouse.

Original Function: Missile assembly and testing facility.

Interim Functions: "Tst Track Bldg" (n.d.); "M/Assembly Test Bldg" (c1962); "Shop, A/C Gener Purps" (c1963); "Shp Acft Gen Purp" (n.d.); "Mun Maint Admin" (c1990); "Whse, Sup & Equip Bse" (c1992).

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

Source: CE File #824-1 (1952).

Foundation: Concrete wall footings. Concrete column footings.

Exterior walls: Concrete masonry units (CMU). Steel wind frame.

Roof: B/U on rigid insulation & gypsum panels sup. by steel joists and trusses.

Notable interior features, including machinery: None noted.

V. CURRENT FEATURES IF DIFFERENT FROM ORIGINAL:

Source: Field visit Fall 1995.

Foundation:

Exterior walls:

Roof:

Notable interior features, including machinery: Hoist is still intact at main assembly room. Mezzanine installed for storage. Pallet conveyor constructed by International Automated, St. Paul MN.

VI. BRIEF STATEMENT OF HISTORIC SIGNIFICANCE:

Building 824 does not retain historic integrity of design, materials, workmanship, feeling, or association with its original use as a guided missile assembly and test plant.

VII. ASSOCIATED BUILDINGS:

Building 824 continues to be associated with the flightline and nearby aircraft support facilities. Early association also with the High Speed Test Track as a sled maintenance facility.

VIII. ADDITIONAL COMMENTS AND MAINTENANCE RECOMMENDATIONS:

Building 824 was originally constructed as Missile Assembly Building #3. "As-built" drawings dated 1953 indicate that the original missile laboratories have been converted for use as F-117 parts storage and general aircraft support. A darkroom and drafting room have been converted into office space. Double-hung, 2-light, aluminum frame windows replace original windows at the first floor of the principal elevation. A new entryway has been added. The addition of a machine shop in 1970 at the north elevation obscures the original facade. Split-faced block security walls and landscaping alter the surroundings. A roll-up door has been added at the east elevation. Three windows have been removed and two sets of double doors added at the south elevation. Although a concrete pad for an incinerator shown on early drawings still exists, the incinerator itself has been removed. Building 824 no longer retains historic integrity.

Suggested routine maintenance: Scrape, prime, and paint exterior block walls. Remove efflorescence at metal fascia. May need to patch roof at main entrance. Replace downspout at the south elevation. (Note: MSgt. Kachold ext. 3717 may have early photos of the interior of Building 824.)

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 near the flightline, as originally built.

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: Renovations include the addition and removal of doors and windows. A machine shop was added at the north elevation. The entryway has been remodeled. Interior partitioning has occurred to accommodate increased office space.

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: The viewshed has been altered by the addition of a split-faced block security wall and landscaping.

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

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

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

Comments: The structural systems, including the foundation, walls, and roof, remain essentially as they were originally constructed. Windows have been covered at the second floor (reversible), and windows have been replaced at the first floor. A machine shop has been added at the north elevation.

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

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

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

Comments:

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: Very few indications of this building's use as a guided missile assembly and test plant remain.

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

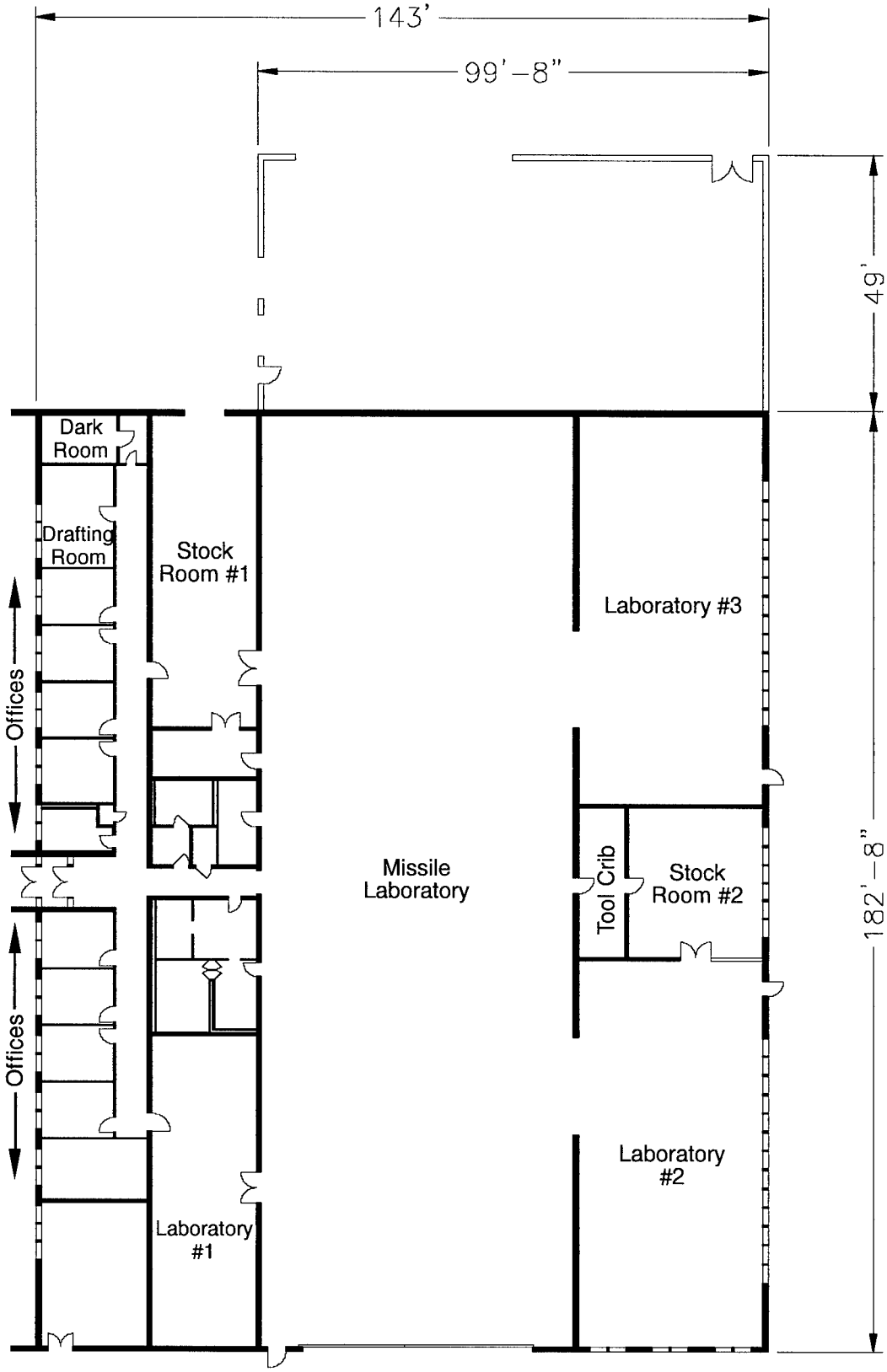
Comments:

X. FURTHER INFORMATION:

Surveyed By:

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

HAFB Report Number: **CRM Publication #3**
Photograph Citation: **CD-ROM #2-Photo #15**
Negatives On File: **49 CES/CEV, 550 Tabosa Ave, HAFB**
Date of Field Visit: **FALL 1995**



Source: CE File #824-1 (1952)

State of New Mexico Office of Cultural Affairs Historic Preservation Division	**BUILDING 824** Holloman Air Force Base Alamogordo, New Mexico	Project No. 35-95-HAFB-4	AutoCAD rendering by: *Mike Gardner* New Mexico State University **Sheet 1 of 1**	

COLD WAR SURVEY: HOLLOMAN AIR FORCE BASE

NAME:
Current: Missile/Space Research Test (Vacant).
Historic: Missile/Space Research Test.
Street Address: 1320 Forty Niner Ave., HAFB, 88330-7918.

Building Number: 882

I. GENERAL INFORMATION:

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

Comments: Routine maintenance at the exterior required.

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

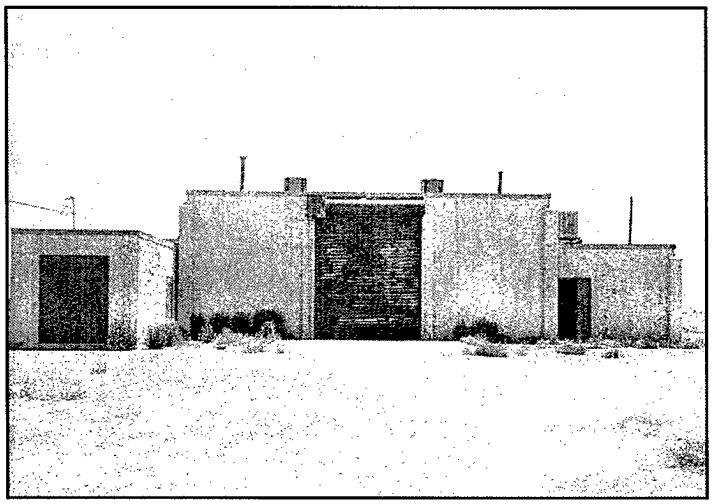
Comments: Building 882 remains essentially as it was originally constructed.

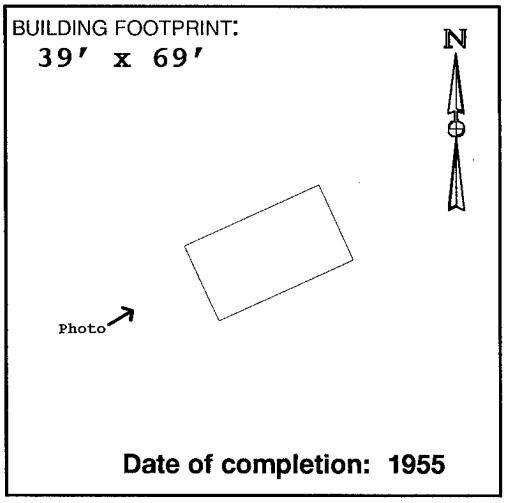
Preliminary Determination of National or State Register Eligibility:

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

Comments: Does not meet "exceptional importance" rule. See Section VIII.

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





Date of completion: 1955

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 882 is a one-story, L-shaped structure with concrete masonry block walls. Certain discrepancies between Real Property Accountable Record/882 and early construction drawings are noted in Section VIII of this form.

Field observation verifies that the current structural system is unaltered from original "As-built" construction drawings dated 1955 (CE File #882-1). A 70'-8" x 40' main floor plan is partitioned into three areas. A high roof middle area is flanked by exterior, low-roofed bays. The north and east elevations had large, double-slider doors. As the sole architectural modification noted, these original doors have been replaced with electrical, metal, roll-up doors. The Atomic Energy Commission, Sandia Corporation, prepared the original drawings. Recommend that this agency be contacted for further information regarding research activities conducted at Building 882. The builder is unknown.

III. HISTORIC AND CURRENT USE:

Source: Real Property Accountable Record/882.

Current Function: (Vacant). Temporary storage for housing department.

Original Function: Missile/Space Research Test (Atomic Energy Commission).

Interim Functions: "Lab Res Engineer" (n.d.); "M/Res Lab" (c1962); "Msl/ Space Rsch Tst" (c1970).

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

Source: CE File #822-1 (1955).

Foundation: Concrete footing and stem wall.

Exterior walls: Concrete column and bond beam frame. Exposed CMU walls.

High Roof: B/U on Insulrock® sheathing supported by steel bar joists.

Low roof: B/U on wood sheathing and 2 x 8 joists.

Notable interior features, including machinery:
Monorail truss installed north-south in main assembly room.

V. CURRENT FEATURES IF DIFFERENT FROM ORIGINAL:

Source: Field visit Spring 1996.

Foundation:

Exterior walls: Painted concrete masonry units (CMU).

Roof:

Notable interior features, including machinery: None noted.

VI. BRIEF STATEMENT OF HISTORIC SIGNIFICANCE:

Although it appears that Building 882 does not meet the "exceptional importance" stipulation imposed on buildings constructed within the last fifty years, this building may be eligible for the National Register once the fifty-year construction date is reached in the year 2005. This building retains all aspects of historic integrity. Further research is warranted.

VII. ASSOCIATED BUILDINGS:

An associated Guard Building has been removed from the front gate vicinity. Associated with other buildings owned by the Atomic Energy Commission. Further research is recommended.

VIII. ADDITIONAL COMMENTS AND MAINTENANCE RECOMMENDATIONS:

Aside from the replacement of slider doors with roll-up doors using the same openings, Building 882 remains essentially as it was originally constructed. Although original drawings do not show a 12′ x 18′ offset at the north elevation, Real Property Accountable Record/882 indicates that this offset was an early, if not original, construction detail. It should be noted that Real Property Accountable Record/882 gives a completion date of 1958 for Building 882. Original, "As-built" drawings date the completion as being 1955.

Building 882 retains integrity of design, setting, materials, workmanship, feeling, and association with its construction as a missile testing facility. Interior and exterior window and door locations remain unchanged. The west wing rooms are partitioned with wood studs and sheetrock (reversible). Further research is recommended to determine the extent of the Atomic Energy Commission's cultural and architectural influence on Holloman Air Force Base.

Suggested routine maintenance: Scrape exterior walls. Point-up loose mortar joints. Prime, and paint exterior. Scrape, prime, and paint exterior metal. Remove vegetation at foundation.

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: A separate "Guard Building" noted on original drawings as being located just inside the gate to Building 882 has been removed.

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: Structural elements, and floor plan remain unchanged.

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

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

Comments: Property is still enclosed by a security fence. Original plot plan shows Building 882 situated near Buildings 885, 886, and 887, as it is today.

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

Comments: CMU walls, and steel bar joists remain exposed in middle bay. Interior, five-panel wood doors still present (CE File #882-1).

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

Comments: Exposed CMU has been painted at the exterior. Original slider doors, material unknown, replaced with metal roll-up doors using same openings.

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 [ ] Some elements remain [x] Retains integrity

Comments:

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

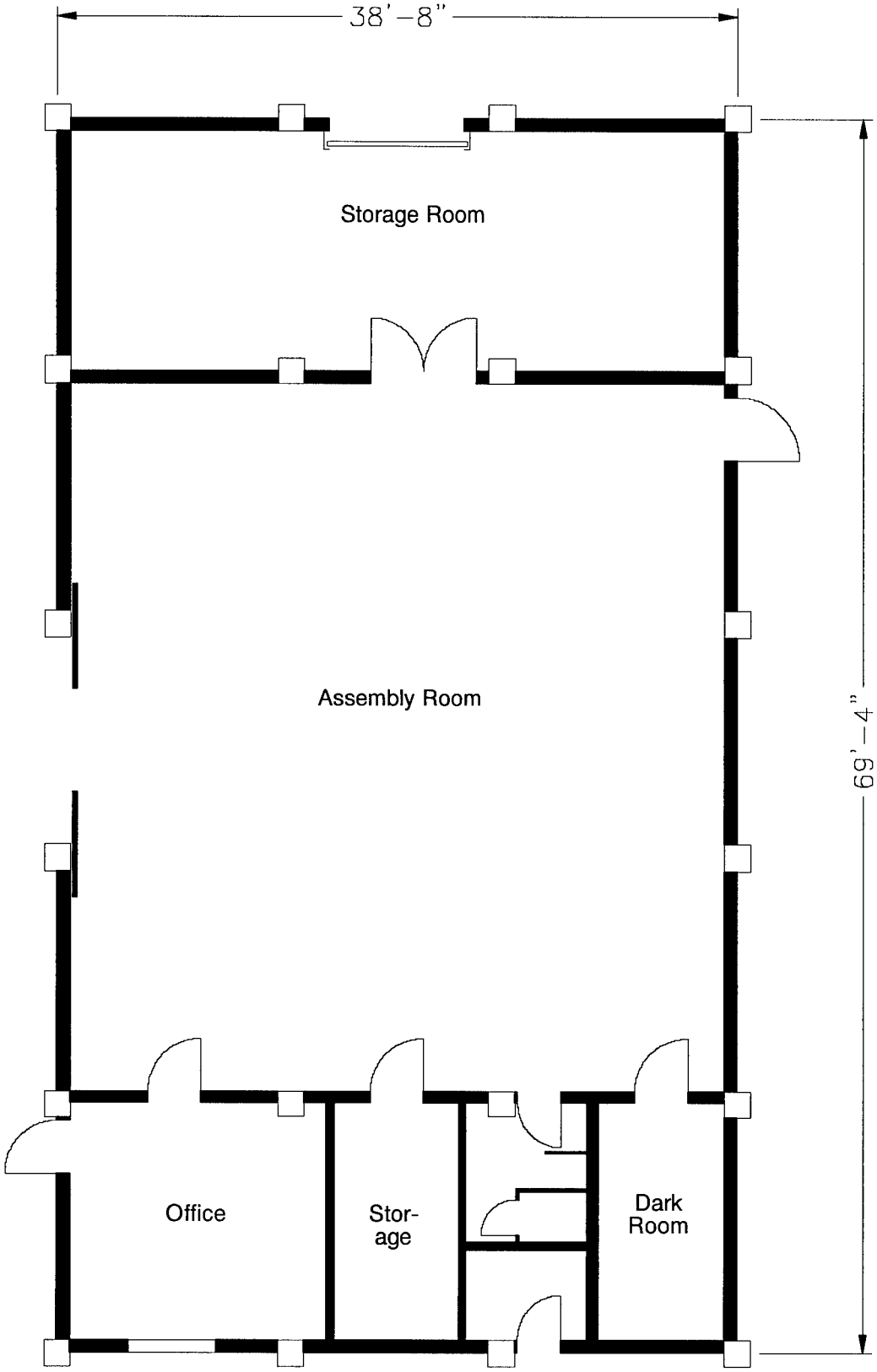
Comments: Although currently used for storage, this large, open, windowless structure retains a visible link to its past as a secured missile research testing facility. Further research recommended.

X. FURTHER INFORMATION:

Surveyed By:

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

HAFB Report Number: **CRM Publication #3**
Photograph Citation: **CD-ROM #2-Photo #75**
Negatives On File: **49 CES/CEV, 550 Tabosa Ave, HAFB**
Date of Field Visit: **SPRING 1996**



Source: CE File #882-1 (1955)

State of New Mexico Office of Cultural Affairs Historic Preservation Division	**BUILDING 882** Holloman Air Force Base Alamogordo, New Mexico	Project No. 35-95-HAFB-4	AutoCAD rendering by: *Steve Merrill* New Mexico State University **Sheet 1 of 1**	NEW MEXICO STATE UNIVERSITY

COLD WAR SURVEY: HOLLOMAN AIR FORCE BASE

NAME:
Current: Terminal, Air Freight.
Historic: Guided Missile Lab/Check-Out Station.
Street Address: 1350 Forty Niner Avenue,HAFB,88330-7910.

Building Number: 885

I. GENERAL INFORMATION:

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

Comments: In need of routine maintenance.

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

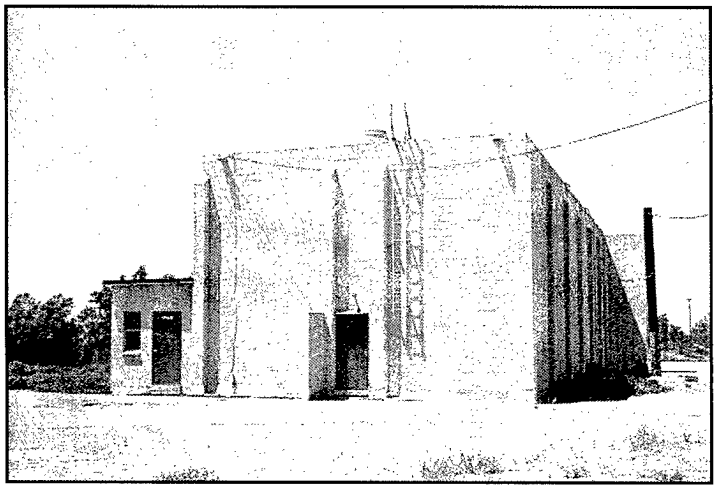
Comments: Modifications to this building are reversible.

Preliminary Determination of National or State Register Eligibility:

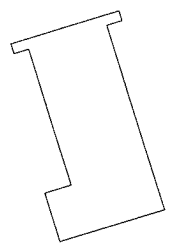
[ ] Exceptional importance [ ] Potentially eligible [x] Further research recommended [ ] Ineligible

Comments: Does not meet the "exceptional importance" rule. See Section VIII.

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



BUILDING FOOTPRINT:
43' x 80'



N

Photo

Date of completion: c1953

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 885 was originally constructed as a rectangular, single-room, single-story, flat-roofed, masonry block structure using exterior pilasters. Originally constructed for use as a missile check-out station, the building is currently used for storage. There are no windows.

The principal elevation faces north, and exhibits a set of wood slider doors. A 5-panel wood door provides access at the east elevation. A small boiler room and bathroom has been added at the west elevation.

According to Real Property Accountable Record/885, the estimated date of completion is c1953. Construction drawings located in CE Files #885 and #887 were consulted for this survey. Both the architect and the builder are unknown.

III. HISTORIC AND CURRENT USE:

Source: Real Property Accountable Record/885.

Current Function: Storage.

Original Function: Check-out station for guided missiles.

Interim Functions: "G/M Lab Calibration" (n.d.); "Msl/Space Rsch Tst" (n.d.); "Arm Rsch Storage" (c1958); "Terminal Air Freight" (c1962); "Terminal, Air Freight" (c1972).

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

Source: CE File #880-1 (c1959).

Foundation: Reinforced concrete slab, column and wall footings.

Exterior walls: Painted concrete masonry (CMU) walls, with block pilasters.

Roof: B/U roof on poured concrete deck supported by steel bar joists.

Notable interior features, including machinery: None noted.

V. CURRENT FEATURES IF DIFFERENT FROM ORIGINAL:

Source: Field visit Spring 1996.

Foundation:

Exterior walls:

Roof:

Notable interior features, including machinery:

Monorail crane system installed c1969, CE File #880-2. It is unclear whether or not this replaced an earlier system.

VI. BRIEF STATEMENT OF HISTORIC SIGNIFICANCE:

Building 885 does not appear to meet the "exceptional importance" imposed upon buildings constructed within the last fifty years. This building does, however, retain historic integrity, and may meet National Register criteria at a regional or even national level once the fifty-year construction date is met in the year 2003. Further research is warranted to determine what research was conducted here during its early Cold War period of historic significance.

VII. ASSOCIATED BUILDINGS:

Building 885 is shown on site plans dated c1951 as being associated with "Check Out" Building 887 and "Ready Room" Building 886. These buildings continue to be situated nearby. Consult Building 886 and 887 field forms for more information.

VIII. ADDITIONAL COMMENTS AND MAINTENANCE RECOMMENDATIONS:

Although currently used for storage, and no longer equipped as a guided missile check-out station, Building 885 retains historic integrity in terms of location, design, setting, materials, workmanship, feeling, and association. The roof was replaced in-kind in 1992. Interior office partitioning and the addition of an interior storage cage represent reversible modifications. All of the essential features of this building's original design remain intact. Nearly all of the original materials remain visible. Large wood slider doors represent the most distinctive feature. These doors use 4x4 wood posts as framing members, and 3/8" plywood as sheathing. The specs for the sliders are shown on c1951 drawings. A 5-panel wood door at the east elevation also appears to be original. Due to its local significance, and because it has retained historic integrity, recommend that future modifications take into account the original open-bay plan, the exposed bar joists, the wood architectural features, and the fact that there are no windows.

Suggested maintenance recommendations: Repair wood slider doors. Repair concrete stoop and walk. Protect or relocate exterior cable pole. Remove asphalt, re-grade to promote positive drainage away from the building, and replace asphalt.

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 in a fairly remote setting near the north-south runway. Check-Out Station and Ready Room located nearby.

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

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

Comments: Except for a small bathroom/boiler room addition at the west elevation, the exterior appears to be original. Roof above the deck replaced in 1992.

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: Aside from a new control building and support buildings constructed to the north, the topography, associated buildings, and road access remain the same.

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

Comments: Block walls, concrete floor, wood architectural features, exposed bar joists, and exposed insulation, all original. No windows. Roof replaced in-kind.

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

Comments: Interior partitioning in one half of the building obscures original walls and ceiling. Partitioning is reversible.

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 [ ] Some elements remain [x] Retains integrity

Comments: Although used for storage, Building 885 retains all of the essential design and architectural features of its construction as a missile check-out station.

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 of feeling remains [ ] Some elements remain [x] Retains integrity

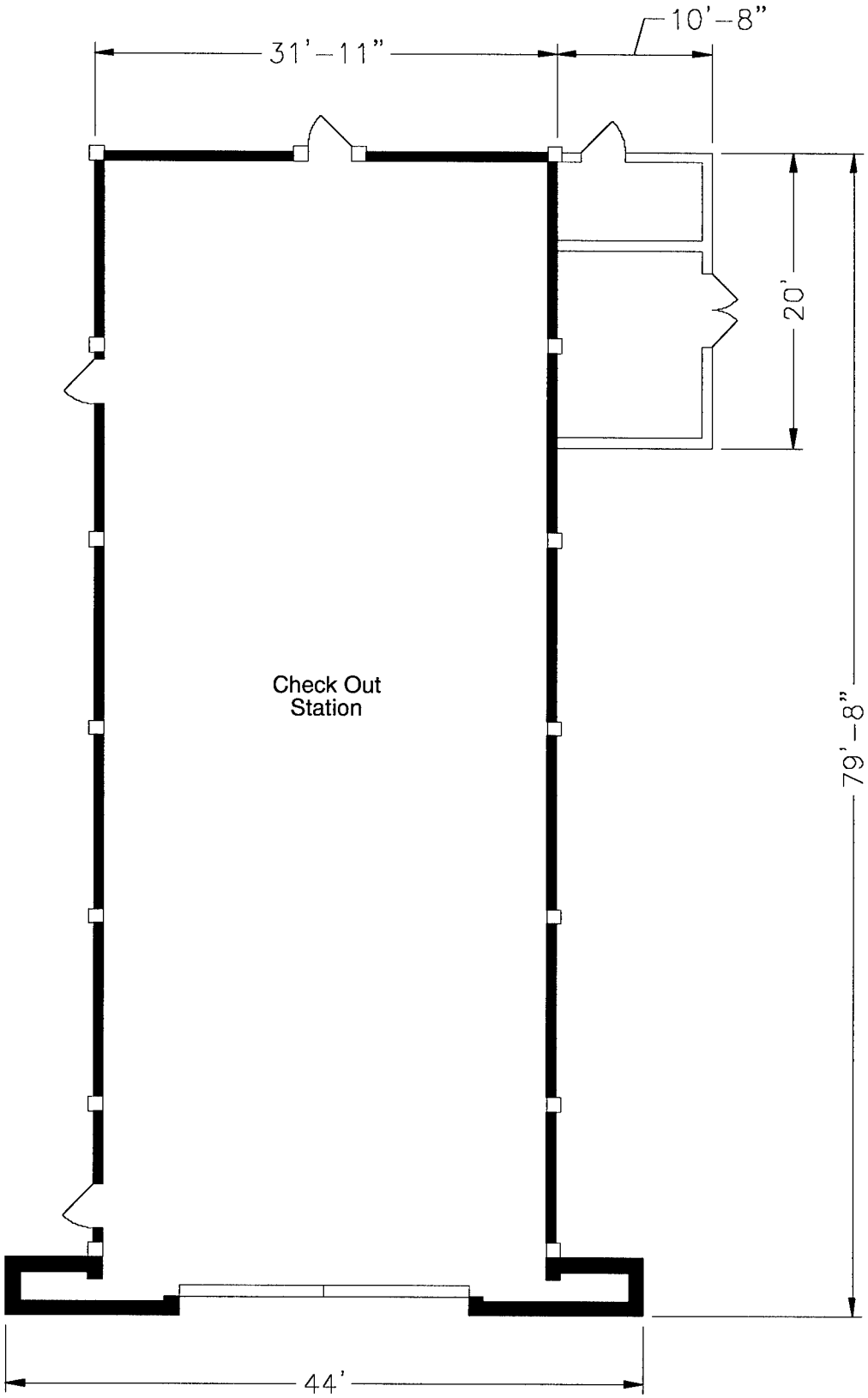
Comments: Continues to be situated near Check-Out Building 887 and Ready Room Building 886. The removal of the interior partitioning would contribute to its historic integrity.

X. FURTHER INFORMATION:

Surveyed By:

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

HAFB Report Number: **CRM Publication #3**
Photograph Citation: **CD-ROM #2-Photo #78**
Negatives On File: **49 CES/CEV, 550 Tabosa Ave, HAFB**
Date of Field Visit: **SPRING 1996**



Source: CE File #885-2 (c1959)

State of New Mexico Office of Cultural Affairs Historic Preservation Division	**BUILDING 885** Holloman Air Force Base Alamogordo, New Mexico	Project No. 35-95-HAFB-4	AutoCAD rendering by: *Steve Merrill* New Mexico State University **Sheet 1 of 1**	NEW MEXICO STATE UNIVERSITY

COLD WAR SURVEY: HOLLOMAN AIR FORCE BASE

NAME:
Current: (Vacant).
Historic: Check-out Station. Ready Room.
Street Address: 1340 Forty Niner Ave., HAFB, 88330-7910.

Building Number: 886

I. GENERAL INFORMATION:

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

Comments: Structurally sound, though in need of minor routine maintenance.

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

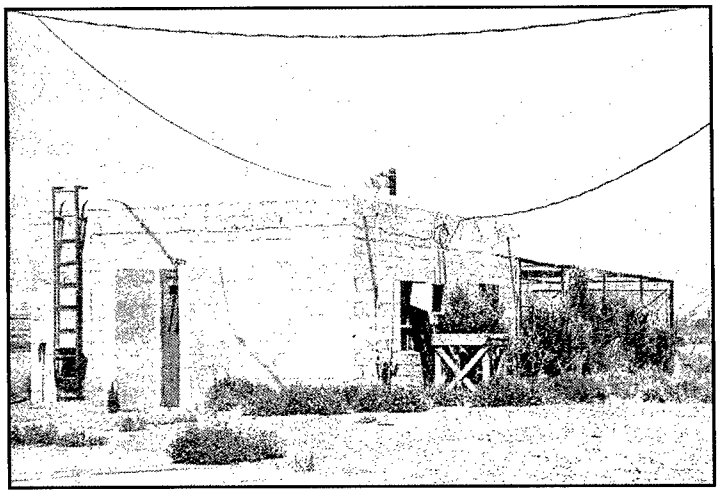
Comments: Assessment based on c1951 blueprints, not stamped "As-built".

Preliminary Determination of National or State Register Eligibility:

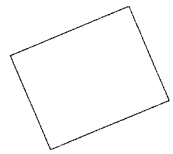
[ ] Exceptional importance [ ] Potentially eligible [x] Further research recommended [ ] Ineligible

Comments: Does not meet "exceptional importance" rule. See Section VII.

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



BUILDING FOOTPRINT:
20' x 25'



N

Photo

Date of completion: c1953

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 886 is a small, 25' x 20', one-story, block structure with a parapeted flat roof. One main room and a bathroom make up the floor plan. Access to the main room is gained through doors at the west and east elevations. A door added at the south elevation accesses the bathroom. Single awning windows are located at the north and south elevations. Real Property Accountable Record/886 indicates that this building was completed c1953. Neither the architect nor the builder are known.

A roof repair in 1992 by Pueblo Enterprises, El Paso, TX represents the sole structural modification to Building 886.

III. HISTORIC AND CURRENT USE:

Source: Real Property Accountable Record/886.

Current Function: (Vacant).

Original Function: Check-out Station. Ready Room. (c1953-c1962).

Interim Functions: Air freight terminal (c1962-c1966); Missile assembly test (c1966-c1970); Missile space research lab (c1970-c1975); Club Aero (c.1975-?); Navaid shop (n.d.).

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

Note: Although prints show 8" clay tile, current wall of CMU was probably the original construction material.

Foundation: Concrete wall footings. Concrete slab on granular fill.

Exterior walls: 8" clay tile (see note above).

Roof: Built-up roof on wood deck, supported by 2 x 12 joists.

Notable interior features, including machinery:
No equipment or machinery noted on early blueprints (CE File #886-1).

V. CURRENT FEATURES IF DIFFERENT FROM ORIGINAL:

Source: Real Property Accountable Record/886.

Foundation:

Exterior walls: Painted concrete masonry units (CMU).

188 Roof: 4-ply B/U Polycon/Confiber membrane.

Notable interior features, including machinery: None noted.

VI. BRIEF STATEMENT OF HISTORIC SIGNIFICANCE:

Building 886 may be eligible for the National Register under Criterion A in the year 2003. Special management consideration is warranted.

VII. ASSOCIATED BUILDINGS:

Building 886 was historically associated with two Check-Out Stations, Buildings 885 and 887. Further research is recommended on all three.

VIII. ADDITIONAL COMMENTS AND MAINTENANCE RECOMMENDATIONS:

An assessment of Building 886 was conducted on the basis of drawings dated April 1951. These drawings are not stamped "As-built." Several discrepancies could not be rectified between what the blueprints documented, and what was noted in the field. The north and west elevations remain as shown on the c1951 drawings. The south elevation shows the removal of one window, and the installation of a five-panel wood door at the location of the removed window. Large (2-1/2' x 8') double doors replace the single door shown on the 1951 drawings at the east elevation. These modifications do not appear to be recent. The use of a wooden door, oversized double metal doors, and the three-year delay between the early drawings (1951) and the completion date specified in the Real Property Records (1954) suggest instead that the building was not constructed as drawn. Aside from the repaired roof and the addition of interior finishes, Building 886 probably looks very much as it did in 1954. Although not distinctive enough to warrant "exceptional importance", recommend that Building 886 be managed in conjunction with Buildings 885 and 887, since all three were historically associated. All three buildings should be reassessed once the fifty-year date of construction has been met. Recommend photo-documentation prior to future modifications.

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: Access roads continue to service Buildings 885, 886, and 887 as orginally constructed.

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

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

Comments: This assessment is based on drawings dated 1951, but not stamped "As-built."

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: Continues to be located in remote setting near runway. Continues to be situated near Buildings 885 and 887. Recent construction of control tower and support buildings to the northwest.

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

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

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

Comments: At least one window and one door may have been removed. Double-doors may have replaced a single door. One five-panel door may have been added.

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

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

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

Comments: The additon of interior finishes, including carpeting, vinyl baseboard, and crown molding conceal original workmanship. A chain link storage enclosure obscures the east elevation (reversible).

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: This building continues to reflect its simplicity of design, and its use as a remote missile testing site.

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

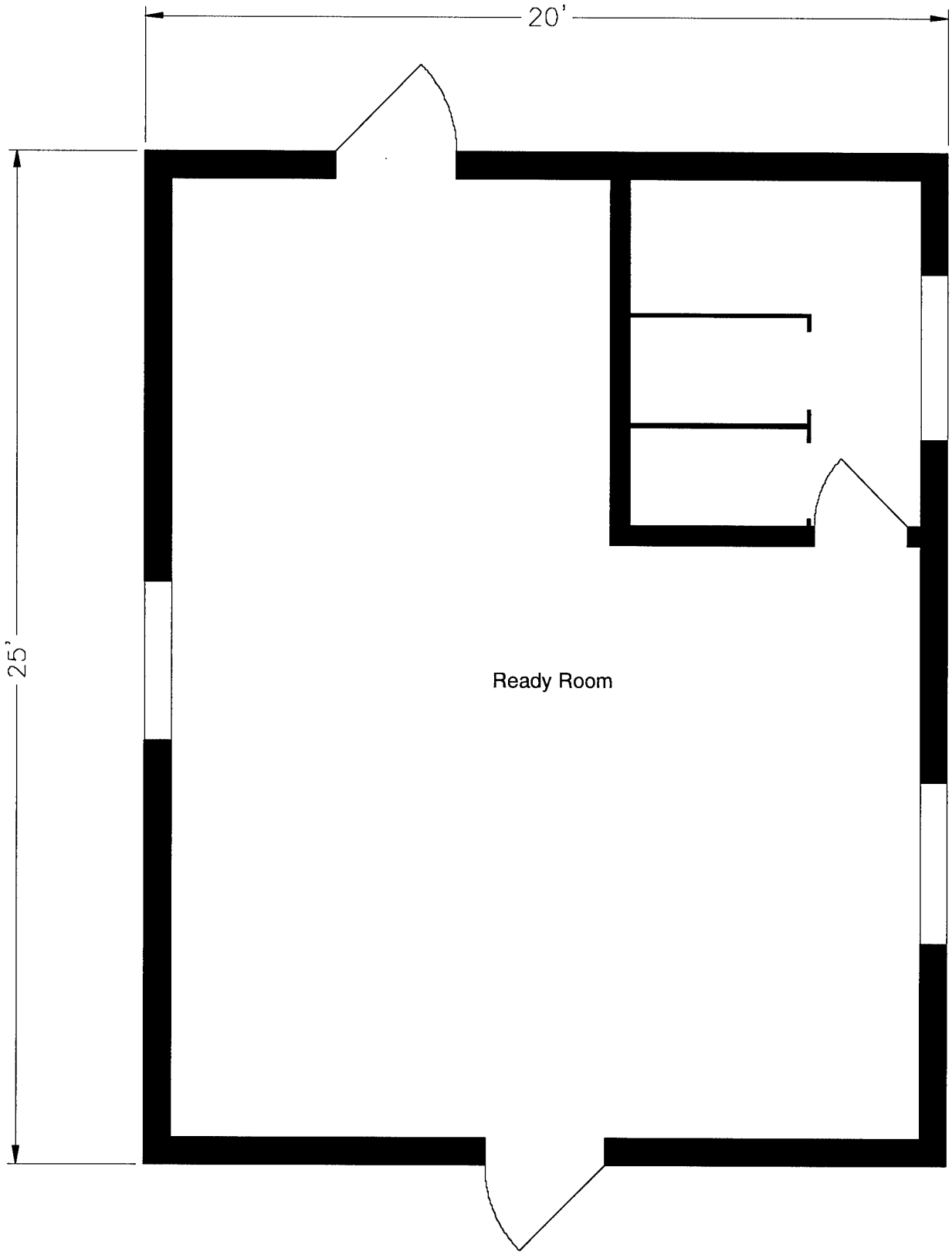
[ ] Unable to determine [x] Little or no integrity remains [ ] Some elements remain [ ] Retains integrity

Comments: Although these elements are reversible, the interior finishes disassociate this building from its early use as a missile check-out station. No interior equipment or machinery remains.

X. FURTHER INFORMATION:

Surveyed By: Jean Fulton
Sonya Cooper
2500 Jordan Road
Las Cruces, NM 88001

HAFB Report Number: **CRM Publication #3**
Photograph Citation: **CD-ROM #2-Photo #77**
Negatives On File: **49 CES/CEV, 550 Tabosa Ave, HAFB**
Date of Field Visit: **FALL 1995**



Source: CE File #886-1 (c1951)

State of New Mexico Office of Cultural Affairs Historic Preservation Division	**BUILDING 886** Holloman Air Force Base Alamogordo, New Mexico	Project No. 35-95-HAFB-4	AutoCAD rendering by: *Steve Merrill* New Mexico State University **Sheet 1 of 1**	NEW MEXICO STATE UNIVERSITY

COLD WAR SURVEY: HOLLOMAN AIR FORCE BASE

NAME: **Building Number:**

Current: Maintenance Shop.
Historic: Guided Missile Lab. Check-Out Station.
Street Address: 1310 Forty Niner Ave., HAFB, 88330-7910.

887

I. GENERAL INFORMATION:

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

Comments: In need of routine maintenance.

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

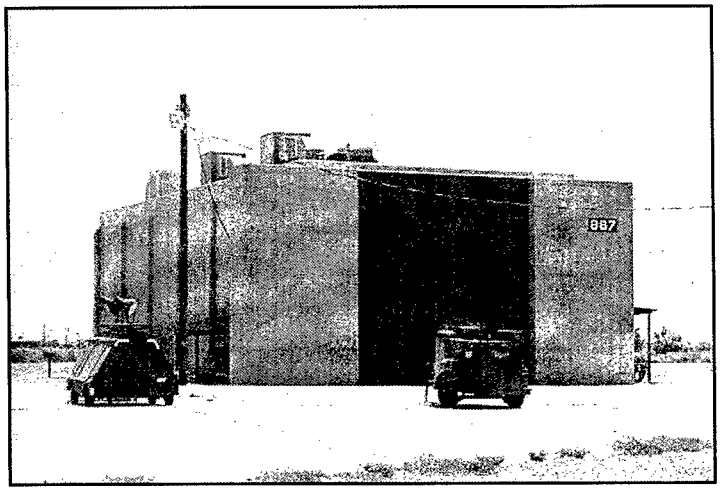
Comments: Modifications to this building are reversible.

Preliminary Determination of National or State Register Eligibility:

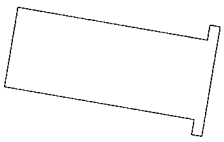
[ ] Exceptional importance [ ] Potentially eligible [x] Further research recommended [ ] Ineligible

Comments: Does not meet "exceptional importance" rule. See Section VIII.

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



BUILDING FOOTPRINT:
32′ x 80′



N

Photo

Date of completion: 1953

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 887 was originally constructed as a rectangular, single-room, single-story, flat-roofed, masonry block structure using exterior pilasters. Originally constructed for use as a missile check-out station, the building is currently used as a maintenance shop. One window was added at the east elevation. The principal elevation faces east, and exhibits a set of original wood slider doors that have been faced with metal. A solid metal door provides access at the east elevation. An open shed covers the maintenance equipment at the west elevation. According to Real Property Accountable Record/887, the estimated date of completion is c1953. Construction drawings located in CE Files #885 and #887 were consulted for this survey. Both the architect and the builder are unknown.

III. HISTORIC AND CURRENT USE:

Source: Real Property Accountable Record/887.

Current Function: Maintenance shop and storage.

Original Function: Check-out station for guided missiles.

Interim Functions: "Club, Aero" (n.d.); "M/Res Storage Bldg" (c1962); "Whse, Sup & Equip, Bse" (c1963); "Msl Asmb Tst Bldg" (c1967); "Msl/Space Rsch Tst" (c1970); "Rsch Equip Stor" (c1980).

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

Note: Although drawings note clay tile walls, the walls appear to have always been CMU. Real Property Record/887.

Foundation: Reinforced concrete slab, column, and wall footings.

Exterior walls: Painted CMU walls, with block pilasters.

Roof: B/U roof on poured concrete deck supported by steel bar joists.

Notable interior features, including machinery: Large wood-frame slider doors.

V. CURRENT FEATURES IF DIFFERENT FROM ORIGINAL:

Source: Field visit Spring 1996.

Foundation:

Exterior walls:

Roof:

Notable interior features, including machinery: Monorail crane system installed c1969, CE File #880-2. It is unclear whether or not this replaced an earlier system. Wood frame slider doors have been faced with metal at the exterior.

VI. BRIEF STATEMENT OF HISTORIC SIGNIFICANCE:

Building 887 may be eligible for the National Register under Criteria A and/or C if historic integrity continues to be maintained. Further research recommended.

VII. ASSOCIATED BUILDINGS:

Building 887 is shown on site plans dated c1951 as being associated with Check-Out Building 885 and Ready Room Building 886. These buildings continue to be nearby.

VIII. ADDITIONAL COMMENTS AND MAINTENANCE RECOMMENDATIONS:

Although currently used as a maintenance shop, and no longer equipped as a guided missile check-out station, Building 887 retains historic integrity in terms of location, design, setting, materials, workmanship, feeling, and association. The roof was replaced in-kind in 1992. Interior office and bathroom partitioning represent reversible modifications. All of the essential features of this building's original design remain intact. Nearly all of the original materials remain visible. Large wood slider doors represent the most distinctive feature. These doors use 4x4 wood posts as framing members and 3/8" plywood as sheathing. These materials are visible from the interior, but have been faced with metal on the exterior. The specs for the sliders are shown on c1951 drawings. Although Building 887 does not meet the "exceptional importance" stipulation imposed on buildings constructed within the last fifty years, this facility may be eligible when the fifty-year construction date is met in the year 2003. For this reason, Buildings 885, 886, and 887 warrant special management consideration. The Atomic Energy Commission, Sandia Labs (Albuquerque, NM) should be consulted to find out what research was conducted in this vicinity during the early Cold War years. Recommend that future modifications to Building 887 take into account the original open-bay plan, the exposed bar joists, and the original wood architectural features.

Suggested maintenance recommendations: All three buildings are structurally sound, and require routine maintenance only. Scrape, prime, and paint exterior.

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 in a fairly remote setting near the north-south runway. Missile Check-Out stations located nearby.

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: The exterior appears to be original. Roof above the deck replaced in 1992. Building 887 still consists of one large room with reversible partitioning.

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: Aside from a new control building and support buildings constructed to the north, the topography, associated buildings, and road access remain the same.

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

Comments: Block walls, concrete floor, wood architectural features, exposed bar joists, and exposed ceiling insulation, all original. One window added. Roof replaced in-kind.

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

Comments: Interior partitioning in the south corners of the building obscures original walls at those locations. 8' partitioning is reversible. Ceilings remain exposed.

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 [ ] Some elements remain [x] Retains integrity

Comments: Although used as maintenance shop, Building 887 retains all of the essential design and architectural features of its construction as a missile check-out station.

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 of feeling remains [ ] Some elements remain [x] Retains integrity

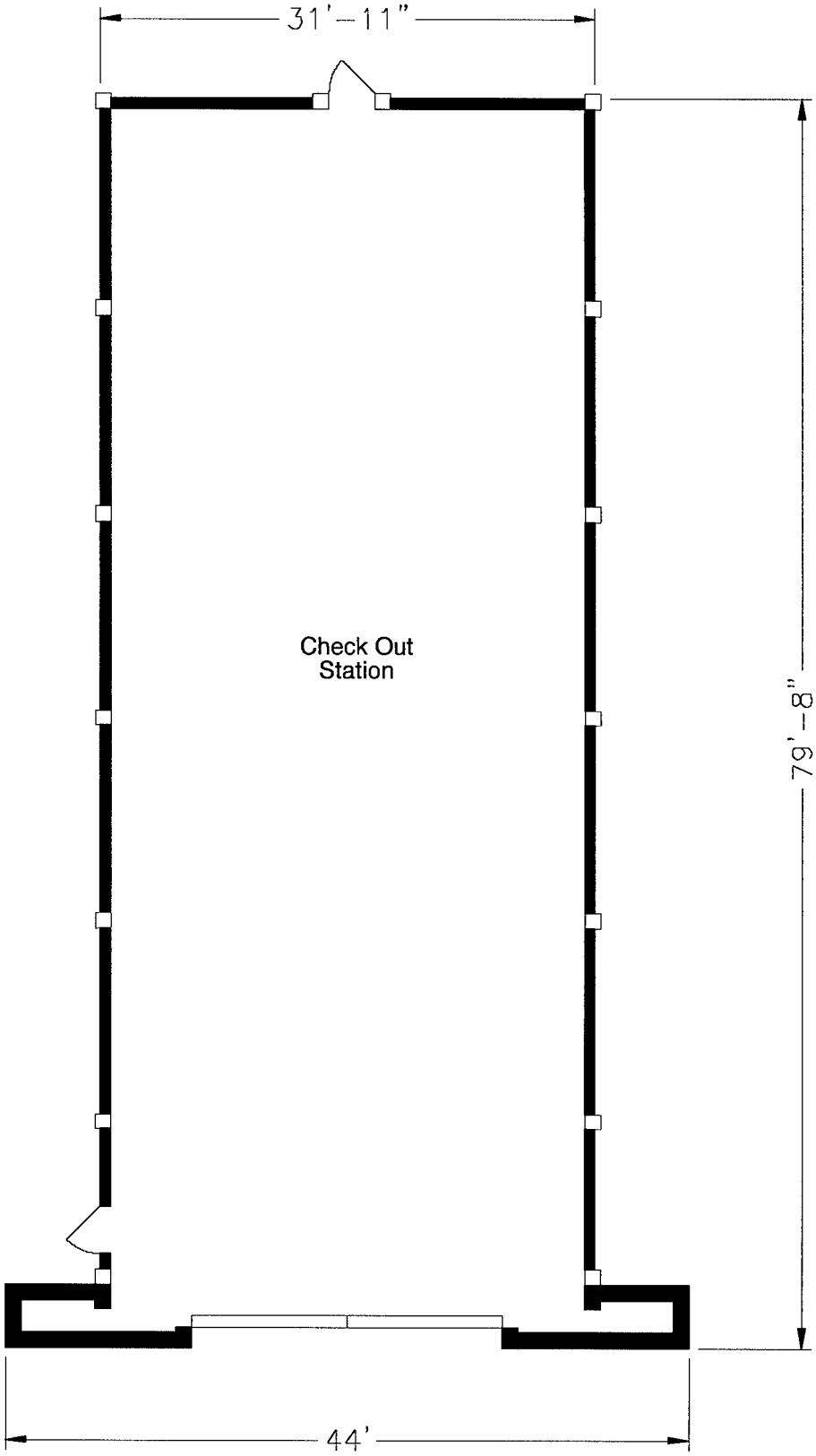
Comments: Continues to be situated near Check-Out Building 885 and Ready Room Building 886. The removal of the interior partitioning would contribute to its historic integrity.

X. FURTHER INFORMATION:

Surveyed By:

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

HAFB Report Number: **CRM Publication #3**
Photograph Citation: **CD-ROM #2-Photo #76**
Negatives On File: **49 CES/CEV, 550 Tabosa Ave, HAFB**
Date of Field Visit: **SPRING 1996**



Source: CE File #887-1 (c1951)

State of New Mexico Office of Cultural Affairs Historic Preservation Division	**BUILDING 887** Holloman Air Force Base Alamogordo, New Mexico	Project No. 35-95-HAFB-4	AutoCAD rendering by: *Steve Merrill* New Mexico State University **Sheet 1 of 1**	NEW MEXICO STATE UNIVERSITY

COLD WAR SURVEY: HOLLOMAN AIR FORCE BASE

NAME:
Current: Coulston Primate Biological Lab.
Historic: Static Missile Assembly Building.
Street Address: 1648 Vandergrift Rd, HAFB, 88330-7850.

Building Number: 1264

I. GENERAL INFORMATION:

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

Comments: Building 1264 is in need of routine maintenance.

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

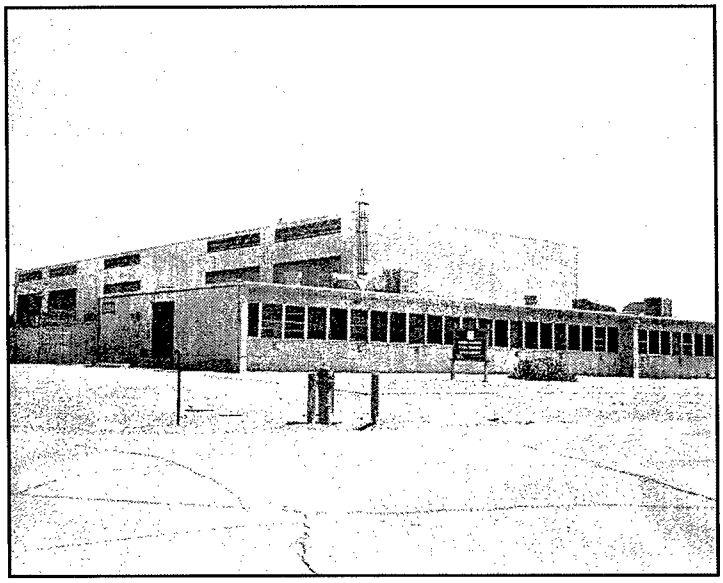
Comments: Subsequently improved to provide shelter for primate colony.

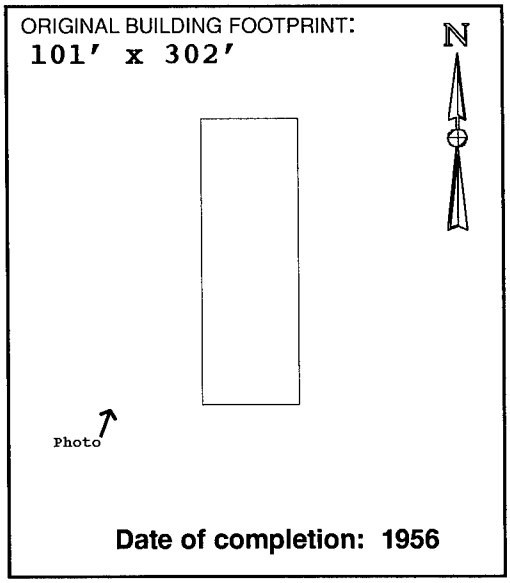
Preliminary Determination of National or State Register Eligibility:

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

Comments: Meets Criteria A and C at a national level of significance.

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





Date of completion: 1956

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 1264 was constructed in 1956 for use as a static missile assembly facility ("As-built" construction drawings CE File #1264-1). The large, high-bay areas with roll-up doors face west, with a perpendicular single-story wing of offices situated at the south elevation, and a parallel row of single-story laboratories at the rear (east) elevation. Subsequent improvements occurred throughout the 1960s in order to convert the missile assembly building into a "Bioastronautical Laboratory" to house a colony of chimpanzees used in early Cold War-era aerospace research.

Structural modifications include the modification of interior assembly bays (1960: CE File #1264-2), the addition of chimpanzee colony areas (1962: CE File #1264-4), and the addition of a wing of laboratories at the southeast elevation (1967: CE #1267-1). An architectural renovation modified Bays #1 and #3 to construct primate holding rooms (1968: CE File #1264-6). Although the original builder is unknown, Kenneth S. Clark (Santa Fe, NM) provided the original construction blueprints.

III. HISTORIC AND CURRENT USE:

Source: Real Property Accountable Record/1264; Field visit Summer 1995.

Current Function: Coulston Foundation Primate Biological Laboratory.

Original Function: Static Missile Assembly; Bioastronautic Research.

Interim Functions: "SC Lab Human Eng" (n.d.); "SC Lab Med" (c1968).

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

Source: CE File #1264-1 (1956).

Foundation: Concrete footing/foundation wall; Concrete grade beam.

Exterior walls: Concrete Masonry Units; Ribbed aluminum siding; Rigid insulation.

Roof: Built-up w/ gravel over rigid insulation & poured gypsum fill. Steel frame.

Notable interior features, including machinery: Crane rail and beam frame.

V. CURRENT FEATURES IF DIFFERENT FROM ORIGINAL:

Note: Assessment of Colony area (1962) and Laboratory addition (1967) based on field visit Summer 1995.

Foundation: Colony: Same as Section IV. Lab: Concrete slab and grade beam.

Exterior walls: Colony: Same as Section IV. Lab: Concrete masonry units.

Roof: Original roof modified in 1967 to a 5-ply built-up roof on rigid insulation around the perimeter. Colony: Same as Section IV. Lab: Built-up on rigid insulation and metal roof deck; Steel joists.

Notable interior features, including machinery: Crane rail and beam frame still present in Bay 3.

VI. BRIEF STATEMENT OF HISTORIC SIGNIFICANCE:

Building 1264 is eligible under Criteria A and C at a national level for its unique design features in support of early Cold War guided missile testing, and early aerospace research using chimpanzees and other animals.

VII. ASSOCIATED BUILDINGS:

Building 1264 was associated with the aeromedical facilities during its second period of significance, including Buildings 1200, 1201, 1202, 1203, 1204, 1205, 1206, and the Daisy Test Track.

VIII. ADDITIONAL COMMENTS AND MAINTENANCE RECOMMENDATIONS:

During its first period of historic significance as a static missile assembly facility, Building 1264 was associated with the Sensitive Equipment Building 1262, the Component Assembly Building 1261, the Vehicle Garage and Maintenance Building 1263, and the Static Missile Lab Building 1265 (CE Files #1264). This facility appears to have been serviced by a railroad line shown in early photographs but no longer in existence. Nearly all of the exterior, including the metal bay doors and the office/reception area, remains essentially as it was originally constructed. The interior was structurally and architecturally modified as a subsequent improvement and shift in function to accommodate a large primate colony used in early aerospace research. The original steel roof framing is still visible in Bay 3, where the crane rail and beam frame is located. Very few vestiges of the missile assembly operation remain. Just as important, however, is the role that Building 1264 played in the national Cold War mission to explore outer space. Building 1264 retains all elements of historic integrity from this second period of significance. Special management consideration is warranted.

Suggested routine maintenance: This building is in need of routine maintenance, particularly at the exterior soffit and walls. Inspect roof/HVAC/ plumbing at south entrance to determine the cause of buckled ceiling tiles.

IX. ASSESSMENT OF HISTORIC INTEGRITY:

Note: This assessment based on Building 1264's second period of significance, c1961-c1968 (aerospace research).

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: Nearby railroad grade still visible, though no longer in use.

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: Although originally constructed as a missile assembly facility, Building 1264 was modified c1961 for use as an aerospace research facility. Large, open bay areas were partitioned to enclose a primate colony. A large (several hundred) primate colony continues to be housed in Building 1264.

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 [ ] Retains most [x] Retains all or nearly all of its cultural setting

Comments: Several new buildings constructed nearby. Railroad no longer intact. Circular chimpanzee consortium constructed in the vicinity no longer visible.

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

Comments: The early interior modifications were assessed as subsequent improvements to the original guided missile assembly facility.

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

Comments: The exterior is reminiscent of its original design as a missile assembly facility. The interior continues to reflect its role as a research facility using primates and other animals.

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 [ ] Some elements remain [x] Retains integrity

Comments:

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

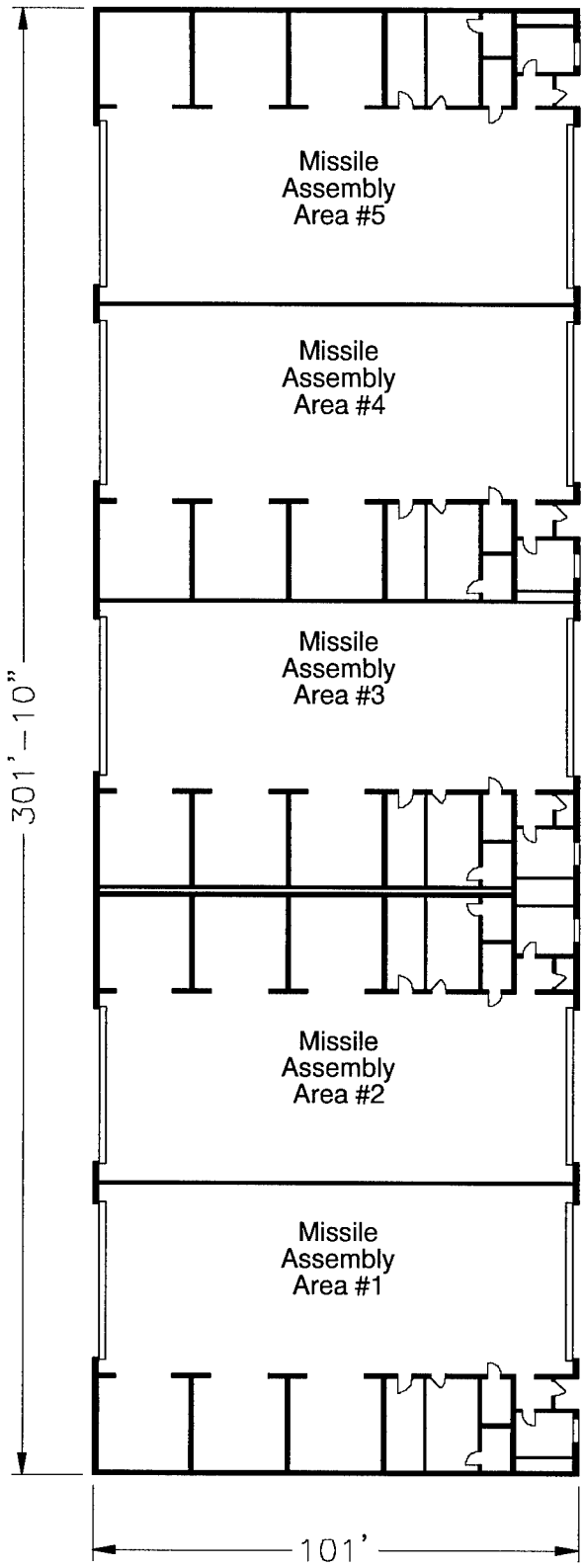
Comments: Shifting public views in response to research using animals, particulary primates, warrant further research.

X. FURTHER INFORMATION:

Surveyed By:

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

HAFB Report Number: **CRM Publication #3**
Photograph Citation: **CD-ROM #1-Photo #101**
Negatives On File: **49 CES/CEV, 550 Tabosa Ave, HAFB**
Date of Field Visit: **SUMMER 1995**



Source: CE File #1264-1 (1956)

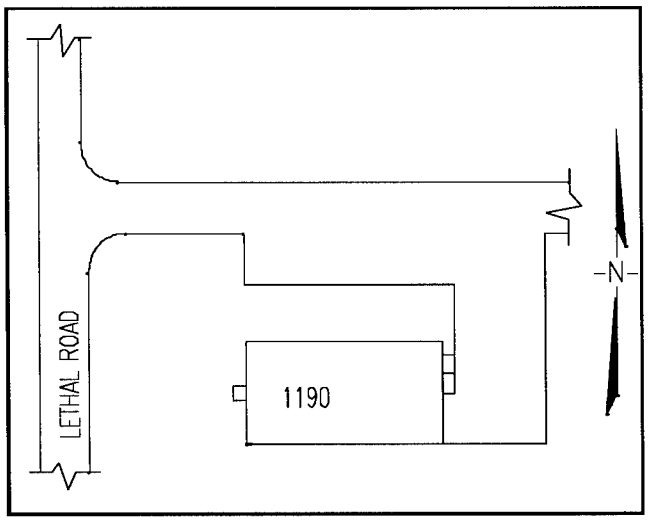
State of New Mexico Office of Cultural Affairs Historic Preservation Division	**BUILDING 1264** Holloman Air Force Base Alamogordo, New Mexico	Project No. 35-95-HAFB-4	AutoCAD rendering by: *Mike Gardner* New Mexico State University **Sheet 1 of 1**	NEW MEXICO STATE UNIVERSITY

Field Survey: Combat Weapons and Support Systems

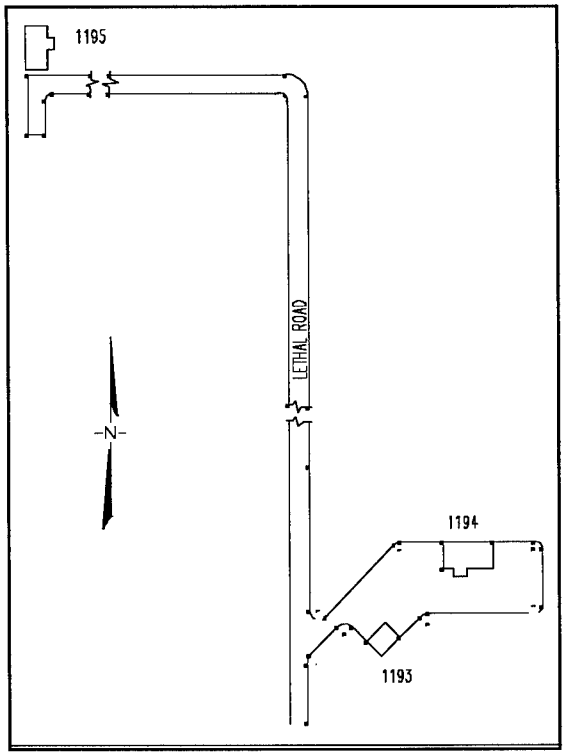
II. Combat Weapons and Support Systems

- Missiles
  - -Building 800
  - -Building 820
  - -Building 822
  - -Building 823
  - -Building 824
  - -Building 882
  - -Building 885
  - -Building 886
  - -Building 887
  - -Building 1264
- **Check Stands/Unconventional Fuels**
  - **-Building 1190**
  - **-Building 1193**
  - **-Building 1194**
  - **-Building 1195**
- Alert Facilities
- Maintenance Docks/Hangars
  - -Building 500
  - -Building 816
  - -Building 817
  - -Building 825
- Communications
- Storage
  - -Building 1197
  - -Building 1198
- Memorial
- Weapons Platforms
- Documentation

Unconventional Fuels Bldgs 1190, 1193, 1194, 1195



Site plan. Building 1190.



Site plan. Buildings 1193, 1194, and 1195.

COLD WAR SURVEY: HOLLOMAN AIR FORCE BASE

NAME:
Current: Security Police Building.
Historic: Change House/Unconventional Fuel Storage.
Street Address: 1514 Lethal Road, HAFB, 88330-7840.

Building Number: 1190

I. GENERAL INFORMATION:

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

Comments: Building 1190 is in need of routine maintenance.

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

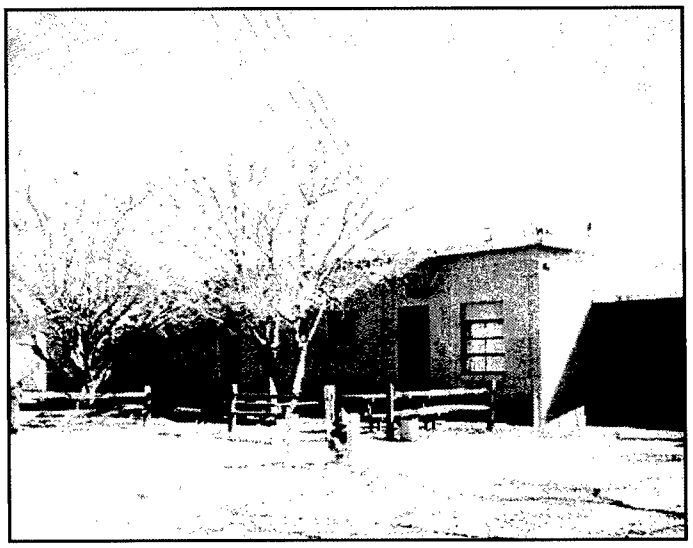
Comments: Interior partitions have been removed (date unknown).

Preliminary Determination of National or State Register Eligibility:

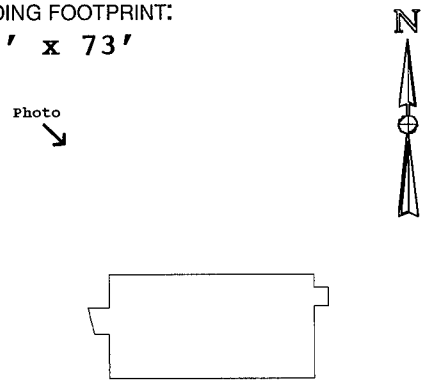
[ ] Exceptional importance [ ] Potentially eligible [x] Further research recommended [ ] Ineligible

Comments: Does not meet "exceptional importance" rule. See Section VIII.

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



BUILDING FOOTPRINT:
37' x 73'



Date of completion: c1952

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 1190 is a single-story, flat-roofed, concrete masonry unit (CMU) building exhibiting large roll-up equipment doors, numerous personnel access doors, and asymmetrical window fenestration. Construction drawings prepared in 1951 were stamped "As-built" but were not stamped in the revision block. Real Property Accountable Record/1190 indicates that Building 1190 was completed c1952 as a Change House for unconventional fuels personnel. W. C. Kruger Company (Santa Fe, NM) provided the construction drawings stored in CE File #1190. The builder is not known. A comparison of the current building and original blueprints reveals that no structural modifications to the building have occurred.

III. HISTORIC AND CURRENT USE:

Source: Real Property Accountable Record/1190; CE File 1195-1 (c1951).

Current Function: Security Police operations.

Original Function: Change House, Unconventional Fuels.

Interim Functions: "RC Con House" (n.d.); "Prpln R-L Fuel/Lub" (n.d.); Prop Res Lab Rocket" (n.d.); "Prpln R-L Rkt" (n.d.); Sp Operations (n.d.).

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

Source: CE File #1190-1 (c1951).

Foundation: Poured concrete footings and grade beams; concrete slab.

Exterior walls: Concrete masonry units (CMU).

Roof: (Built-up) gravel on rigid insul.; 2" slab sup. by metal lath and steel joists.

Notable interior features, including machinery: Shower stalls, locker room, dressing room, and laboratories.

V. CURRENT FEATURES IF DIFFERENT FROM ORIGINAL:

Source: Field visit Summer 1995.

Foundation:

Exterior walls:

Roof:

Notable interior features, including machinery: None noted.

VI. BRIEF STATEMENT OF HISTORIC SIGNIFICANCE:

Recommend reassessment of Building 1190 once the fifty-year construction date is met in the year 2002. This building retains historic integrity.

VII. ASSOCIATED BUILDINGS:

According to CE File #1190-1 *Title Sheet*, Unconventional Fuels Storage Building 1190 was associated with Building 1194 (Booster Inspection), Building 1192 (Add Storage), Building 1191 (Aniline Storage), Building 1193 (Continuity Check Stand), and Building 1195 (Solid Fuel Conditioning).

VIII. ADDITIONAL COMMENTS AND MAINTENANCE RECOMMENDATIONS:

This building retains all aspects of historic integrity. Although not meeting the "exceptional importance" standard imposed on buildings constructed within the last fifty years, Building 1190 remains potentially eligible as an individual property once the fifty-year date of construction is met in the year 2002. Recommend inclusion in a Multiple Property nomination along with the other unconventional fuels storage buildings. Building 1190 is currently being used as a storage and administrative facility by the 49th Squadron Security Police personnel. The original shower stalls, dressing room, locker room, shop, tools and supply rooms are all used for storage. Free-standing shelves have been installed to accommodate storage. As a result, some original doors and windows are blocked from view. Minor alterations have occurred at the interior. Two partitions have been removed. Glazed tile walls appear to have been added to at least one office. Vinyl tile has been installed over one section of the concrete slab in what once served as a machine shop. Some of the window panes have been painted. Because this facility remains potentially eligible, recommend that the original design features be considered in future modifications, and that photographs document any changes to the essential features. Suggested routine maintenance: Prune trees away from principal facade. Noticeable water damage warrants inspection of the roof. Replace broken window panes. Repair hole at exterior south elevation wall.

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

Comments: Interior room layout as a Change House remains a key design element. This layout includes large open interior spaces, smaller labs/offices, and showers, dressing, and locker rooms used by unconventional fuels personnel.

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 no longer used as such, Building 1190 continues to be situated in the vicinity of other buildings historically associated with unconventional fuels testing and storage. This building appears to been recently landscaped.

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

Comments: Two interior partitions removed. Glazed tile walls in office rather than CMU shown on original drawings.

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

Comments: Nearly all original workmanship remains visible, particularly at 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 [ ] Some elements remain [x] Retains integrity

Comments: Aside from the change in operations occurring here, Building 1190 remains essentially as it was originally constructed.

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 [x] Some elements remain [ ] Retains integrity

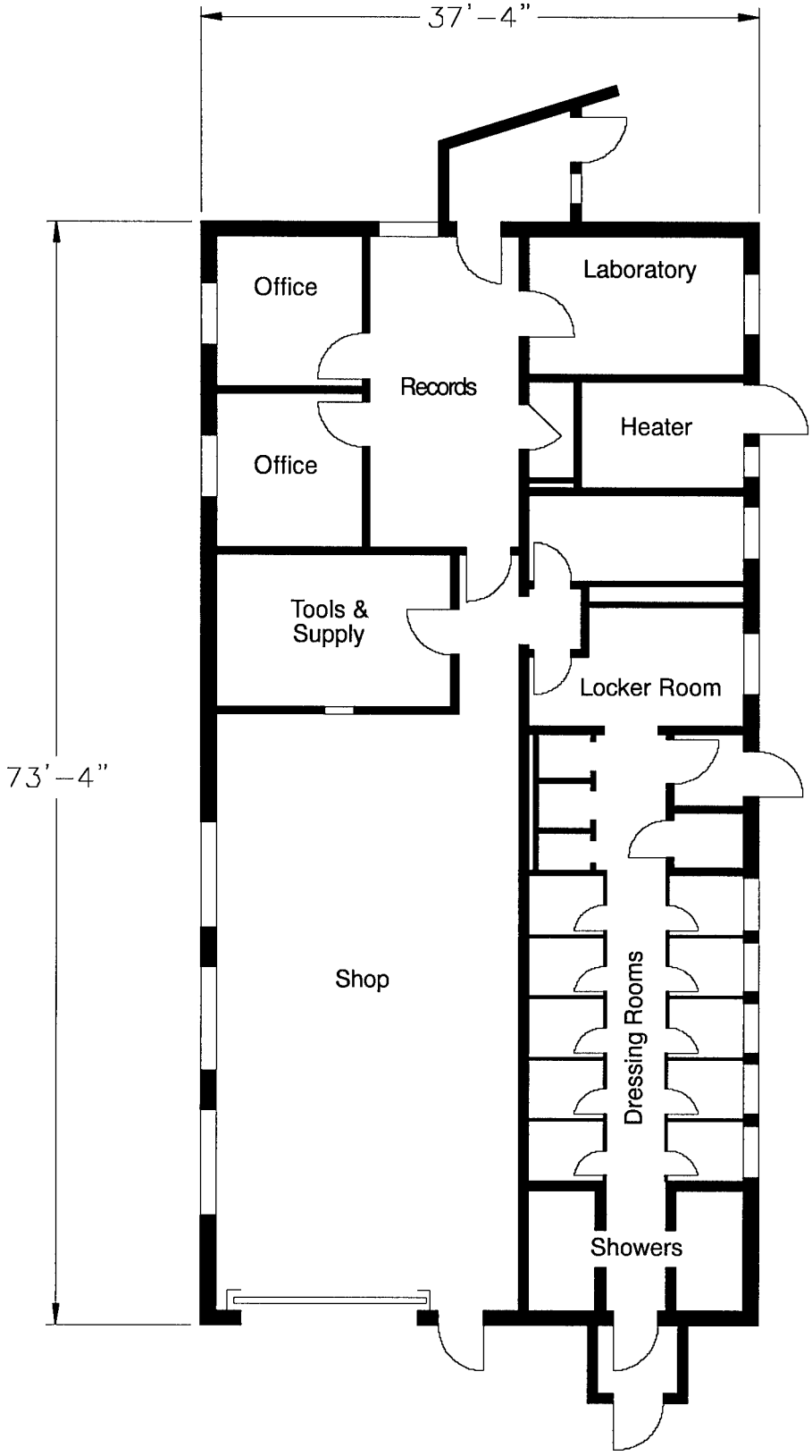
Comments:

X. FURTHER INFORMATION:

Surveyed By:

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

HAFB Report Number: **CRM Publication #3**
Photograph Citation: **CD-ROM #-Photo #**
Negatives On File: **49 CES/CEV, 550 Tabosa Ave, HAFB**
Date of Field Visit: **SUMMER 1995**



Source: CE File #1190-1 (c1951)

State of New Mexico Office of Cultural Affairs Historic Preservation Division	**BUILDING 1190** Holloman Air Force Base Alamogordo, New Mexico	Project No. 35-95-HAFB-4	AutoCAD rendering by: *Mike Gardner* New Mexico State University **Sheet 1 of 1**	NEW MEXICO STATE UNIVERSITY

COLD WAR SURVEY: HOLLOMAN AIR FORCE BASE

NAME: **Building Number:**
Current: Test Stand (Abandoned).
Historic: Continuity Check Stand/Unconventional Fuel.
Street Address: Lethal Road, HAFB, 88330-7840.

1193

I. GENERAL INFORMATION:

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

Comments: Building 1193 is in need of minor routine maintenance.

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

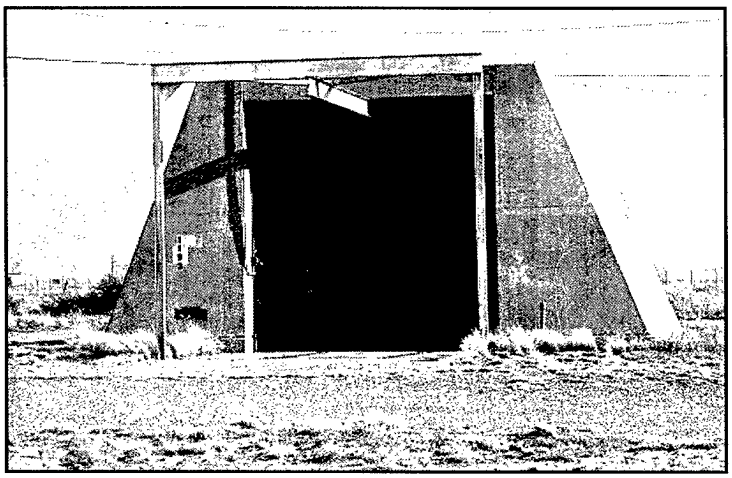
Comments: The hoist system has been removed.

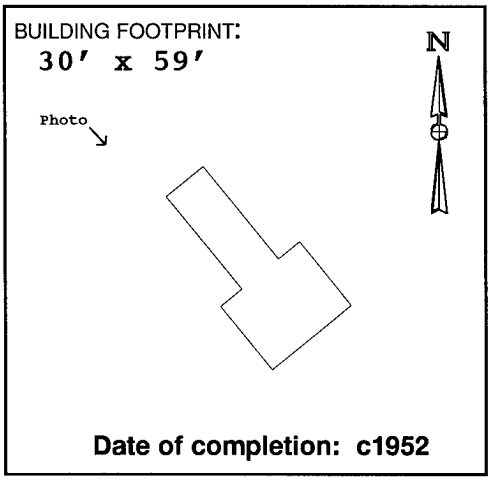
Preliminary Determination of National or State Register Eligibility:

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

Comments: Does not meet "exceptional importance" rule. See Section VIII.

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 1193 is a unique structure, designed primarily as a continuity check stand for testing boosters using unconventional fuels. It is made of cast-in-place, reinforced concrete walls on three sides, with one side left open. The structure is somewhat pyramidal in shape. The walls are two feet thick at the top, widening to seven feet thick at the bottom. A track and hoist system leads into the structure. Explosion-proof electrical switches are found at the interior. This structure has no doors and no windows. Although the builder is unknown, W. C. Kruger Company (Santa Fe, NM) provided the architectural work. No structural modifications to the original structure noted.

III. HISTORIC AND CURRENT USE:

Source: Real Property Accountable Record/1193; CE File #1195-1 (1952).

Current Function: (Vacant).

Original Function: Missile Assembly/Continuity Check Stand.

Interim Functions: "Test Stand" (c1980); "Test Stand Rocket" (n.d.).

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

Source: CE File #1195-1 (c1952).

Foundation: Poured concrete footings. Concrete slab.

Exterior walls: Poured concrete (wider at bottom).

Roof: Poured concrete slab.

Notable interior features, including machinery:

4-ton manual hoist mechanism supported by track I-beam and crane I-beam over track rail. The 80# track rail is set in the foundation slab. Explosion-proof switches located at the north wall. The concrete side walls are two feet thick at the top, widening to seven feet thick at the bottom.

V. CURRENT FEATURES IF DIFFERENT FROM ORIGINAL:

Source: Field visit Summer 1995.

Foundation:

Exterior walls:

Roof:

Notable interior features, including machinery:

Although hoist has been removed, the track and switches remain intact. The explosion-proof switches were manufactured by Appleton Electric Company (Chicago, IL).

VI. BRIEF STATEMENT OF HISTORIC SIGNIFICANCE:

Building 1193 does not meet the "exceptional importance" standard imposed on structures built within the last fifty years. This check stand may, however, be eligible under Criteria A and/or C for its distinctive role in Cold War materiel development and its unusual design characteristics once the fifty-year construction date is met in the year 2002.

VII. ASSOCIATED BUILDINGS:

According to CE File #1195-1 *Title Sheet*, Building 1193 was associated during its early Cold War period of significance with Building 1190 (Change House), Building 1192 (Add Storage), Building 1191 (Aniline Storage), Building 1194 (Booster Inspection), and Building 1195 (Solid Fuel Conditioning).

VIII. ADDITIONAL COMMENTS AND MAINTENANCE RECOMMENDATIONS:

Building 1193 remains essentially as it was originally constructed c1952, except for 4 x 10 wood planks missing at the back wall. The hoist mechanism has been removed. This building is no longer used as a check stand, and is currently abandoned. This structure should be managed in conjunction with Building 1194. Due to the unique design of Building 1193, and its association with Building 1194, recommend that this structure be reassessed once the fifty-year construction date is reached in the year 2002. Complete photo-documentation should be provided prior to any future modifications.

Suggested routine maintenance: The exterior concrete is spalling and should be cleaned and patched. Remove the vegetation at the foundation. Scrape and paint the metal track.

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

Comments: All original features remain, except hoist mechanism and wood planks.

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

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

Comments: Buildings 1193 and 1194 remain in an unmodified and isolated setting.

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

Comments: 4 x 10 wood planks attached to interior rear wall have been removed.

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

Comments:

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 [ ] Some elements remain [x] Retains integrity

Comments: This structure remains enclosed on three sides by massive poured concrete walls, and is open at one elevation. This building retains its original aesthetic character.

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

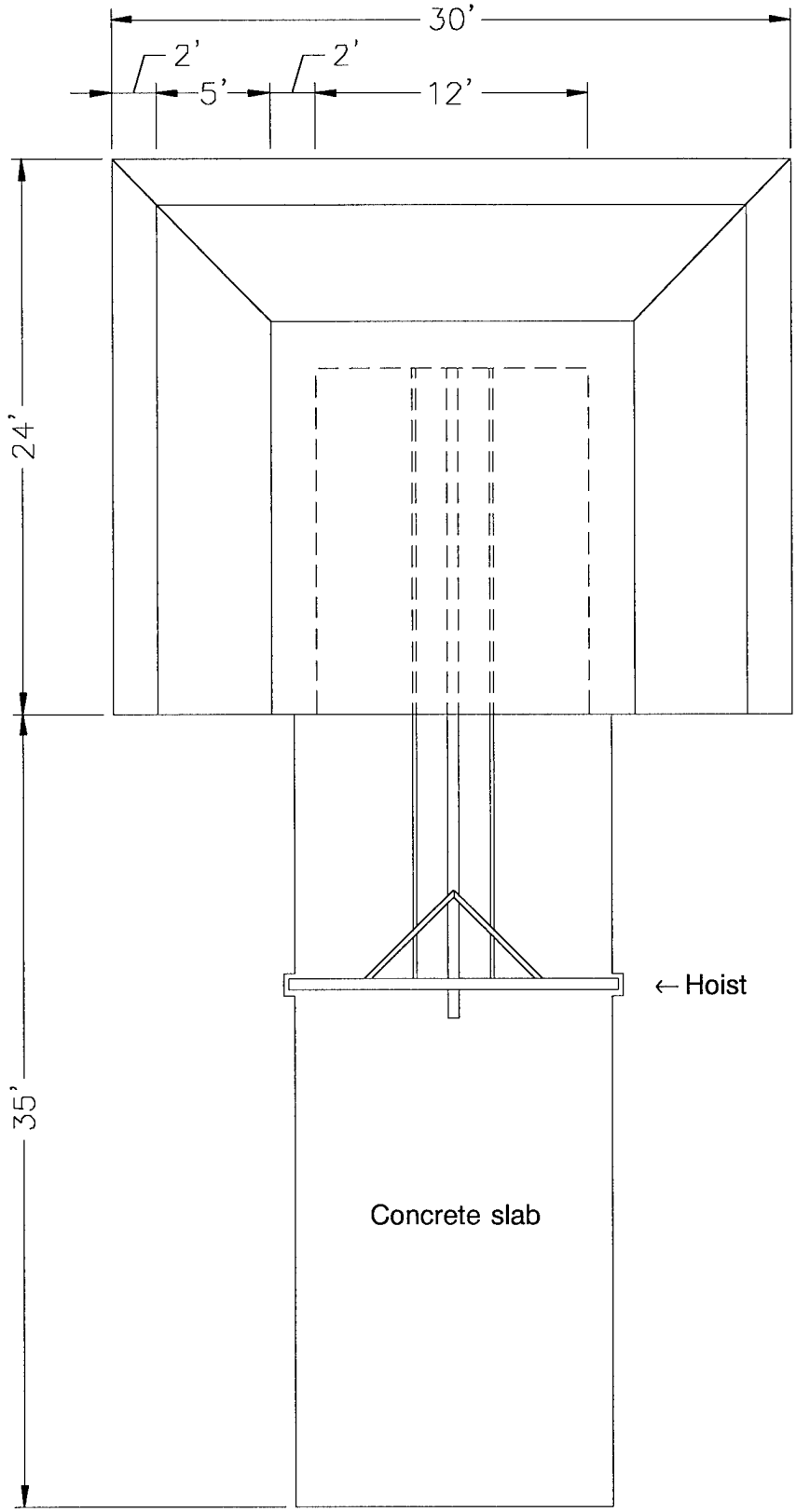
Comments: The isolated setting, track rail, and nearby booster inspection building (Building 1194) contribute to this building's integrity of association.

X. FURTHER INFORMATION:

Surveyed By:

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

HAFB Report Number: **CRM Publication #3**
Photograph Citation: **CD-ROM #3-Photo #29**
Negatives On File: **49 CES/CEV, 550 Tabosa Ave, HAFB**
Date of Field Visit: **SUMMER 1995**



Source: CE File #1195-1 (c1951)

State of New Mexico Office of Cultural Affairs Historic Preservation Division	**BUILDING 1193** Holloman Air Force Base Alamogordo, New Mexico	Project No. 35-95-HAFB-4	AutoCAD rendering by: *Steve Merrill* New Mexico State University **Sheet 1 of 1**	NEW MEXICO STATE UNIVERSITY

COLD WAR SURVEY: HOLLOMAN AIR FORCE BASE

NAME: **Building Number:**

Current: Research Equipment Storage.
Historic: Booster Inspection/Unconventional Fuel.
Street Address: 1584 Lethal Rd., HAFB, 88330-7840.

1194

I. GENERAL INFORMATION:

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

Comments: Building 1194 is in need of minor routine maintenance.

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

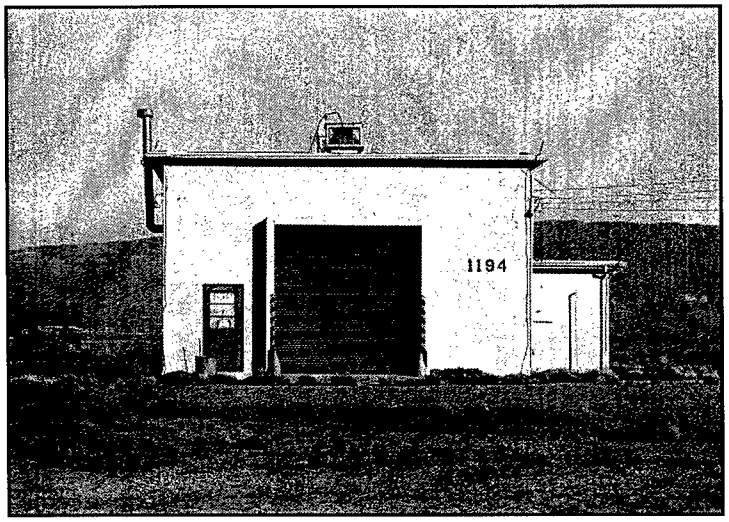
Comments: Interior partitioning is reversible.

Preliminary Determination of National or State Register Eligibility:

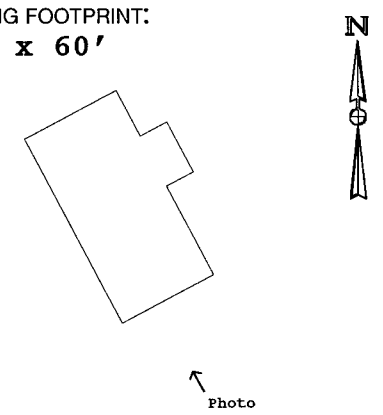
[ ] Exceptional importance [ ] Potentially eligible [x] Further research recommended [ ] Ineligible

Comments: Does not meet "exceptional importance" rule. See Section VIII.

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



BUILDING FOOTPRINT:
30' x 60'



Date of completion: c1952

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 1194 is a rectangular, single-story, high bay structure made of concrete masonry units (CMU) and exhibiting a flat roof. The principal elevation faces west, showing one large roll-up door, and one personnel door. One row of windows is located below the eave line at the north and south elevations. The ceiling at the interior is exposed. "As-built" construction drawings show that Building 1194 was completed in 1952. W. C. Kruger Co. (Santa Fe, NM) provided the architectural work (1952: CE File 1194). The builder is unknown. No structural modifications to the original structure were noted.

III. HISTORIC AND CURRENT USE:

Current Function: Research equipment storage.

Original Function: Missile Assembly Test Building/Booster Inspection.

Interim Functions: "Mls/Space Rsch Tst" (n.d.); "M/Assembly Test Bldg" (n.d.); "Shp Wpn and Rlse Sys" (c1976); "BE Stor Cv Fclty" (n.d.); "Rsch Equip Stor" (c1988).

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

Source: CE File #1195-1 (c1952).

Foundation: Poured concrete footings and stem wall. Slab on compacted fill.

Exterior walls: CMU between concrete columns and bond beams.

Roof: BUR gravel. Rigid insulation. 2" concrete deck supported by steel joists.

Notable interior features, including machinery:

4-ton Wright Company chain-operated crane and hoist system, hoist no. 5197, serial no. 4925. The hoist is attached to a runway "I"-beam (crane) supported by steel support beams. Large metal roll-up doors at east and west elevations.

V. CURRENT FEATURES IF DIFFERENT FROM ORIGINAL:

Source: Field visit Summer 1995.

Foundation:

Exterior walls:

Roof:

Notable interior features, including machinery: None noted.

VI. BRIEF STATEMENT OF HISTORIC SIGNIFICANCE:

Building 1194, although not meeting the "exceptional importance" standard, may be eligible for the National Register for its role in early Cold War materiel development once the fifty-year construction date is met in 2002.

VII. ASSOCIATED BUILDINGS:

According to CE File #1195-1 (c1951) *Title Sheet*, Building 1194 was associated with Building 1190 (Change House), Building 1192 (Add Storage), Building 1191 (Aniline Storage), Building 1193 (Continuity Check Stand), and Building 1195 (Solid Fuel Conditioning).

VIII. ADDITIONAL COMMENTS AND MAINTENANCE RECOMMENDATIONS:

Building 1194 remains essentially as it was constructed c1952. The original floor plan layout included one main room and an equipment room. A small area in the northwest corner of the main room has been partitioned. No documentation was found pertaining to this modification. This minor partitioning of the main room is reversible. This building is no longer associated with either missile assembly and test activities or unconventional fuels storage, and currently serves as an equipment storage room for the 6585th Test Group. Construction drawings (1956: CE File # 1194-1) show that an addition to this building was planned. There is no indication that this addition was ever built. Because this building retains historic integrity, and may be eligible for the National Register under Criteria A and/or C once the 50-year construction date is reached in the year 2002, recommend that future modifications take essential design features into account. Note: One isolated occurrence of prehistoric artifacts was noted on the grounds north of the building, including one white chert core, and one secondary chert flake.

Suggested routine maintenance: Scrape, prime, and paint the exterior. Replace downspouts. Prune landscape plantings away from foundation.

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: Construction drawings show plans for an addition to the north elevation (1956: CE File #1194-1). There is no evidence that this addition was ever built.

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: The high open-bay floor plan allowing the crane and hoist system, and the large metal equipment roll-up doors remain as key design elements.

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

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

Comments: Buildings 1193 and 1194 remain in an unmodified and isolated setting.

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

Comments: Nearly all of the historic materials used to construct this building remain visible.

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

Comments: Two doors have been replaced. All windows appear to be original. Interior partitions at the northwest corner divide the original floor plan.

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 [ ] Some elements remain [x] Retains integrity

Comments: Although retaining its original open floor plan, this building is currently used for storage of modern equipment.

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

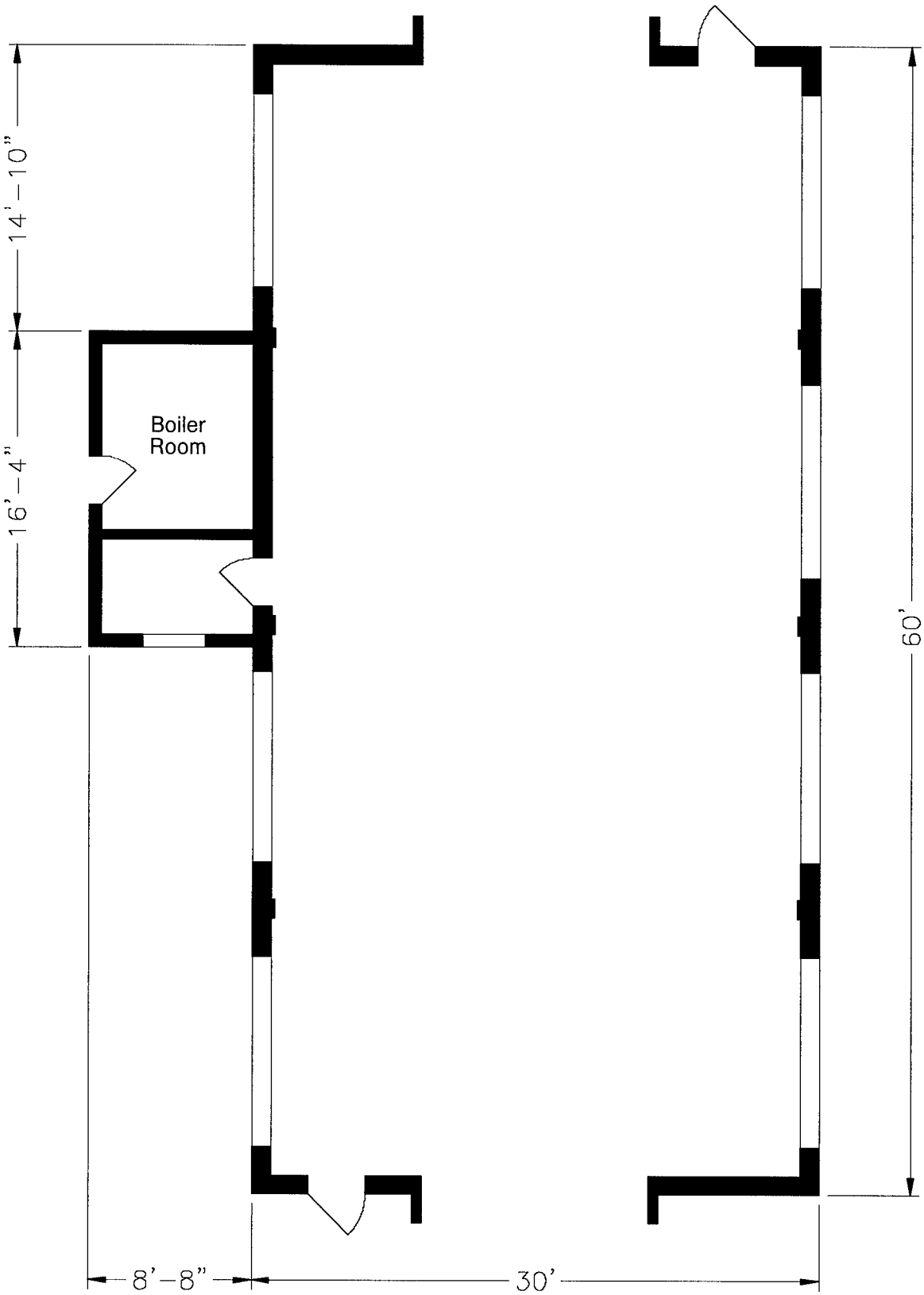
Comments: The open floor plan, isolated setting, hoist system, and nearby continuity check stand (Building 1193) contribute to this building's integrity of association.

X. FURTHER INFORMATION:

Surveyed By:

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

HAFB Report Number: **CRM Publication #3**
Photograph Citation: **CD-ROM #3-Photo #31**
Negatives On File: **49 CES/CEV, 550 Tabosa Ave, HAFB**
Date of Field Visit: **SUMMER 1995**



Source: CE File #1195-1 (c1951)

State of New Mexico Office of Cultural Affairs Historic Preservation Division	**BUILDING 1194** Holloman Air Force Base Alamogordo, New Mexico	Project No. 35-95-HAFB-4	AutoCAD rendering by: *Steve Merrill* New Mexico State University **Sheet 1 of 1**	NEW MEXICO STATE UNIVERSITY

COLD WAR SURVEY: HOLLOMAN AIR FORCE BASE

NAME: **Building Number:**

Current: Defense Mapping Agency Shop and Storage.
Historic: Solid Fuel Conditioning/Unconventional Fuel.
Street Address: 1595 Lethal Road, HAFB, 88330-7840.

1195

I. GENERAL INFORMATION:

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

Comments: Building 1195 is in need of minor routine maintenance.

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

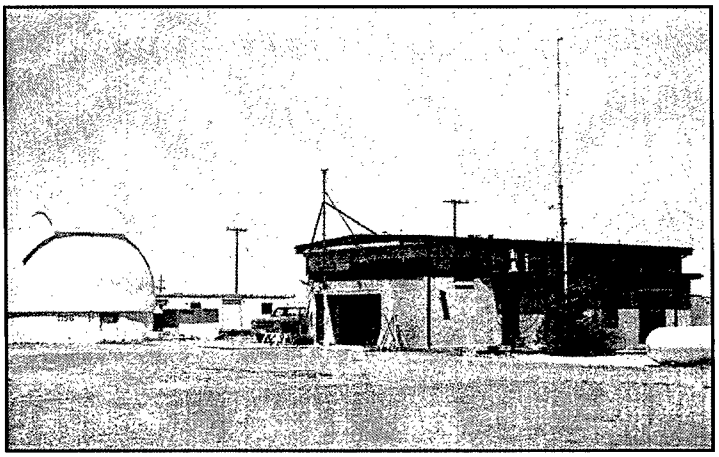
Comments: Pitched roof added overtop original c1992.

Preliminary Determination of National or State Register Eligibility:

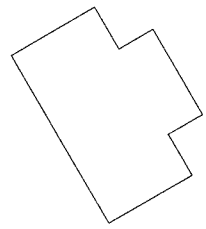
[ ] Exceptional importance [ ] Potentially eligible [x] Further research recommended [ ] Ineligible

Comments: Does not meet "exceptional importance" rule. See Section VIII.

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



BUILDING FOOTPRINT:
37' x 52'



N

Photo

Date of completion: 1952

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 1195 is a rectangular, single-story, high bay concrete masonry unit structure with a slightly pitched gable roof and accordion doors at the principal facade. "As-built" construction drawings date the completion of this building as 1952. W. C. Kruger Co. (Santa Fe, NM) provided the architectural work. The builder is unknown. Real Property Accountable Record/1195 indicates that Pueblo Enterprises (El Paso, TX) added a low-pitched gable roof overtop the existing flat roof c1992. This represents the only known structural modification to Building 1195 since its original construction.

III. HISTORIC AND CURRENT USE:

Source: Real Property Accountable Record/1195.

Current Function: Shop and storage for the Defense Mapping Agency.

Original Function: Solid Fuel Conditioning Building (1952).

Interim Functions: "Prop Res Lab Fuel" (n.d.); "Sc Lab Physics" (c1965); "Msl/ Space Rsch Tst" (c1970); "Rsch Equip Stor" (c1975).

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

Source: CE File #1195-1 (c1951); CE File #1195-2 (c1961).

Foundation: Poured concrete wall and column footings. 6" slab on compacted fill.

Exterior walls: Painted concrete masonry units (CMU) between concrete columns.

Roof: BUR w/gravel. Rigid insulation. 2" conc. slab supported by steel joists.

Notable interior features, including machinery:
4-ton Wright Co. crane and hoist system, serial #4924, Conco Crane Engineering Works, Mendota Illinois. The hoist is attached to a runway "I" beam (crane) supported by steel beams. Inside folding accordion-type doors at loading dock.

V. CURRENT FEATURES IF DIFFERENT FROM ORIGINAL:

Source: Field visit Summer 1995.

Foundation:

Exterior walls:

Roof: Built-up roofing membrane on wood sheathing and steel gable frame.

Notable interior features, including machinery:
Note: Crane and hoist system described above still intact.

VI. BRIEF STATEMENT OF HISTORIC SIGNIFICANCE:

Building 1195 was constructed as a missile and unconventional fuels test and storage facility in 1952, and retains historic integrity. Although currently not meeting the "exceptional importance" criteria, recommend that this facility be reassessed once the 50-year construction date is met in 2002.

VII. ASSOCIATED BUILDINGS:

According to CE File #1195-1, *Title Sheet*, Building 1194 was at one time associated with other unconventional fuels storage buildings, including Building 1192 (Add Storage), Building 1191 (Aniline Storage), Building 1193 (Continuity Check Stand), and Building 1194 (Booster Inspection).

VIII. ADDITIONAL COMMENTS AND MAINTENANCE RECOMMENDATIONS:

Everything except the roof at Building 1195 remains essentially as it was constructed in 1952. The addition of the low-pitch roof as part of a base-wide roof repair plan alters the exterior appearance. The original floor plan layout included one main room and an equipment room. Lavatory and storage partitions were later added to the main room. This minor partitioning of the main room is reversible. This building is no longer associated with fuels storage. This building continues to be associated with the nearby dome as equipment storage only. According to Real Property Accountable Record/1195, ownership of this building was transferred from the White Sands Missile Range to Holloman Air Force Base c1964. Recommend that this facility and the other unconventional fuels storage/missile test facilities in the vicinity be reassessed for National Register eligibility as individual properties or contributing features once the fifty-year construction date is met (c2002). Recommend photo-documentation of these buildings in the interim prior to alterations to any essential design elements. Suggested routine maintenance: Repair ductwork in equipment room. Scrape, prime, and paint exterior walls.

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

Comments: The crane and hoist system and the large accordion equipment doors remain as key design elements.

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

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

Comments: Continues to be situated in an isolated setting adjacent to an observatory.

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

Comments:

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

Comments: Slightly pitched roof added over original roof. Windows, doors remain the same, though panes have been covered with metal grates.

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 [ ] Some elements remain [x] Retains integrity

Comments:

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: The remaining open portion of the main room, the crane system, the accordion doors, and the bollards at the loading ramp are all reminiscent of Building 1195's association with early missile test and fuel storage activities.

X. FURTHER INFORMATION:

Surveyed By:

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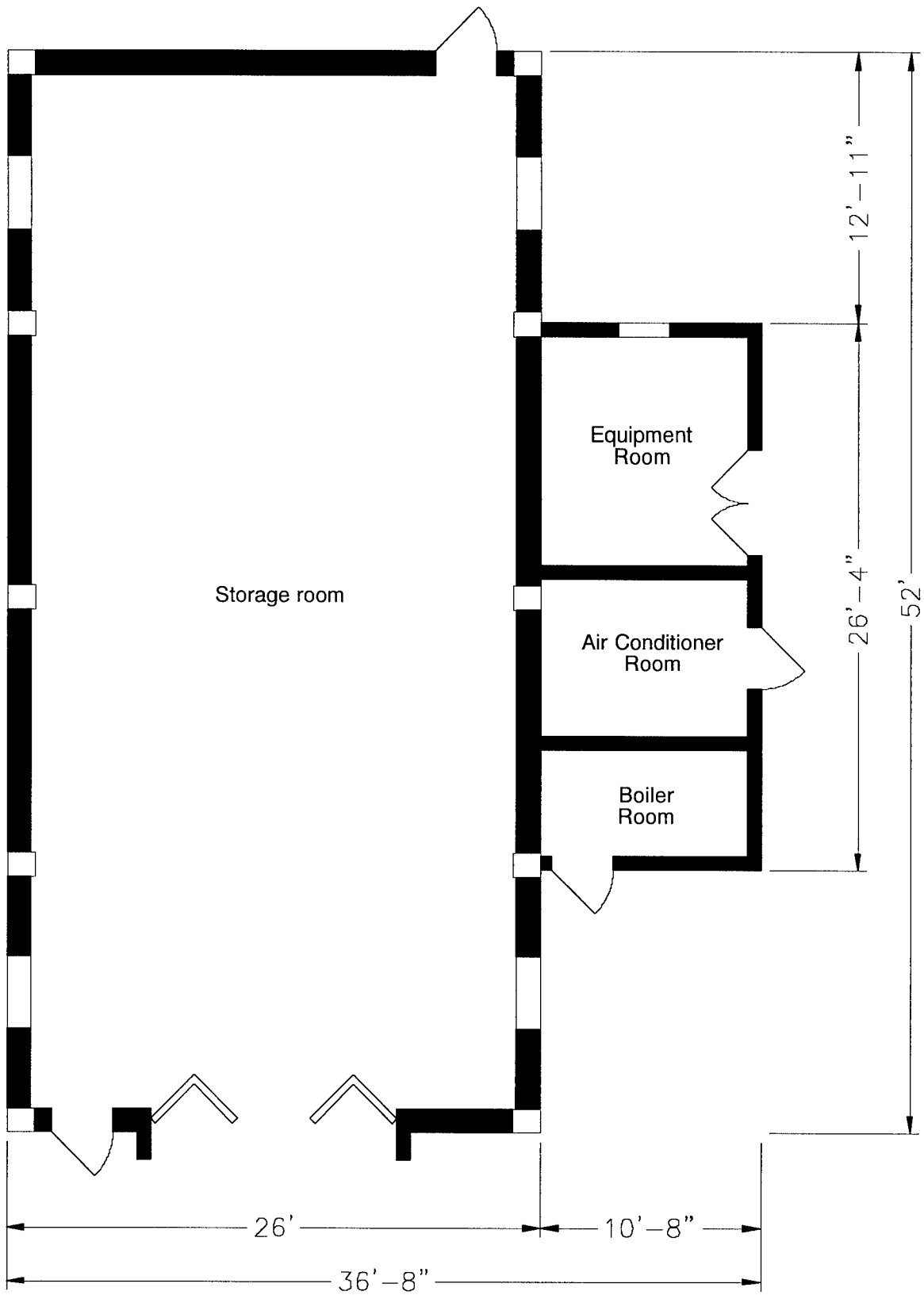
HAFB Report Number: **CRM Publication #3**
Photograph Citation: **CD-ROM #1-Photo #74**
Negatives On File: **49 CES/CEV, 550 Tabosa Ave, HAFB**
Date of Field Visit: **SUMMER 1995**



Source: CE File #1195-1 (c1951)

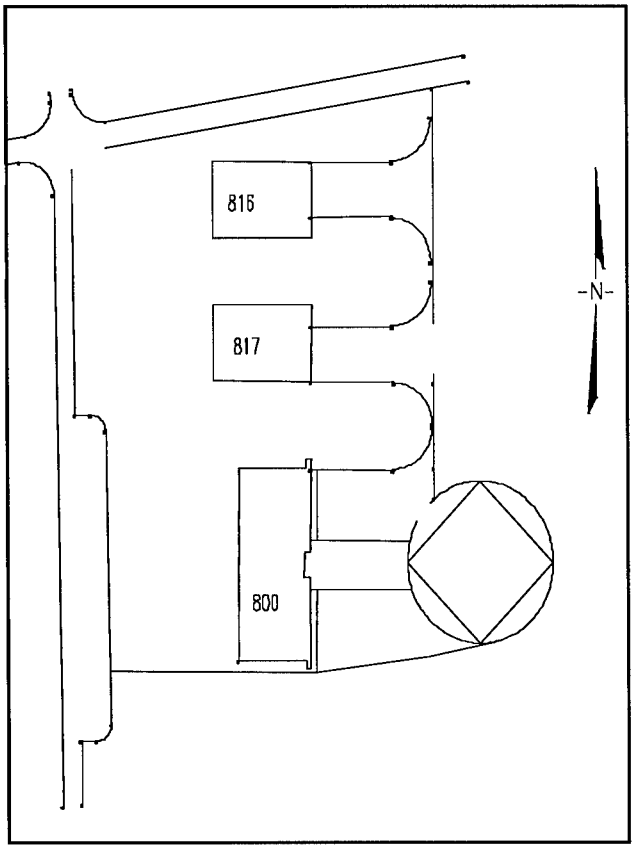
State of New Mexico Office of Cultural Affairs Historic Preservation Division	**BUILDING 1195** Holloman Air Force Base Alamogordo, New Mexico	Project No. 35-95-HAFB-4	AutoCAD rendering by: *Steve Merrill* New Mexico State University **Sheet 1 of 1**	NEW MEXICO STATE UNIVERSITY

Field Survey: Combat Weapons and Support Systems

II. Combat Weapons and Support Systems

- Missiles
  - -Building 800
  - -Building 820
  - -Building 822
  - -Building 823
  - -Building 824
  - -Building 882
  - -Building 885
  - -Building 886
  - -Building 887
  - -Building 1264
- Check Stands/Unconventional Fuels
  - -Building 1190
  - -Building 1193
  - -Building 1194
  - -Building 1195
- Alert Facilities
- **Maintenance Docks/Hangars**
  - **-Building 500**
  - **-Building 816**
  - **-Building 817**
  - **-Building 825**
- Communications
- Storage
  - -Building 1197
  - -Building 1198
- Memorial
- Weapons Platforms
- Documentation

Hangar Bldgs 500, 816, 817, 825



Site Plan. Buildings 800, 816 and 817.

COLD WAR SURVEY: HOLLOMAN AIR FORCE BASE

NAME:
Current: Aircraft Maintenance Hangar.
Historic: Aircraft Maintenance Hangar.
Street Address: 1071 Sixth St., HAFB, 88330-8076.

Building Number: 500

I. GENERAL INFORMATION:

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

Comments: In need of routine maintenance.

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

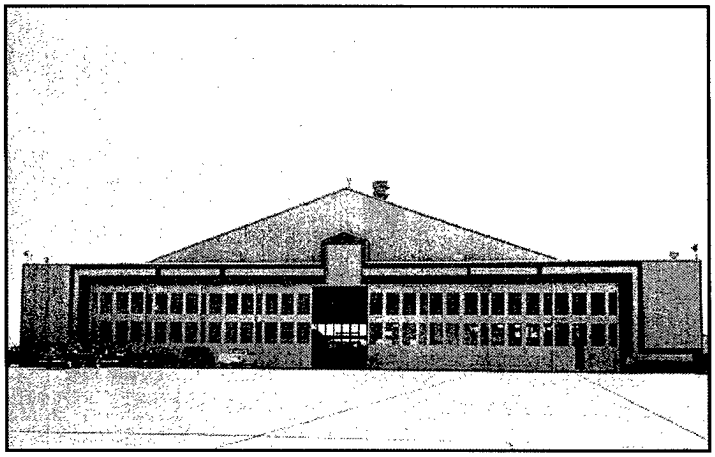
Comments: Corrugated metal siding added c1980.

Preliminary Determination of National or State Register Eligibility:

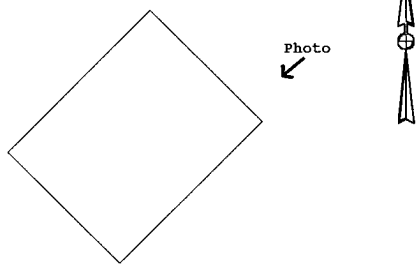
[ ] Exceptional importance [ ] Potentially eligible [x] Further research recommended [ ] Ineligible

Comments: Does not meet "exceptional importance" rule. See Section VIII.

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



BUILDING FOOTPRINT:
206' x 269'



Date of completion: 1954

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 500 is a 205'-10" x 268'-9" aircraft hangar constructed using rigid steel truss bent frame construction. The central open bay is flanked by flat-roofed, one-story wings with partitioned rooms. Large slider doors span the length of the gable ends. Fixed-light windows cover much of the door area. One long elevation exhibits an uninterrupted row of windows at the hangar bay clerestory. The wings, hangar door pockets, and gable ends have been clad in metal siding. Construction was completed in 1954 according to "As-built" construction drawings (CE File #500-1). Although the builder is unknown, W. C. Kruger (Santa Fe, NM) provided the architectural work.

III. HISTORIC AND CURRENT USE:

Source: Real Property Accountable Record/500; Field visit Spring 1996.

Current Function: U.S. and German Air Force aircraft hangar.

Original Function: Aircraft hangar.

Interim Functions: "Hangar, Maint, Field" (n.d.); "Maint, Dock Med A/C" (c1963); "Maint Dock, M/A" (n.d.); "Maint Dock, S/A" (c1968).

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

Source: CE File #500-1 (c1952).

Foundation: Concrete spread footings support bent truss frame. Concrete grade beams support walls.

Exterior walls: CMU walls. Corrugated asbestos cement siding at gable ends, hangar door pockets.

Roof: Steel truss frame. Mineral roofing on 2" ltweight concrete deck. Gyp boards on purlins.

Notable interior features, including machinery: Large steel truss frame fabricated with rolled steel shapes. Distinctive wood gutter at hangar door track.

V. CURRENT FEATURES IF DIFFERENT FROM ORIGINAL:

Source: Field visit Spring 1996; CE File 500-7 (c1980).

Foundation:

Exterior walls: Furred-out siding over original CMU and asbestos siding.

Roof:

Notable interior features, including machinery: None noted.

VI. BRIEF STATEMENT OF HISTORIC SIGNIFICANCE:

Building 500 has provided aircraft and combat weapons systems support since its completion in 1954, and exhibits distinctive design elements and workmanship. Building 500 does not meet the "exceptional importance" stipulation because historic integrity has been compromised. This hangar may meet National Register Criteria A and C once the fifty-year construction designation has been reached in the year 2004.

VII. ASSOCIATED BUILDINGS:

Historically associated with the flightline. Further research required to determine which hangars, if any, Building 500 was associated with.

VIII. ADDITIONAL COMMENTS AND MAINTENANCE RECOMMENDATIONS:

No structural modifications to Building 500 have occurred. The original elevations were altered due to the unsympathetic addition of corrugated metal siding to all four elevations. This siding is attached to the original concrete masonry units, and to the existing asbestos siding. This addition obscured nearly all of the original windows at both long elevations. This addition is reversible. Aside from the obscured windows, other distinctive design features of Building 500 include the exposed steel bents at the interior, the large slider doors (including the wood tracks and the wood drains) at the gable ends, and the clerestory windows. Due to the regional disappearance of vintage hangars, recommend that these distinctive design features be considered in any future modifications to Building 500. Removal of existing metal siding to original CMU, exposing the original windows, would enhance this property's historic integrity. Suggested routine maintenance: The wood architectural features at the south elevation, including sills, louvres, and soffit have incurred moisture damage from a (replaced) steam system. Replace these elements in-kind, if possible. Repair concrete at metal track/slider doors.

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

Comments: Although the exterior elevations have changed due to the addition of metal siding, the original structure and design remain intact.

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

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

Comments: Hangar 500 continues to be situated near Base Operations Building 571, and adjacent to the NE-SW main aircraft taxiway.

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

Comments: Nearly all of the original materials remain, even though some are obscured by metal siding.

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

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

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

Comments: Concrete floor, CMU walls, exposed steel truss frame, large slider doors, door windows, and clerestory windows are all visible from interior. Much of the original CMU and asbestos siding obscured by new exterior siding.

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 [ ] Some elements remain [x] Retains integrity

Comments: Visible workmanship, including exposed trusses and clerestory windows, and the presence of aircraft and support crews gives this building integrity of feeling and association.

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

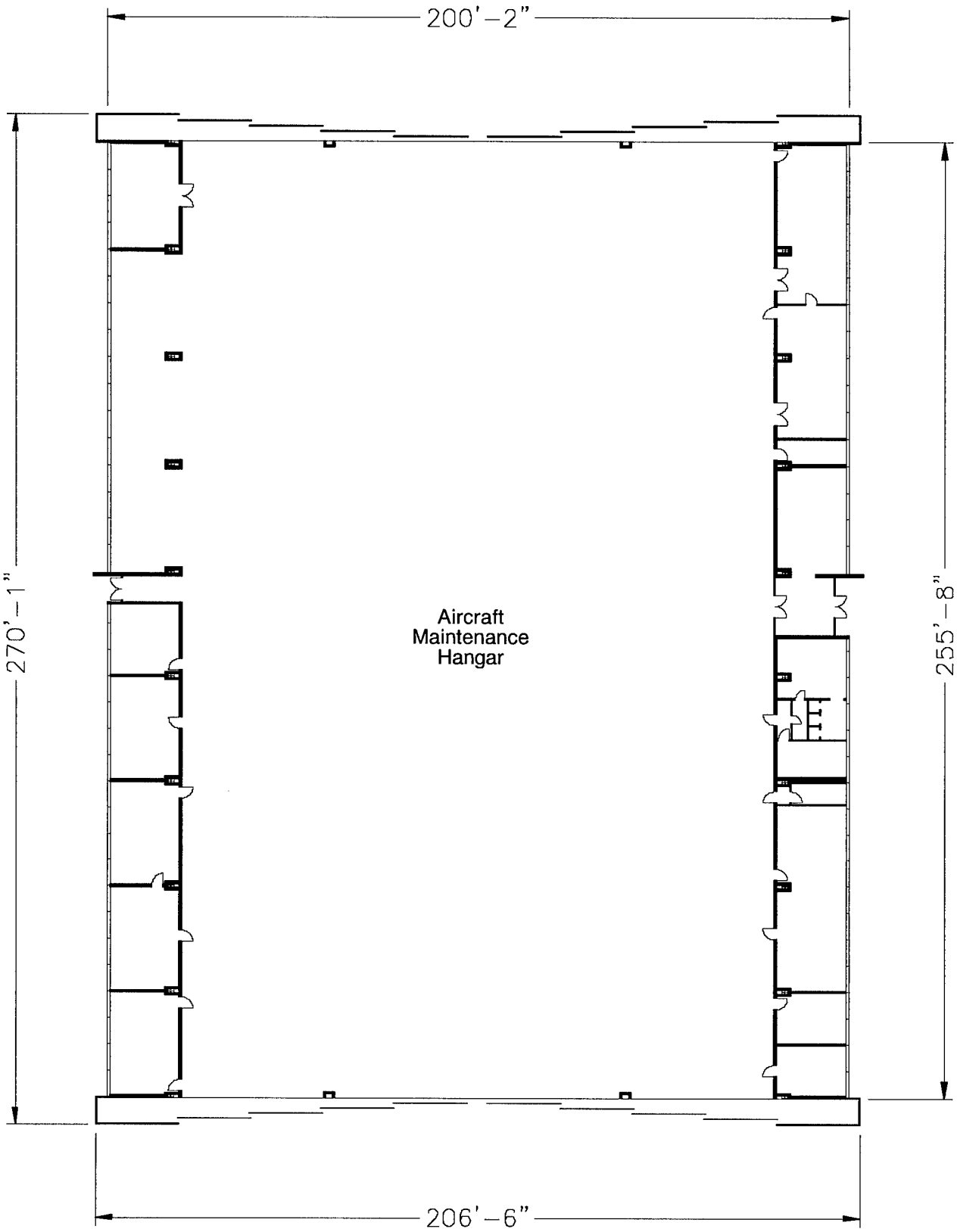
Comments:

X. FURTHER INFORMATION:

Surveyed By:

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

HAFB Report Number: **CRM Publication #3**
Photograph Citation: **CD-ROM #2-Photo #69**
Negatives On File: **49 CES/CEV, 550 Tabosa Ave, HAFB**
Date of Field Visit: **SPRING 1996**



Source: CE File #500-1 (c1954)

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State of New Mexico Office of Cultural Affairs Historic Preservation Division	**BUILDING 500** Holloman Air Force Base Alamogordo, New Mexico	Project No. 35-95-HAFB-4	AutoCAD rendering by: *Eugene N. Kilmer* *(505) 323-0641* Mag Drafting **Sheet 1 of 1**

COLD WAR SURVEY: HOLLOMAN AIR FORCE BASE

NAME:
Current: Shop, Aircraft (General Purpose).
Historic: Fighter Hangar.
Street Address: 1224 Wagner St., HAFB, 88330-7904.

Building Number: 816

I. GENERAL INFORMATION:

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

Comments: Building 816 is in need of routine maintenance.

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

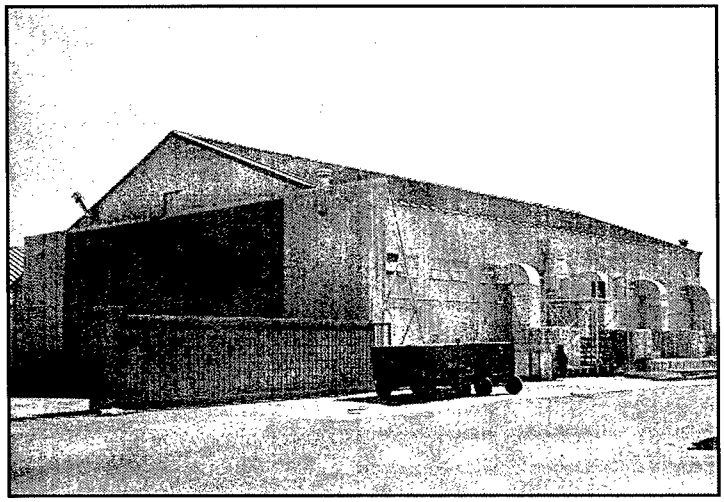
Comments: Original structural and architectural design essentially intact.

Preliminary Determination of National or State Register Eligibility:

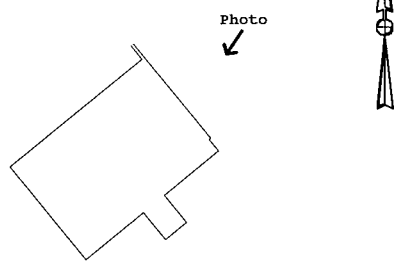
[ ] Exceptional importance [ ] Potentially eligible [x] Further research recommended [ ] Ineligible

Comments: Does not meet "exceptional importance" rule. See Section VIII.

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



BUILDING FOOTPRINT:
70' x 103'



Date of completion: c1955

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.)

The original Building 816 was a high-bay, rectangular, steel frame structure with steel trusses forming the gable roof. Building 816 currently has a rectangular footprint, with an offset at the south elevation. The floorplan consists of a large open room the length of the building. A wing was created by extending one end of the truss system, providing a lower ceiling height. This wing has been partitioned. The north and south elevations have symmetrical fenestration with skylights at the roof and a row of windows across the length of the building. The skylights have been covered. Large slider doors are located at the east elevation. One single door and one window are located at the west elevation. Real Property Record/816 indicates that this building was completed c1955. Neither the architect nor the builder is known.

III. HISTORIC AND CURRENT USE:

Source: Real Property Accountable Record/816.

Current Function: Welding and machine shop.

Original Function: Aircraft hangar for fighter jets.

Interim Functions: "Elec Lab Test" (c1962); "Shop, A/C eng I & Repr" (c1962); "Shop, Grnd Supp Equip"(c1964); "Shp GSE AGE Whse Sup & Equip Bse" (c1973).

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

Source: Real Property Accountable Record/816.

Foundation: Concrete grade beams and column footings. Reinforced concrete slab.

Exterior walls: Steelox® metal siding on steel frame.

Roof: Steelox® metal roof on Fink trusses.

Notable interior features, including machinery: None noted.

V. CURRENT FEATURES IF DIFFERENT FROM ORIGINAL:

Source: Real Property Accountable Record/816; Field visit Fall 1995.

Foundation:

Exterior walls:

Roof: Vulcraft standing seam metal roof over original Steelox® roof c1988.

Notable interior features, including machinery: None noted.

VI. BRIEF STATEMENT OF HISTORIC SIGNIFICANCE:

Building 816 does not meet the "exceptional importance" criteria imposed on buildings constructed within the last fifty years. This building maintains all aspects of historic integrity, though, and may be eligible for the National Register under Criteria A and/or C once its fifty-year construction date has been reached (in the year 2005).

VII. ASSOCIATED BUILDINGS:

Buildings 816 and 817 were constructed concurrently. Both continue to be situated adjacent to each other and the flightline. Both buildings continue to provide general purpose storage, and aircraft support.

VIII. ADDITIONAL COMMENTS AND MAINTENANCE RECOMMENDATIONS:

Building 816 was originally constructed for use as a fighter hangar facility for its counterpart, Building 817 (Guidance Check). Both buildings appear to have been converted in the late 1950s for general purpose aircraft maintenance and storage. Although none of the early drawings for Building 816 are stamped "As-built," it appears that Building 816 has retained most of its original structural and architectural features, including its original siding, roof, doors, and windows. This building has served as a warehouse and shop facility since its construction, and continues to serve in that capacity. Although perhaps not exhibiting "exceptional" qualities on a national level, Building 816 does retain historic integrity and significance at a local/regional level of significance. Recommend photo-documentation of this building prior to structural or architectural modifications which will alter any essential features.

Suggested routine maintenance: Scrape, prime, and paint corrugated siding. Scrape, prime, and paint masonry foundation. Repair deterioration at exterior footings. Replace broken window panes.

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 adjacent to Building 817.

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: The foundation, walls, corrugated siding, metal roof, exposed trusses, slider door, access door, skylights (covered) and windows appear to be original, or have been replaced in-kind. Interior hardboard wainscoting was replaced with metal c1983.

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: A split-faced block security wall has altered the viewshed.

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

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

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

Comments: Bare concrete floors, exposed trusses, corrugated metal siding, and standing seam metal roof are all intact. Although window panes have been painted, and the skylights covered, these changes are reversible.

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

Comments: Other than minor interior partitioning, the essential elements of this building's original design and workmanship, including the exposed trusses, large slider door, and windows remain visible.

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 [ ] Some elements remain [x] Retains integrity

Comments: Building 816 continues to funciton as it has since the early 1960s. Its location on the flightline, open concrete floor, and high bay contribute to its integrity of feeling as a hangar/shop.

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

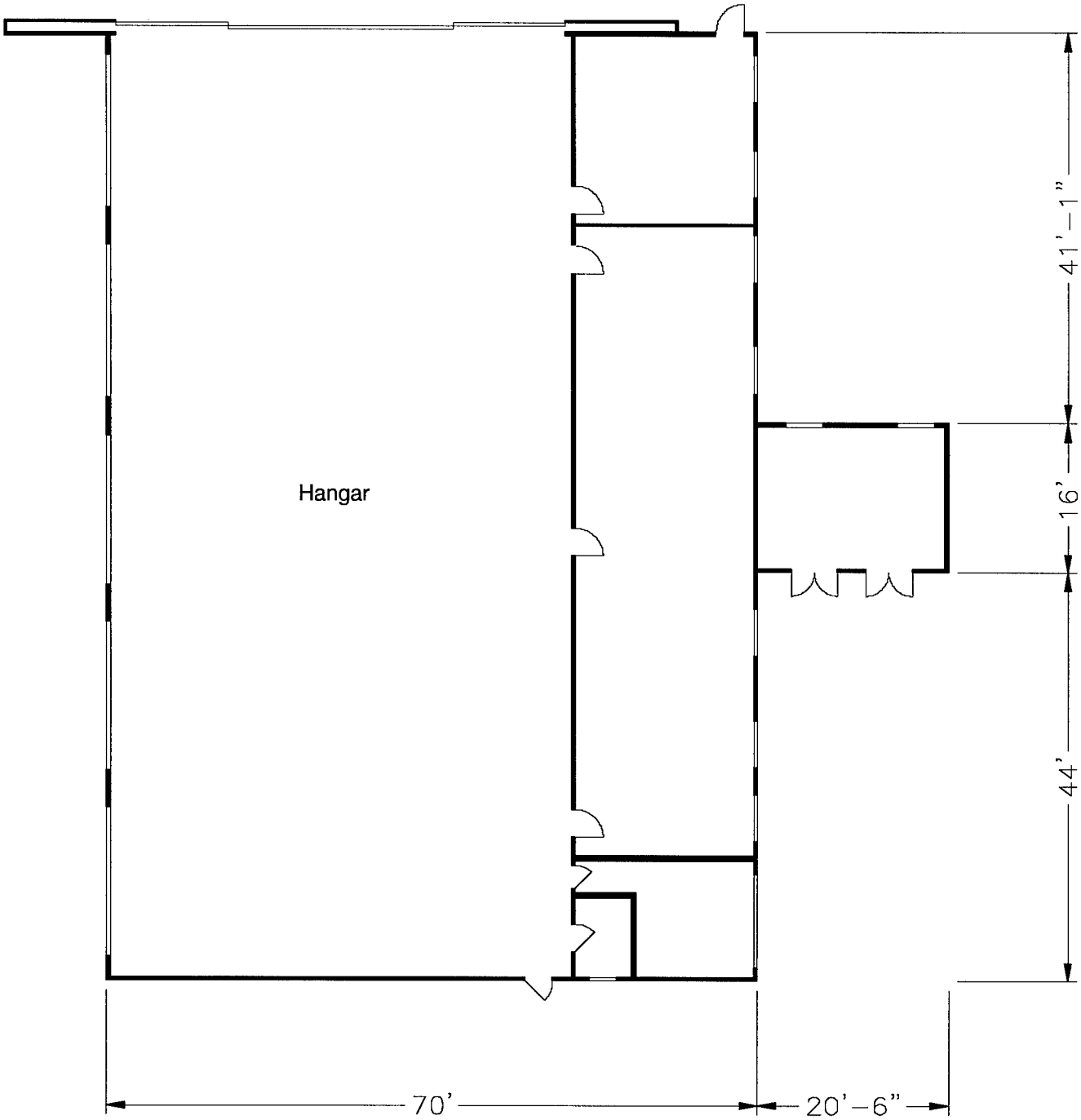
[ ] Unable to determine [ ] Little or no integrity remains [ ] Some elements remain [x] Retains integrity

Comments: This hangar was apparently converted in the early 1960s to a warehouse/shop facility for aircraft and base maintenance, and continues to serve in that capacity.

X. FURTHER INFORMATION:

Surveyed By: Jean Fulton
Sonya Cooper
2500 Jordan Road
Las Cruces, NM 88001

HAFB Report Number: **CRM Publication #3**
Photograph Citation: **CD-ROM #2-Photo #11**
Negatives On File: **49 CES/CEV, 550 Tabosa Ave, HAFB**
Date of Field Visit: **FALL 1995**



Source: CE File #816-1 (c1954)

State of New Mexico Office of Cultural Affairs Historic Preservation Division	**BUILDING 816** Holloman Air Force Base Alamogordo, New Mexico	Project No. 35-95-HAFB-4	AutoCAD rendering by: *Mike Gardner* New Mexico State University **Sheet 1 of 1**	NEW MEXICO STATE UNIVERSITY

COLD WAR SURVEY: HOLLOMAN AIR FORCE BASE

NAME:
Current: Shop, Aircraft (General Purpose).
Historic: Guidance Check Building.
Street Address: 1214 Wagner St., HAFB, 88330-7904.

Building Number: 817

I. GENERAL INFORMATION:

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

Comments: Building 817 is in need of routine maintenance.

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

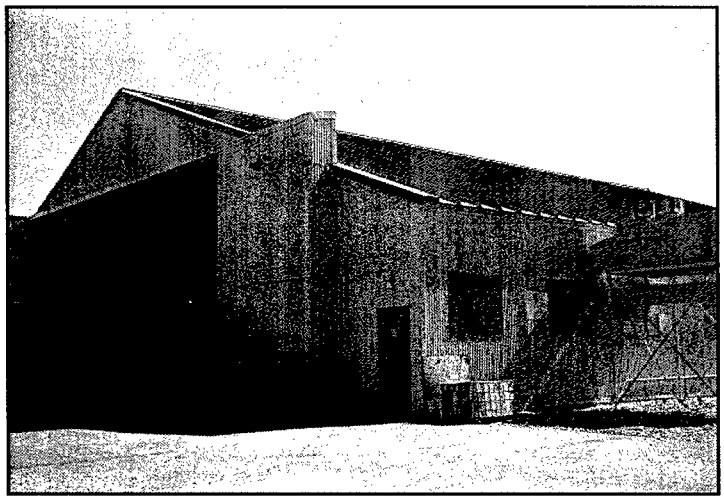
Comments: Original structural and architectural design essentially intact.

Preliminary Determination of National or State Register Eligibility:

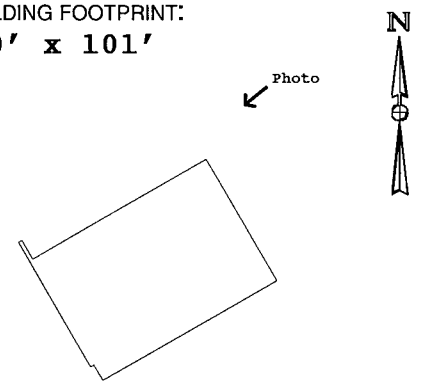
[ ] Exceptional importance [ ] Potentially eligible [x] Further research recommended [ ] Ineligible

Comments: Does not meet "exceptional importance" rule. See Section VIII.

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



BUILDING FOOTPRINT:
70' x 101'



Date of completion: c1955

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.)

The original Building 817 was a rectangular, high-bay, steel frame structure with steel trusses forming the gable roof. The floor plan consisted of a large open room occupying the length of the building. A wing off the north elevation was created by extending one end of the truss system, providing a lower ceiling height. This wing has been partitioned, and a prefabricated steel frame, steel deck, mezzanine was installed in the main room (c1957: CE File #817-2). The north and south elevations have symmetrical fenestration with skylights at the roof and a row of windows across the length of the building. Large slider doors are located at the east elevation. One single door and one window are located at the west elevation. Real Property Accountable Record/817 indicates that this building was completed c1955. A metal storage mezzanine shows up for the first time on blueprints dated c1957. Early improvements were contracted out to Davis, Foster, & Thorpe (El Paso, TX). Neither the architect nor the builder is known.

III. HISTORIC AND CURRENT USE:

Source: Real Property Accountable Record/817.

Current Function: Storage building for construction materials.

Original Function: Guidance missile and space research testing facility.

Interim Functions: "Whse Sup & Equip Bse" (c1976); "Shp A/SE Stor Fclt" (c1982); "Shp Acft Gen Purp" (n.d.).

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

Source: Real Property Accountable Record/817.

Foundation: Concrete grade beams column footings. Reinforced concrete slab.

Exterior walls: Steelox® metal siding on steel frame.

Roof: Steelox® metal roof on Fink-type steel trusses.

Notable interior features, including machinery:
Metal storage mezzanine installed during post-construction modifications. "Yale" 2-ton manual hoist crane installed in 1955 (CE File #817-2).

V. CURRENT FEATURES IF DIFFERENT FROM ORIGINAL:

Source: Real Property Accountable Record/817; Field visit Fall 1995.

Foundation:

Exterior walls:

Roof: Vulcraft standing seam metal roof over original Steelox® roof c1988.

Notable interior features, including machinery: Metal mezzanine and crane still intact.

VI. BRIEF STATEMENT OF HISTORIC SIGNIFICANCE:

Building 817 does not meet the "exceptional importance" criteria imposed on buildings constructed within the last fifty years. This aircraft support building does maintain historic integrity, and may meet NR criteria at a local/regional level once the fifty-year construction date is met in the year 2005.

VII. ASSOCIATED BUILDINGS:

Buildings 817 and 816 were constructed concurrently. Both continue to be situated adjacent to each other and the flightline. Both buildings continue to provide general purpose storage, and aircraft support.

VIII. ADDITIONAL COMMENTS AND MAINTENANCE RECOMMENDATIONS:

Building 817 was originally constructed for use as a guidance check facility for its counterpart, Building 816 (Fighter Hangar). Both buildings appear to have been converted in the late 1950s for general purpose aircraft maintenance and storage. Although none of the early drawings for Building 817 are stamped "As-built," it appears that a metal storage mezzanine was installed during post-construction improvements (c1957: CE File 817-2). Original room use on these early plans include laboratories for instrument and electronics testing, shop and storage areas, and office space for inspectors, engineers, and administrators. All of the original windows, door, and rooms remain essentially the same. The windows have been tinted/painted. A dropped acoustical ceiling and interior partitions have been added. Office use has evolved to accommodate a general purpose/storage function. The original roof was replaced in-kind c1988. Buildings 816 and 817 retain historic integrity, and may be eligible for the National Register with local/regional significance once the fifty-year construction designation is reached. Recommend further photo-documentation of each building prior to structural or architectural modifications.

Suggested routine maintenance: Refasten loose exterior siding, repair windbrace footing at slider door, patch and paint spalling at masonry foundation.

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 adjacent to Building 816, and near the flightline.

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

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

Comments: Skylights have been covered, an access door has been cut into slider door, the roof has been replaced, the windows tinted, minor interior partitioning has occurred, and a dropped ceiling added. Openings, interior and exterior design features and materials essentially intact.

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: Continues to support flightline activities, although function has broadened to include general purpose support. A split-faced block security wall has altered the viewshed.

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

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

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

Comments: The interior has been reconfigured to accommodate general purpose storage.

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

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

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

Comments: Exposed concrete floor, exposed trusses, large slider door, corrugated metal siding, the metal roof, and windows show original workmanship.

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 [ ] Some elements remain [x] Retains integrity

Comments: Building 817 continues to retain integrity of feeling and association as a flightline/Base support facility.

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

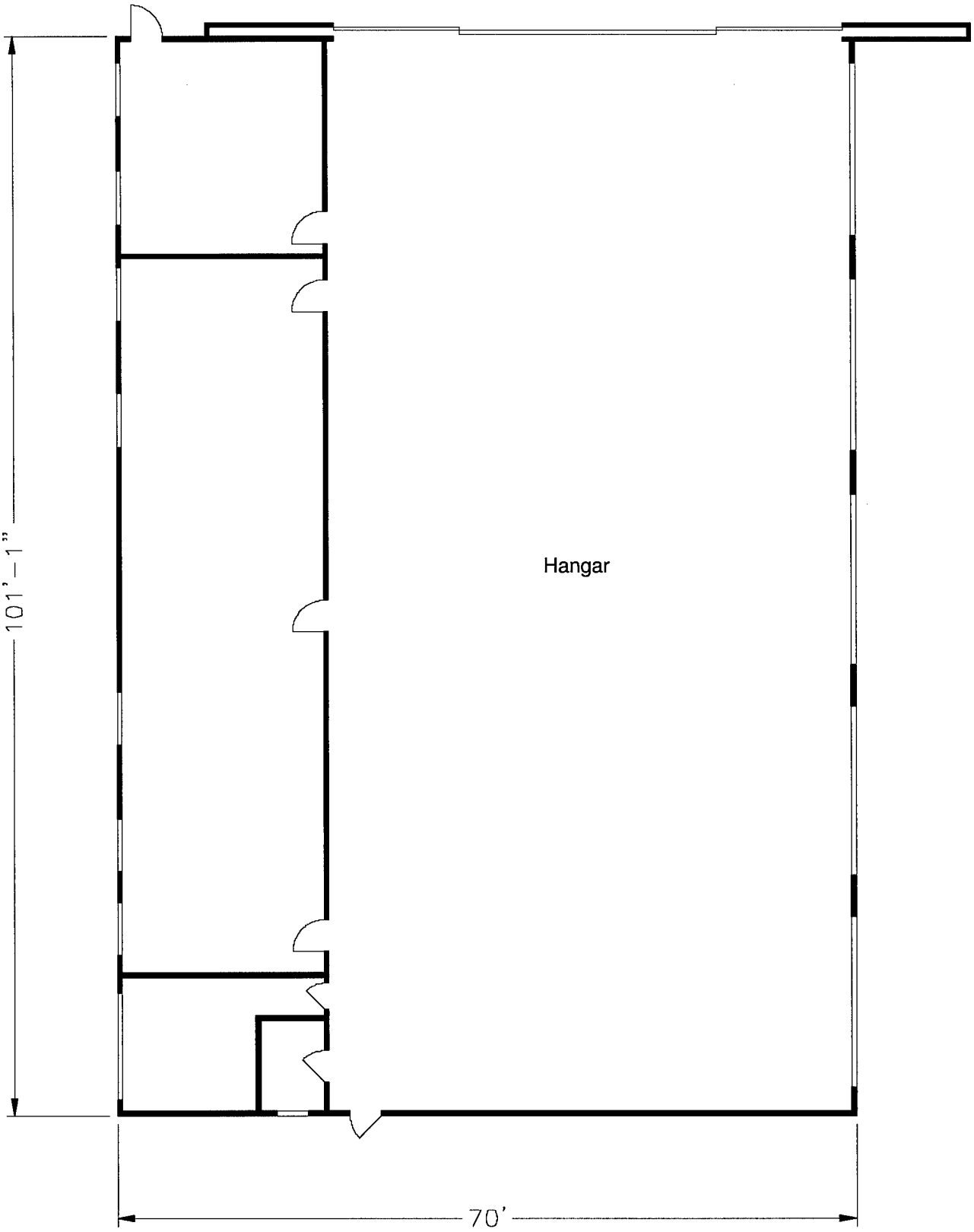
Comments:

X. FURTHER INFORMATION:

Surveyed By:

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

HAFB Report Number: **CRM Publication #3**
Photograph Citation: **CD-ROM #2-Photo #12**
Negatives On File: **49 CES/CEV, 550 Tabosa Ave, HAFB**
Date of Field Visit: **FALL 1995**



Source: CE File #817-1 (c1954)

State of New Mexico Office of Cultural Affairs Historic Preservation Division	**BUILDING 817** Holloman Air Force Base Alamogordo, New Mexico	Project No. 35-95-HAFB-4	AutoCAD rendering by: *Mike Gardner* New Mexico State University **Sheet 1 of 1**	NEW MEXICO STATE UNIVERSITY

COLD WAR SURVEY: HOLLOMAN AIR FORCE BASE

NAME:
Current: Air Freight Terminal/Mobility Control.
Historic: Nose Hangar.
Street Address: 1280 Wagner Street, HAFB, 88330-7904.

Building Number: 825

I. GENERAL INFORMATION:

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

Comments: Building 825 is in need of routine maintenance.

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

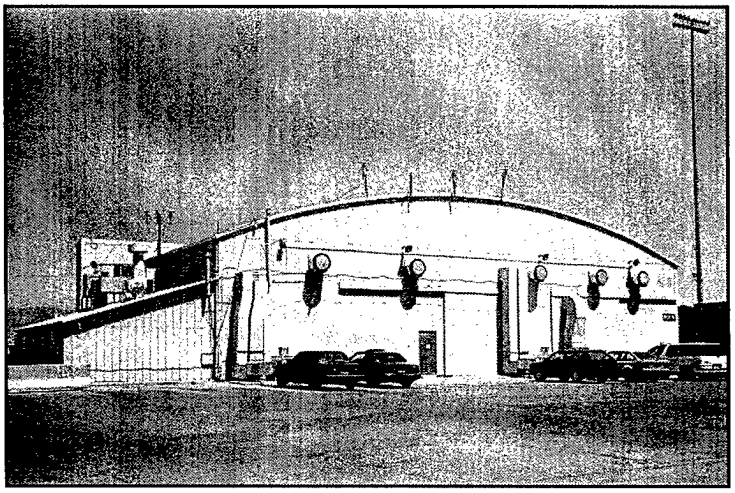
Comments: Bears little resemblance to its early hangar design function.

Preliminary Determination of National or State Register Eligibility:

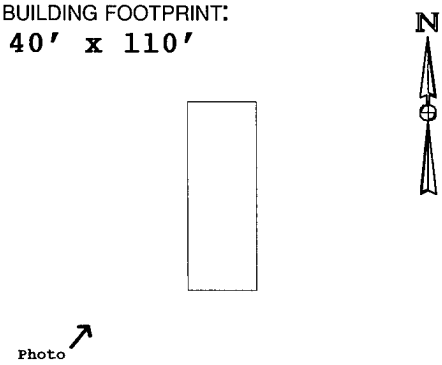
[ ] Exceptional importance [ ] Potentially eligible [ ] Further research recommended [x] Ineligible

Comments: Building 825 does not retain historic integrity.

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



BUILDING FOOTPRINT:
40′ x 110′



Date of completion: c1954

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.)

The original Building 825 was constructed as a large, one-room metal hangar with an arched roof and rectangular floor plan. The east elevation consists of large metal sliding doors that span the length of the building. These doors are not used, and several types of smaller doors have been cut in. The west elevation consists of a smaller set of slider doors that have been welded in place. The earliest drawings, dated c1954 (but not stamped "As-built") refer to the Lockheed Corporation (CE File #825-1). Real Property Accountable Record/825 also gives an estimated completion date of c1954. A lean-to addition was constructed at the north elevation as a subsequent improvement, c1954. Neither the architect nor the builder are known.

III. HISTORIC AND CURRENT USE:

Source: Real Property Accountable Record/825.

Current Function: Mobility control center, and freight terminal.

Original Function: Hangar, Maintenance, Field.

Interim Functions: "Whse, Sup & Equip, Bse" (c1965); "Supply & Issue, Shop" (c1966); "Sup Issue Shp" (n.d.); "Sc Lab Geophy" (c1973); "Rsch Equip Stor" (n.d.); "Whse Sup & Equp Bse" (c1979); "HQ WG" (n.d.).

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

Source: CE File #825-1 (c1954).

Foundation: Concrete grade beams. Concrete column footings.

Exterior walls: Corrugated metal over steel frame.

Roof: Corrugated metal.

Notable interior features, including machinery: None noted.

V. CURRENT FEATURES IF DIFFERENT FROM ORIGINAL:

Source: Field visit Fall 1995.

Foundation:

Exterior walls:

Roof:

Notable interior features, including machinery: None noted.

VI. BRIEF STATEMENT OF HISTORIC SIGNIFICANCE:

Building 825 does not meet National Register criteria for significance, because it does not retain historic integrity of design, materials, workmanship, feeling or association.

VII. ASSOCIATED BUILDINGS:

Building 825 was historically associated with the flightline and with other contemporary hangars.

VIII. ADDITIONAL COMMENTS AND MAINTENANCE RECOMMENDATIONS:

Although drawings for Building 825 are not stamped "As-built," it seems clear that this building was originally constructed for use as a hangar with no interior partitions. Subsequent changes accommodated lab and shop equipment, including ovens, plating, acid tanks, and work tables (CE Files #825-1,2,3). Further work modified this building for use as a mobility control center for personnel deployment, and as a storage facility for freight. Very few elements of its original design as an aircraft hangar remain.

At least 20 new partition walls obscure the original interior. The ceiling, originally exposed, is obscured by dropped acoustical tile ceilings. One original slider door is no longer accessible. Exterior elevations have changed due to the addition of personnel access doors. The arched metal roof remains the single most distinctive original feature. This building no longer retains historic integrity in terms of design, materials, workmanship, feeling, or association.

Suggested routine maintenance: Damaged exterior corrugated metal siding may need to be monitored/replaced. Remove accumulated debris at foundation. Remove bird's nest at overhang. Repair or remove concrete pad at south elevation. Scrape, prime, and paint metal at windows.

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

Comments: This hangar has been converted for use as a personnel deployment center. Nearly all of the interior design elements and the exterior openings have been obscured, changed, or are no longer accessible.

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: A split-faced block wall has been added at property perimeter.

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

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

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

Comments: Doors have been added at exterior elevations. Large slider door no longer used. Original interior materials, though still intact, are obscured.

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

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

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

Comments: Nearly all of the original materials at the interior have been obscured.

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: Except for its location at the flightline, this building does not retain integrity of feeling as an aircraft hangar.

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

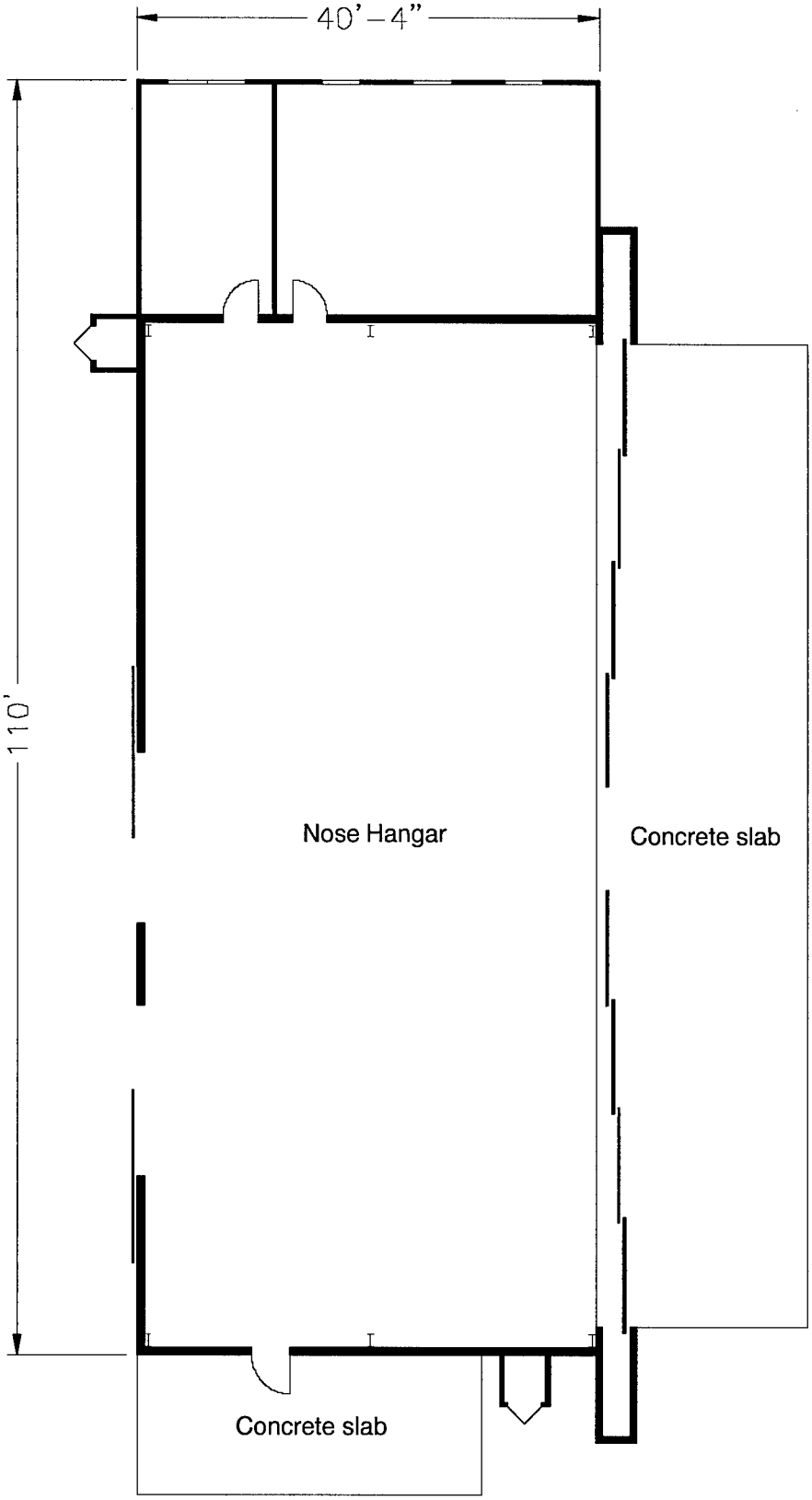
Comments: Although still situated near the flightline, this building no longer functions or could function as it was originally designed.

X. FURTHER INFORMATION:

Surveyed By:

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

HAFB Report Number: **CRM Publication #3**
Photograph Citation: **CD-ROM #2-Photo #80**
Negatives On File: **49 CES/CEV, 550 Tabosa Ave, HAFB**
Date of Field Visit: **FALL 1995**



CE File #825-1 (c1954)

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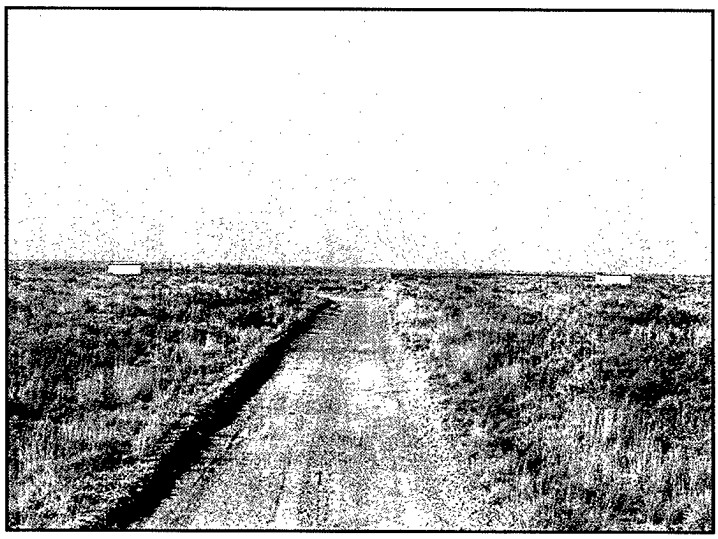
State of New Mexico Office of Cultural Affairs Historic Preservation Division	**BUILDING 825** Holloman Air Force Base Alamogordo, New Mexico	Project No. 35-95-HAFB-4	AutoCAD rendering by: *Eugene N. Kilmer* *(505) 323-0641* Mag Drafting **Sheet 1 of 1**

Field Survey: Combat Weapons and Support Systems

II. Combat Weapons and Support Systems

- Missiles
  - -Building 800
  - -Building 820
  - -Building 822
  - -Building 823
  - -Building 824
  - -Building 882
  - -Building 885
  - -Building 886
  - -Building 887
  - -Building 1264
- Check Stands/Unconventional Fuels
  - -Building 1190
  - -Building 1193
  - -Building 1194
  - -Building 1195
- Alert Facilities
- Maintenance Docks/Hangars
  - -Building 500
  - -Building 816
  - -Building 817
  - -Building 825
- Communications
- **Storage**
  - **-Building 1197**
  - **-Building 1198**
- Memorial
- Weapons Platforms
- Documentation

Storage Bldgs 1197 and 1198



Buildings 1197 and 1198 (facing northwest). Summer 1995.

COLD WAR SURVEY: HOLLOMAN AIR FORCE BASE

NAME: **Building Number:**
Current: AF Office of Special Investigations (AFOSI).
Historic: Armament Disposal Ready Building.
Street Address: 1701 Vandergrift Rd, HAFB, 88330-7853.

1197

I. GENERAL INFORMATION:

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

Comments: Building 1197 is in need of minor routine maintenance.

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

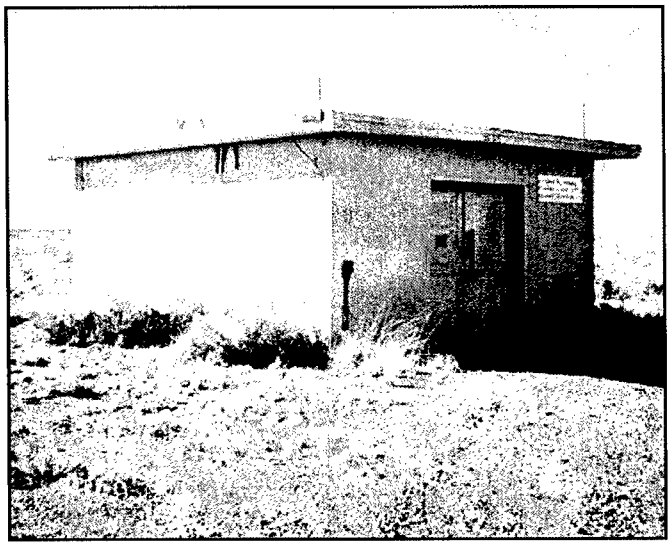
Comments: Building has not been altered since its original construction.

Preliminary Determination of National or State Register Eligibility:

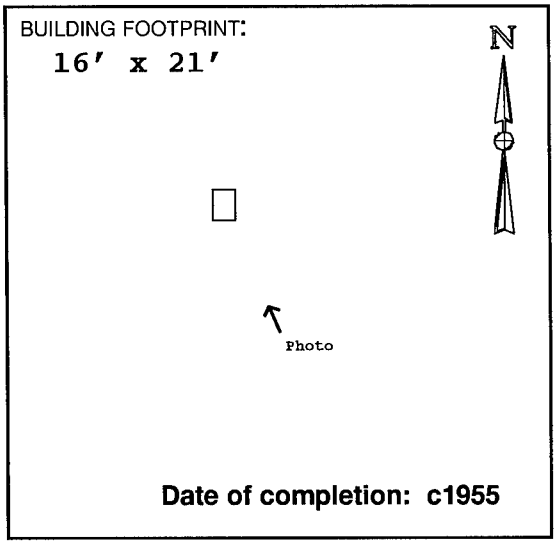
[ ] Exceptional importance [ ] Potentially eligible [ ] Further research recommended [x] Ineligible

Comments: Does not meet Nat'l Register criteria as an individual property.

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



BUILDING FOOTPRINT:
16' x 21'



Date of completion: c1955

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.)

Buildings 1197 and 1198 were constructed c1955 for use as storage buildings for explosive munitions (Real Property Accountable Records/1197 & 1198. Each concrete masonry unit (CMU) building features a built-up roof (BUR) with gravel on a 6-inch precast masonry roof slab. These buildings are utilitarian in design, materials, and workmanship, exhibiting no decorative embellishments. Both storage structures are located in a remote setting north of the main Base. Each is accessed by the same gravel secondary road.

Building 1197 has one metal, double sliding door located at the east elevation. There are no windows. No structural modifications to the original building have occurred. Neither the builder nor the architect is known.

III. HISTORIC AND CURRENT USE:

Source: Real Property Accountable Record/1197; CE File #1198-1 (c1955).

Current Function: AF Office of Special Investigations (AFOSI).

Original Function: Armament Disposal Ready Building.

Interim Functions: "Stor, Spares, Inert" (n.d.); MWR Support C-Storage.

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

Source: CE File 1198-1 (c1955).

Foundation: Concrete wall footings. Concrete slab on grade.

Exterior walls: Painted concrete masonry units (CMU).

Roof: BUR w/ gravel on 6-inch precast masonry slab.

Notable interior features, including machinery: None noted.

V. CURRENT FEATURES IF DIFFERENT FROM ORIGINAL:

Source: Field visit Summer 1995.

Foundation:

Exterior walls:

Roof:

Notable interior features, including machinery: None noted.

VI. BRIEF STATEMENT OF HISTORIC SIGNIFICANCE:

Building 1197 does not meet National Register criteria for significance as an individual property. This facility does, however, retain historic integrity. Buildings 1197 and 1198 could be considered as contributing features in a Cold War-era Multiple Property nomination for Holloman Air Force Base combat weapons and support systems.

VII. ASSOCIATED BUILDINGS:

Building 1197 and Building 1198 are identical in design, materials, and workmanship. Both were constructed c1955 to store munitions.

VIII. ADDITIONAL COMMENTS AND MAINTENANCE RECOMMENDATIONS:

Building 1197 is identical to Building 1198. Each utilitarian structure was constructed to safely store potentially explosive munitions. Both are located in a remote setting accessed by the same gravel secondary road. A fire hydrant is located approximately 50 feet from each building entrance.

As ancillary storage facilities, neither building meets National Register of Historic Places criteria as individual properties. Both buildings retain all aspects of historic integrity. Each is in need of routine maintenance. Although not mandatory, recommend that photo-documentation prior to future modifications document these storage facilities. Although perhaps only of interest at a local level, Buildings 1197 and 1198 would qualify as contributing features in a basewide Cold War-era Multiple Property nomination.

Suggested routine maintenance: Stress cracks are evident at the building exterior, running from the bottom center to the top front corner. These cracks were most likely caused by the weight of the sliding door and the sudden impacts caused by opening and closing the slider door panels. Efflorescence at the interior walls indicates water infiltration. Recommend repairing or replacing the built-up roof in kind, sealing the interior wall surfaces, sealing and painting the exterior walls, repairing the cracks in the masonry, and repairing the metal door track.

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: Situated in a remote area north of the main Base, accessed by a gravel secondary road.

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: Building 1197 remains essentially as it was originally constructed.

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

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

Comments:

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

Comments: All materials used to construct Building 1197 remain visible.

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

Comments: Built-up gravel roof, concrete masonry unit walls, and metal double sliding doors remain as originally constructed. There are no windows.

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 [ ] Some elements remain [x] Retains integrity

Comments:

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

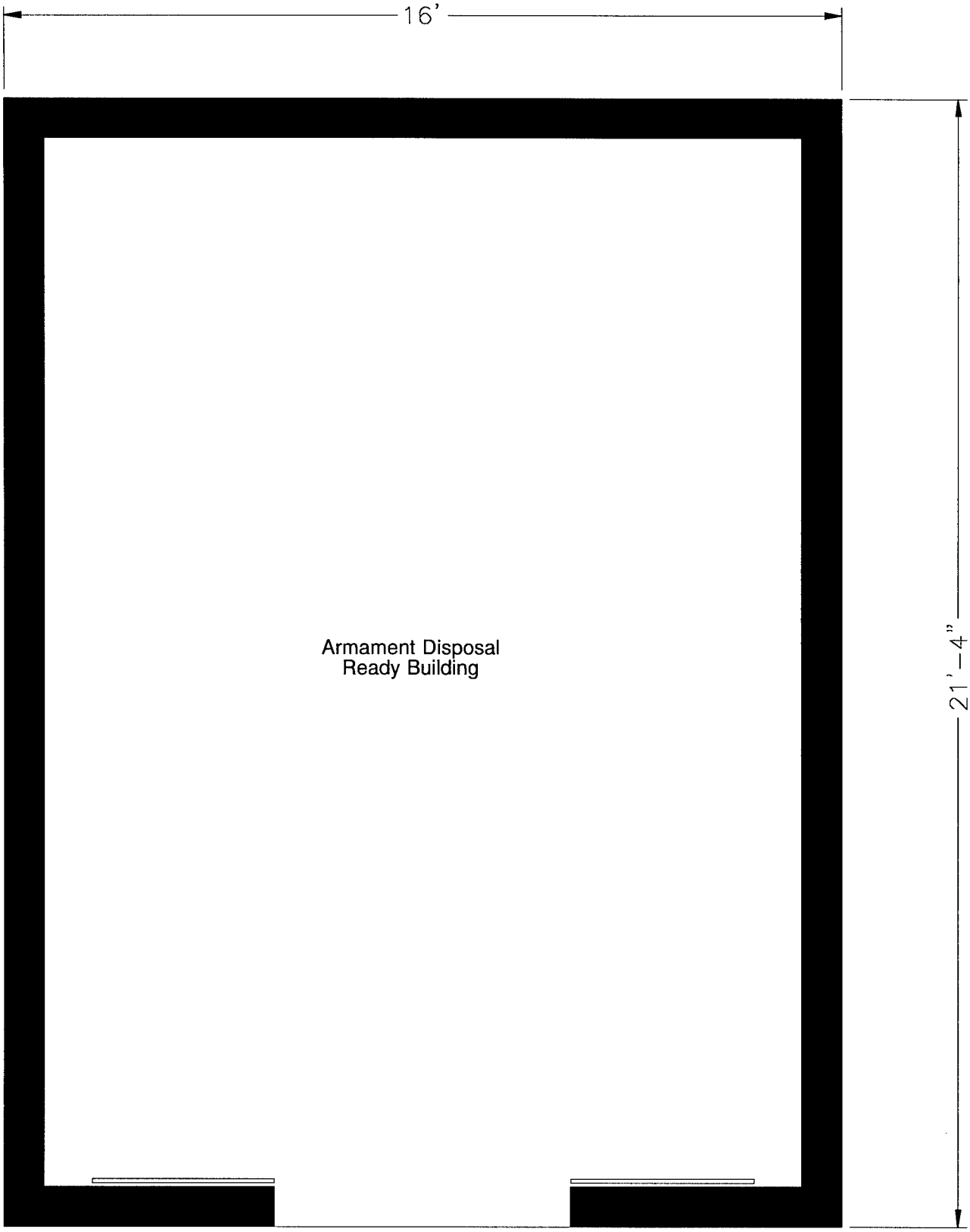
Comments: Although no longer used to store munitions, Building 1197 continues to be an isolated structure, accessed by a single secondary road, and supplied with a fire hydrant. The setting and the structure itself continue to reflect design features associated with providing safe storage for explosive materials.

X. FURTHER INFORMATION:

Surveyed By:

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

HAFB Report Number: **CRM Publication #3**
Photograph Citation: **CD-ROM #4-Photo #35**
Negatives On File: **49 CES/CEV, 550 Tabosa Ave, HAFB**
Date of Field Visit: **SUMMER 1995**



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Source: CE File #1198-1 (c1955)

State of New Mexico Office of Cultural Affairs Historic Preservation Division	**BUILDING 1197** Holloman Air Force Base Alamogordo, New Mexico	Project No. 35-95-HAFB-4	AutoCAD rendering by: *Steve Merrill* New Mexico State University **Sheet 1 of 1**	NEW MEXICO STATE UNIVERSITY

COLD WAR SURVEY: HOLLOMAN AIR FORCE BASE

NAME:
Current: Comm Facility/HVAC Storage.
Historic: Armament Disposal Ready Building.
Street Address: 1669 Vandergrift Rd, HAFB, 88330-7853.

Building Number: 1198

I. GENERAL INFORMATION:

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

Comments: Building 1198 is in need of minor routine maintenance.

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

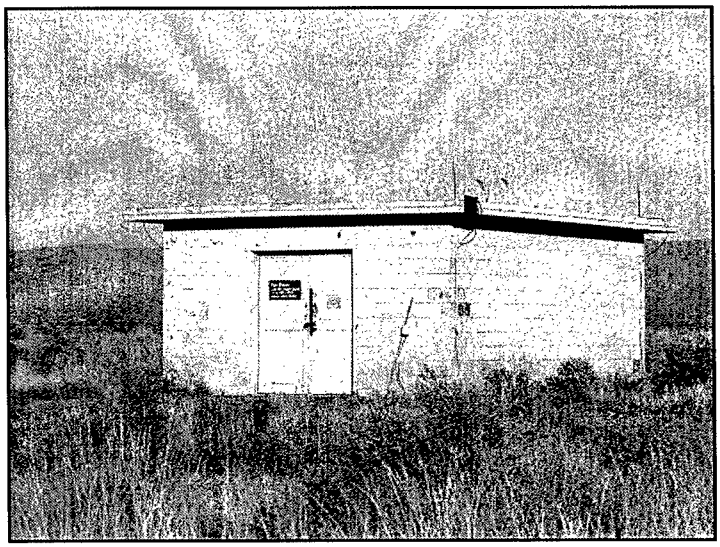
Comments: Building has not been altered since its original construction.

Preliminary Determination of National or State Register Eligibility:

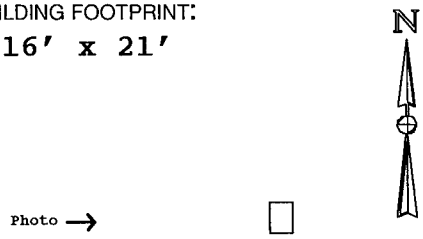
[ ] Exceptional importance [ ] Potentially eligible [ ] Further research recommended [x] Ineligible

Comments: Does not meet Nat'l Register criteria as an individual property.

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



BUILDING FOOTPRINT:
16' x 21'



Date of completion: c1955

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 1198 and Building 1197 were constructed c1955 for use as storage buildings for explosive munitions (Real Property Accountable Records/1197-8. Each concrete masonry unit (CMU) building features a built-up roof (BUR) with gravel on a 6-inch precast masonry roof slab. These buildings are utilitarian in design, materials, and workmanship, exhibiting no decorative embellishments. Both storage structures are located in a remote setting north of the main Base. Each is accessed by the same gravel secondary road.

Building 1198 has one metal, double sliding door located at the west elevation. There are no windows. No structural modifications to the original building have occurred. Neither the builder nor the architect is known.

III. HISTORIC AND CURRENT USE:

Source: Real Property Accountable Record/1198; CE File #1198-1 (c1955); Field visit Summer 1995.

Current Function: Spare HVAC parts storage.

Original Function: Armament Disposal Ready Building.

Interim Functions: "Stor, Mag" (n.d.); "Stor, Detonator" (n.d.); "Whse, Sup&Equip Bse" (c1988); "Comm Fclty" (c1993).

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

Source: CE File 1198-1 (c1955).

Foundation: Concrete wall footings. Concrete slab on grade.

Exterior walls: Painted concrete masonry units (CMU).

Roof: BUR w/ gravel on 6-inch precast masonry slab.

Notable interior features, including machinery: None noted.

V. CURRENT FEATURES IF DIFFERENT FROM ORIGINAL:

Source: Field visit Summer 1995.

Foundation:

Exterior walls:

Roof:

Notable interior features, including machinery: None noted.

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VI. BRIEF STATEMENT OF HISTORIC SIGNIFICANCE:

Building 1198 does not meet National Register criteria for significance as an individual property. This facility does, however, retain historic integrity. Buildings 1198 and 1197 could be considered as contributing features in a Cold War-era Multiple Property nomination documenting Holloman Air Force Base combat weapons and support systems.

VII. ASSOCIATED BUILDINGS:

Building 1198 and Building 1197 are identical in design, materials, and workmanship. Both were constructed c1955 to store munitions.

VIII. ADDITIONAL COMMENTS AND MAINTENANCE RECOMMENDATIONS:

Building 1198 is identical to Building 1197. Each utilitarian structure was constructed to safely store potentially explosive munitions. Both are located in a remote setting accessed by the same gravel secondary road. A fire hydrant is located approximately 50 feet from each building entrance.

As ancillary storage facilities, neither building meets National Register of Historic Places criteria as individual properties. Both buildings retain all aspects of historic integrity. Each is in need of routine maintenance. Although not mandatory, recommend that photo-documentation prior to future modifications document these storage facilities. Although perhaps only of interest at a local level, Buildings 1198 and 1197 would qualify as contributing features in a basewide Cold War-era Multiple Property nomination.

Suggested routine maintenance: Stress cracks are evident at the building exterior, running from the bottom center to the top front corner. These cracks were most likely caused by the weight of the sliding door and the sudden impacts caused by opening and closing the slider door panels. Efflorescence at the interior walls indicates water infiltration. Recommend repairing or replacing the built-up roof in kind, sealing the interior wall surfaces, sealing and painting the exterior walls, repairing the cracks in the masonry, and repairing the weatherstripping at the entrance to prevent further rodent infestation.

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: Situated in a remote area north of the main Base, accessed by a gravel secondary road.

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: Building 1198 remains essentially as it was originally constructed.

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

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

Comments:

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

Comments: All materials used to construct Building 1198 remain visible.

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

Comments: Built-up gravel roof, concrete masonry unit walls, and metal double sliding doors remain as originally constructed. There are no windows.

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 [ ] Some elements remain [x] Retains integrity

Comments:

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

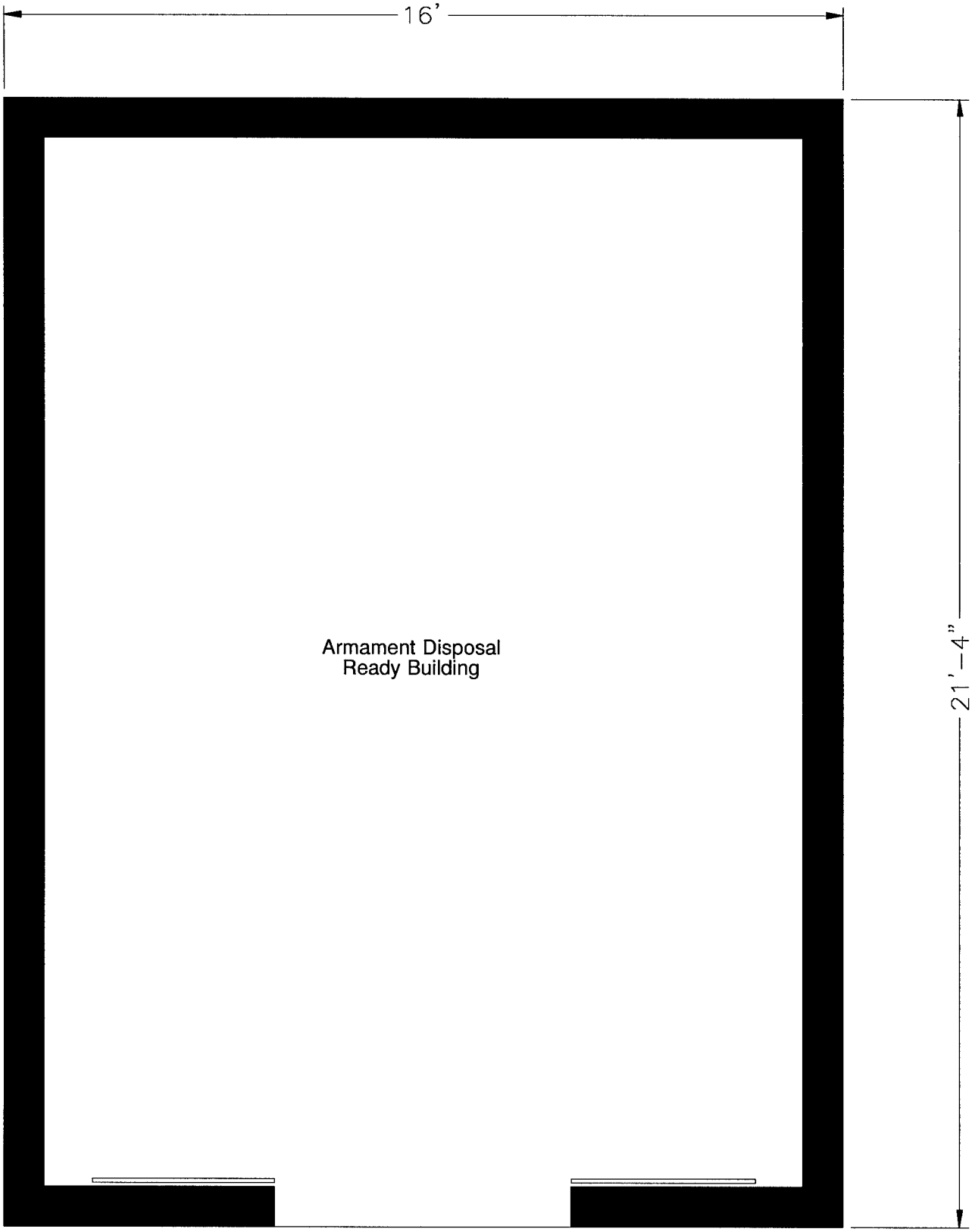
Comments: Although no longer used to store munitions, Building 1198 continues to be an isolated structure, accessed by a single secondary road, and supplied with a fire hydrant and lightning ground rods. The setting and the structure itself continue to reflect design features associated with providing safe storage for potentially explosive materials.

X. FURTHER INFORMATION:

Surveyed By:

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

HAFB Report Number: **CRM Publication #3**
Photograph Citation: **CD-ROM #4-Photo #36**
Negatives On File: **49 CES/CEV, 550 Tabosa Ave, HAFB**
Date of Field Visit: **SUMMER 1995**



Source: CE File #1198-1 (c1955)

State of New Mexico Office of Cultural Affairs Historic Preservation Division	**BUILDING 1198** Holloman Air Force Base Alamogordo, New Mexico	Project No. 35-95-HAFB-4	AutoCAD rendering by: *Steve Merrill* New Mexico State University **Sheet 1 of 1**	NEW MEXICO STATE UNIVERSITY

Field Survey: Training Facilities

II. Combat Weapons & Support Systems

- Missiles
  - -Building 800
  - -Building 820
  - -Building 822
  - -Building 823
  - -Building 824
  - -Building 882
  - -Building 885
  - -Building 886
  - -Building 887
  - -Building 1264
- Stands/Unconventional Fuels*
  - -Building 1190
  - -Building 1193
  - -Building 1194
  - -Building 1195
- Alert Facilities
- Maintenance Docks/Hangars
  - -Building 500
  - -Building 816
  - -Building 817
  - -Building 825
- Communications
- Storage
  - -Building 1197
  - -Building 1198
- Memorial
- Weapons Platforms
- Documentation

Training Bldg 1074

III. Training Facilities

- Base Support
- **Flight Training**
  - **-Building 1074**
- Intelligence Training
- Combat Training
- Combat Support Training
  - -Building 821
- Launch Complexes
- Combat Training Ranges
- Impact Areas and Targets
- POW Training Camps
- Communications

COLD WAR SURVEY: HOLLOMAN AIR FORCE BASE

NAME:
Current: Acquisition Security Office.
Historic: Target Drone OST.
Street Address: 961 Dezonia Rd., HAFB, 88330-7717.

Building Number: 1074

I. GENERAL INFORMATION:

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

Comments: Building 1074 is in need of minor routine maintenance.

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

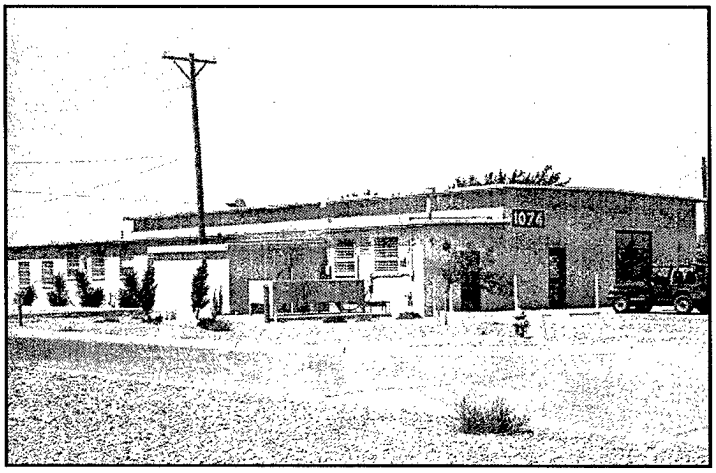
Comments: Building 1074 has been heavily modified.

Preliminary Determination of National or State Register Eligibility:

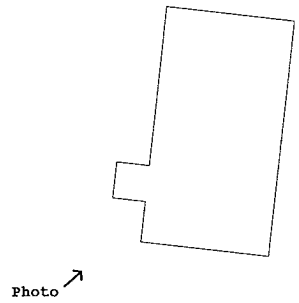
[ ] Exceptional importance [ ] Potentially eligible [ ] Further research recommended [x] Ineligible

Comments: Building 1074 no longer retains historic integrity.

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



BUILDING FOOTPRINT:
54' x 101'



Date of completion: c1955

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 1074 is a single-story, rectangular, office building made of concrete masonry units and showing a flat roof. This building has a high-bay area, with plywood covering a row of windows at the eave. Building 1074 is asymmetrically fenestrated. Several renovation phases have altered original door and window openings. According to Real Property Accountable Record/1074, this building was completed c1955. Kenneth S. Clark (Santa Fe NM) provided the architectural drawings (CE File #1074-1). The builder is unknown. The north elevation was modified c1961 (CE File #1074-2), and the interior was remodeled in 1992 (CE File #1074-6A).

III. HISTORIC AND CURRENT USE:

Source: Real Property Accountable Record/1074.

Current Function: Office building (46th Test Group).

Original Function: Target Drone Building.

Interim Functions: "Plt Reproduction" (n.d.); "G/M Lab Target Drone" (n.d.); "Flt Simltr Tng" (n.d.); "Msl/Space Rsch Eng" (n.d.); "M/Res Lab" (n.d.); "Plant, Reproduction" (c1963); "Flt Simltr Tng" (c1973); Lab Wpn CDNC" (c1980); "Msl/Space Rsch Eng" (c1980); "Hq Group" (c1992).

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

Source: CE File #1074-1 (c1955).

Foundation: Poured concrete wall footings. Concrete slab on grade.

Exterior walls: Painted concrete masonry units (CMU).

Roof: Built-up on rigid insulation and wood deck, supported by steel joists.

Notable interior features, including machinery: None noted.

V. CURRENT FEATURES IF DIFFERENT FROM ORIGINAL:

Source: Field visit Summer 1995.

Foundation:

Exterior walls:

Roof:

Notable interior features, including machinery:

Currently partitioned and furnished for office space and conference rooms. Also serves as storage for flight simulators and miscellaneous equipment. No longer used for pilot training.

VI. BRIEF STATEMENT OF HISTORIC SIGNIFICANCE:

Although providing vital Cold War-era simulated flight training since its constructin c1955, this facility no longer retains historic integrity of design, materials, or workmanship. Building 1074 is therefore ineligible for the National Register.

VII. ASSOCIATED BUILDINGS:

No other buildings appear to have been associated with Building 1074 during its historic period of significance.

VIII. ADDITIONAL COMMENTS AND MAINTENANCE RECOMMENDATIONS:

Building 1074 has lost most of its historic integrity due to several major modifications. This building originally served as the Target Drone building. Early construction drawings feature an autopilot shop, an electrical shop, a beacon shop, a sheet metal shop, a stock room, an operations room, and other miscellaneous rooms (1955: CE File #1074-1). These drawings also feature workbenches, wainscoting, and an entrance canopy. Subsequent renovations removed all of these features, and altered the north elevation (c1961: CE File #1074-2). Flight simulators were added to room 114 (c1974: CE File #1074-5). The entire building was renovated for use as Acquisition Security offices (c1992: CE File #1074-9).

Suggested routine maintenance: The new mechanical room at the west elevation has settled, and has separated from the main building. The footing must be excavated and underpinned, and backfill placed to a height below the slab elevation. This may require a low retaining wall along the sidewalk. The separated opening should be filled. Scrape, prime, and paint the exterior masonry. Repair, scrape, prime, and paint the wooden fascia and soffit at the eaveline.

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

Comments: A vault room has been added to the east elevation. A mechanical room has been added to the west elevation. Doors and transom windows at the main entrance (north elevation) have been modified.

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: Building 1074 has been landscaped with yucca plants, trees, and shrubs. Continues to be located adjacent to airfield.

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

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

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

Comments: Exterior elevations have changed. Roll-up doors have been added to the west elevation. Windows have been painted and covered with security bars and metal.

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

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

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

Comments: Drop ceilings, new floor finishes, and partition walls obscure most of the original interior materials and workmanship.

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

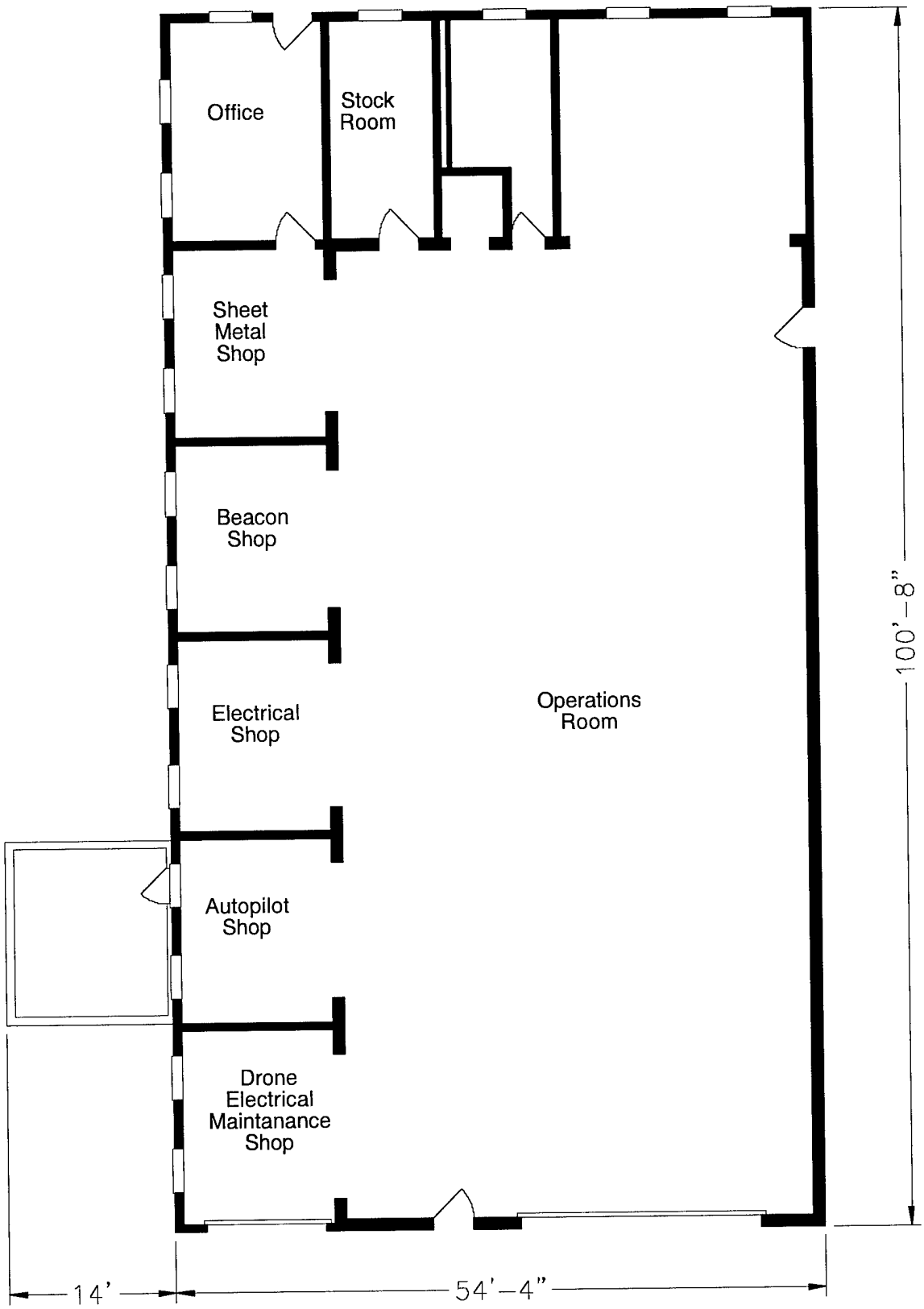
Comments: No longer retains feeling or association with its use as a target drone/training building.

X. FURTHER INFORMATION:

Surveyed By:

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

HAFB Report Number: **CRM Publication #3**
Photograph Citation: **CD-ROM #2-Photo #102**
Negatives On File: **49 CES/CEV, 550 Tabosa Ave, HAFB**
Date of Field Visit: **SUMMER 1995**



Source: CE File #1074-1 (c1955)

State of New Mexico Office of Cultural Affairs Historic Preservation Division	**BUILDING 1074** Holloman Air Force Base Alamogordo, New Mexico	Project No. 35-95-HAFB-4	AutoCAD rendering by: *Steve Merrill* New Mexico State University **Sheet 1 of 1**	New Mexico State University

Field Survey: Training Facilities

II. Combat Weapons & Support Systems

- Missiles
  - -Building 800
  - -Building 820
  - -Building 822
  - -Building 823
  - -Building 824
  - -Building 882
  - -Building 885
  - -Building 886
  - -Building 887
  - -Building 1264
- Stands/Unconventional Fuels*
  - -Building 1190
  - -Building 1193
  - -Building 1194
  - -Building 1195
- Alert Facilities
- Maintenance Docks/Hangars
  - -Building 500
  - -Building 816
  - -Building 817
  - -Building 825
- Communications
- Storage
  - -Building 1197
  - -Building 1198
- Memorial
- Weapons Platforms
- Documentation

Combat Support Building 821

III. Training Facilities

- Base Support
- Flight Training
  - -Building 1074
- Intelligence Training
- Combat Training
- **Combat Support Training**
  - **-Building 821**
- Launch Complexes
- Combat Training Ranges
- Impact Areas and Targets
- POW Training Camps
- Communications

COLD WAR SURVEY: HOLLOMAN AIR FORCE BASE

NAME:
Current: Munitions Maintenance (VACANT).
Historic: Missile Projects Training.
Street Address: 1243 Wagner St., HAFB, 88330-7905.

Building Number: 821

I. GENERAL INFORMATION:

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

Comments: Building 821 is unsafe for occupancy in its current condition.

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

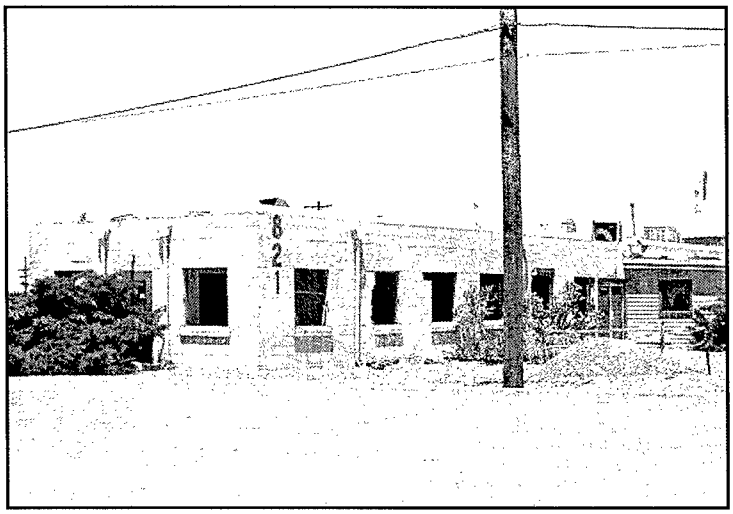
Comments: Altered by several renovations. Currently undergoing demolition.

Preliminary Determination of National or State Register Eligibility:

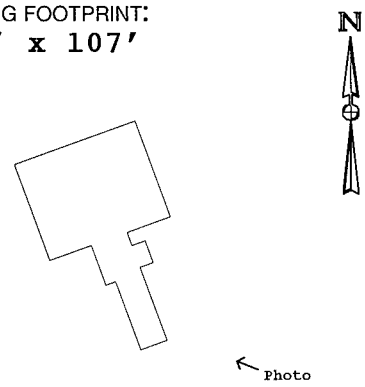
[ ] Exceptional importance [ ] Potentially eligible [ ] Further research recommended [x] Ineligible

Comments: Building 821 does not retain historic integrity.

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



BUILDING FOOTPRINT:
101′ x 107′



Date of completion: c1954

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 821 consists of a "T-shaped" footprint. A Technical Analysis Facility, constructed of metal siding on a steel bent frame, forms the top part of the "T", and faces north. This portion of Building 821 shows concrete masonry block wings at the east and west elevations. A one-story, flat-roofed concrete block structure projects off of the south elevation, forming the rest of the "T". Original blueprints refer to this section of Building 821 as the Missile Projects Training Building (CE File #821-1). The earliest plans are not stamped "As-built." It is difficult to tell if the Technical Analysis Facility was built at the same time or subsequent to the Missile Projects Training building. The Technical Analysis Facility consists of a steel bent frame structure allowing large interior space, with two wings either side. The steel bent frame facility features a large open room with offices in each of the wings. The projection to the south features entrance doors and awning windows at all three elevations, and exhibits a parapeted roof. An addition to this portion of Building 821 was constructed at the east elevation (n.d.). Neither the builder nor the architect is known.

III. HISTORIC AND CURRENT USE:

Source: Real Property Accountable Record/821.

Current Function: Building 821 is currently vacant.

Original Function: Missile projects: training and analysis.

Interim Functions: "G/M Lab Tech Analysis" (n.d.); "Mun Maint Admin" (n.d.); "Elec Lab Calibrain" (c1956); "El Lab Instrumen T" (c1959); "Acft R-L Engrg" (c1960);"Elec Lab Test" (c1962); "Msl/Space Rsch Eng" (c1977).

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

Source: CE File #821-1 (c1953); CE File #821-2 (c1954).

Foundation: Concrete footings and stem wall. Concrete slab.

Exterior walls: *Missile Projects*: Concrete masonry units (CMU); *Technical Analysis*: Metal siding on steel bents; *Wings*: Concrete masonry units.

Roof: *Missile Projects*: B/U on rigid insulation & lightweight concrete slab. Rib metal lath and steel bar joists. *Technical Analysis*: Galvanized metal on steel purlins and steel bent frame.

Notable interior features, including machinery: None noted.

V. CURRENT FEATURES IF DIFFERENT FROM ORIGINAL:

Source: Field visit Fall 1995.

Foundation:

Exterior walls:

254

Roof:

Notable interior features, including machinery: Portions of the roof in the Missile Projects area appear to be wood-frame in addition to the steel joists and concrete fill. The Technical Analysis facility is currently being used to store large containers of aircraft parts.

VI. BRIEF STATEMENT OF HISTORIC SIGNIFICANCE:

Building 821 no longer retains historic integrity in terms of location, design, setting, materials, workmanship, feeling, or association.

VII. ASSOCIATED BUILDINGS:

It is unclear which guided missile test facilities Building 821 may have been associated with during early Cold War weapons materiel tests.

VIII. ADDITIONAL COMMENTS AND MAINTENANCE RECOMMENDATIONS:

Building 821 no longer retains historic integrity. An initial site visit (Fall 1995) revealed that the exterior of the original Missile Projects training building remained essentially the same as it was constructed, except for a small addition and a different door type at the east elevation. The original drawings for the Technical Analysis facility show seven (7) windows at the north elevation. Thirteen (13) were counted at the site visit. It is possible that new frames were installed in the original rough openings, with more windows added. A door has been added to the north wing on the east elevation and the south wing on the west elevation. Some window glass has been painted over or boarded over. The interior appeared to have been substantially altered by a series of renovations. Building 821 was vacant, and was showing signs of neglect and disrepair, including overgrown vegetation, a blocked window, structural cracks in the exterior walls, and broken window glass. A subsequent site visit (Spring 1996) revealed that Building 821 was being demolished.

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 [ ] Entire structure located at original site.

Comments: Building 821 is abandoned, and is currently being demolished.

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: The original floor plans (CE File #821-1,-2), a floor plan dated c1985, and the current (1996) floor plan are all different. It appears that extensive remodeling occurred at Building 821 prior to the demolition efforts currently underway.

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: Building 821 has been landscaped with shrubs and cactii.

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

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

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

Comments: Building 821 is vacant, and is currently being demolished.

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

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

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

Comments: Building 821 is vacant, and is currently being demolished.

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

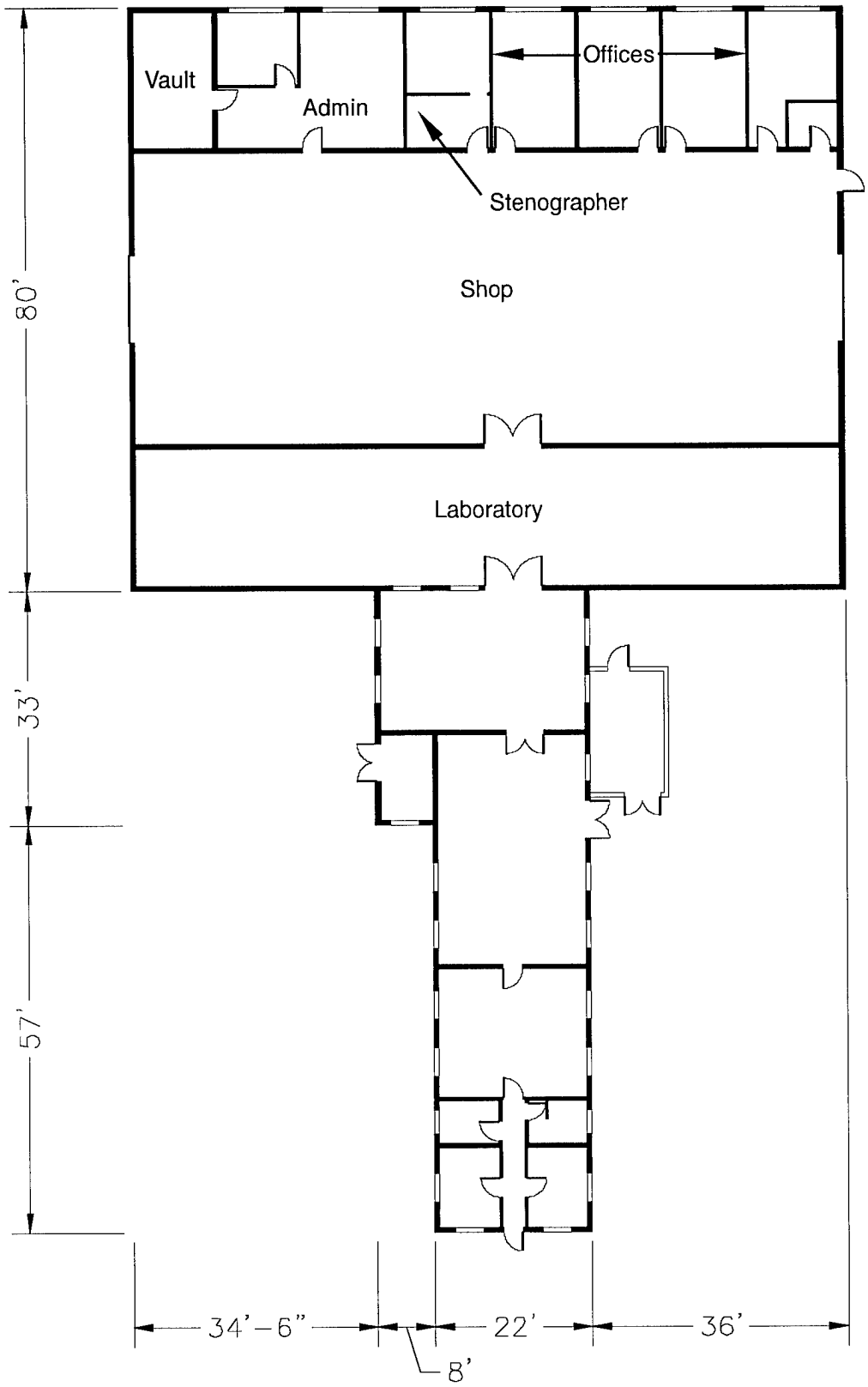
Comments:

X. FURTHER INFORMATION:

Surveyed By:

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

HAFB Report Number: **CRM Publication #3**
Photograph Citation: **CD-ROM #2-Photo #44**
Negatives On File: **49 CES/CEV, 550 Tabosa Ave, HAFB**
Date of Field Visit: **FALL 1995**



Source: CE File #821-1 (c1953)

State of New Mexico Office of Cultural Affairs Historic Preservation Division	**BUILDING 821** Holloman Air Force Base Alamogordo, New Mexico	Project No. 35-95-HAFB-4	AutoCAD rendering by: *Eugene N. Kilmer* *(505) 323-0641* Mag Drafting **Sheet 1 of 1**

Field Survey: Materiel Development

IV. Materiel Development Facilities

- **Research Laboratories**
  - **-Building 839**
  - Daisy Test Track:
    - -Building 1200
    - -Building 1201
    - -Building 1202
    - -Building 1203
    - -Building 1204
    - -Building 1205
    - -Building 1206
    - -PRL Facility
  - Balloon/Parachute Operations:
    - -Building 524
    - -Building 849
    - -Building 850
    - -Building 855
- Manufacturing Sites
- Test Sites
  - -Building 640
  - High Speed Test Track:
    - -Building 835
    - -Building 1159
    - -Building 1160
    - -Building 1161
    - -Building 1162
    - -Building 1163
    - -Building 1175
    - -Building 1178
    - -Building 1284
    - -Building 1285
    - -Building 1645
- Proving Grounds
- Communications
  - -Building 1102
  - -Building 1103
  - -Building 1121
- Documentation
  - -Building 841
  - -Building 848
  - -Building 1182

COLD WAR SURVEY: HOLLOMAN AIR FORCE BASE

NAME:
Current: Precision Measurement Laboratory.
Historic: Special Projects Laboratory.
Street Address: 1321 Tularosa Road, HAFB, 88330-7929.

Building Number: 839

I. GENERAL INFORMATION:

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

Comments: Building 839 is in need of routine maintenance.

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

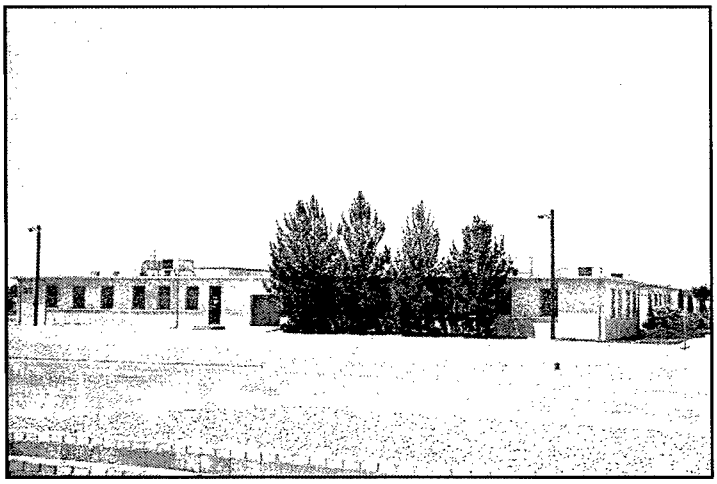
Comments:

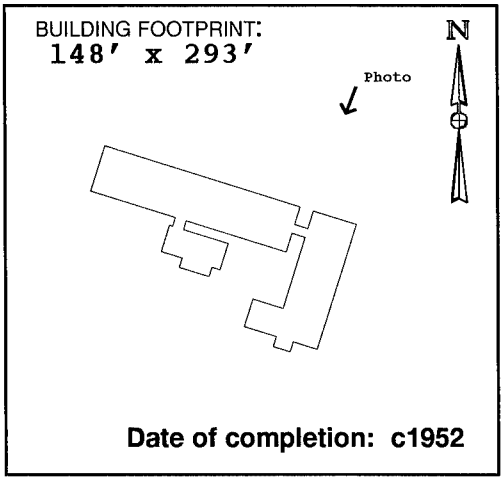
Preliminary Determination of National or State Register Eligibility:

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

Comments: Building 839 does not retain historic integrity.

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 839 has two main wings referred to as "839 East," and "839 West." Each wing has a central corridor with rooms off of either side. The entire building is a one-story concrete masonry unit structure with a flat roof. The west wing was constructed first, in 1952 (CE File #850-1). The east wing was completed in 1959 (CE File #839-1). A "Clean Room" and a mechanical room were added to the south of the west wing in 1964 (CE File #839-2). An addition was constructed at the east wing in 1989 (CE File #839-5). Although the builder is unknown, W. C. Kruger and Associates (Santa Fe, NM) provided the architectural work.

III. HISTORIC AND CURRENT USE:

Current Function: (West Wing) Precision Measurement Lab.

Current Function: (East Wing) Base Info. Mgmt. Flight; Defense Printing Service.

Original Function: Base director, admin., tech offices. (See CE File #850-1).

Interim Functions: Judge Advocate's Office; Corps of Engineers; OSI.

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

Foundation: (West Wing) Concrete footings. Foundation wall.

Foundation: (East Wing) Concrete footing and stem wall.

Exterior walls: Painted concrete masonry units (CMU).

Roof: (West Wing) B/U on 2" rigid insulation & 2" concrete slab. Steel bar joists.

Roof: (East Wing) B/U on poured gyp deck. Insulated form boards sup. by steel bar joists.

Notable interior features, including machinery: None noted.

V. CURRENT FEATURES IF DIFFERENT FROM ORIGINAL:

Source: Field visit Spring 1996.

Foundation:

Exterior walls:

260 Roof:

Notable interior features, including machinery: None noted.

VI. BRIEF STATEMENT OF HISTORIC SIGNIFICANCE:

Building 839 does not meet National Register criteria as an individual property, and does not retain historic integrity.

VII. ASSOCIATED BUILDINGS:

None noted.

VIII. ADDITIONAL COMMENTS AND MAINTENANCE RECOMMENDATIONS:

Building 839 has served as a technical support building for many projects on Base. As a result, many interior and exterior alterations have occurred, resulting in a loss of historic integrity in terms of design, materials, feeling, and workmanship. Correspondence within Real Property Accountable Record/839 indicates several interim functions which occurred at Building 839 (1973: CE File #839-3; n.d.: CE File #839-4; 1987: CE File #839-5). Each of these functions resulted in partitioning and finish modifications to the interior. Nearly every original window in the west wing has been removed and blocked in. The east wing (Defense Printing Service) is currently undergoing renovation.

Suggested routine maintenance: Scrape flaking paint, especially at CMU joints, re-point, prime and paint. Scrape foundation wall, patch, and paint. Replace rotted soffit wood (east wing). Reset splash blocks. Fill depressions at foundation and regrade to promote positive drainage. Prune vegetation away from building. Clean roof gravel out of gutters. Note: Poor drainage has caused the foundation to be undercut at the rear elevation, near the substation. Relocate two downspouts. Move foundation vents to allow regrading at foundation. Fill depression caused by undercut. Rework existing fill at foundation to promote positive drainage, and to provide a swale around the substation.

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

Comments: Architectural elements have changed significantly. Structural system remains essentially unaltered.

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

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

Comments: From 1959 plot plan, buildings shown situated near Building 839 are still present.

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

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

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

Comments: Nearly all of the original windows in the west wing have been removed and the openings blocked in. Several renovations obscure interior finishes.

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

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

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

Comments: Interior renovations obscure original finishes and craftsmanship.

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

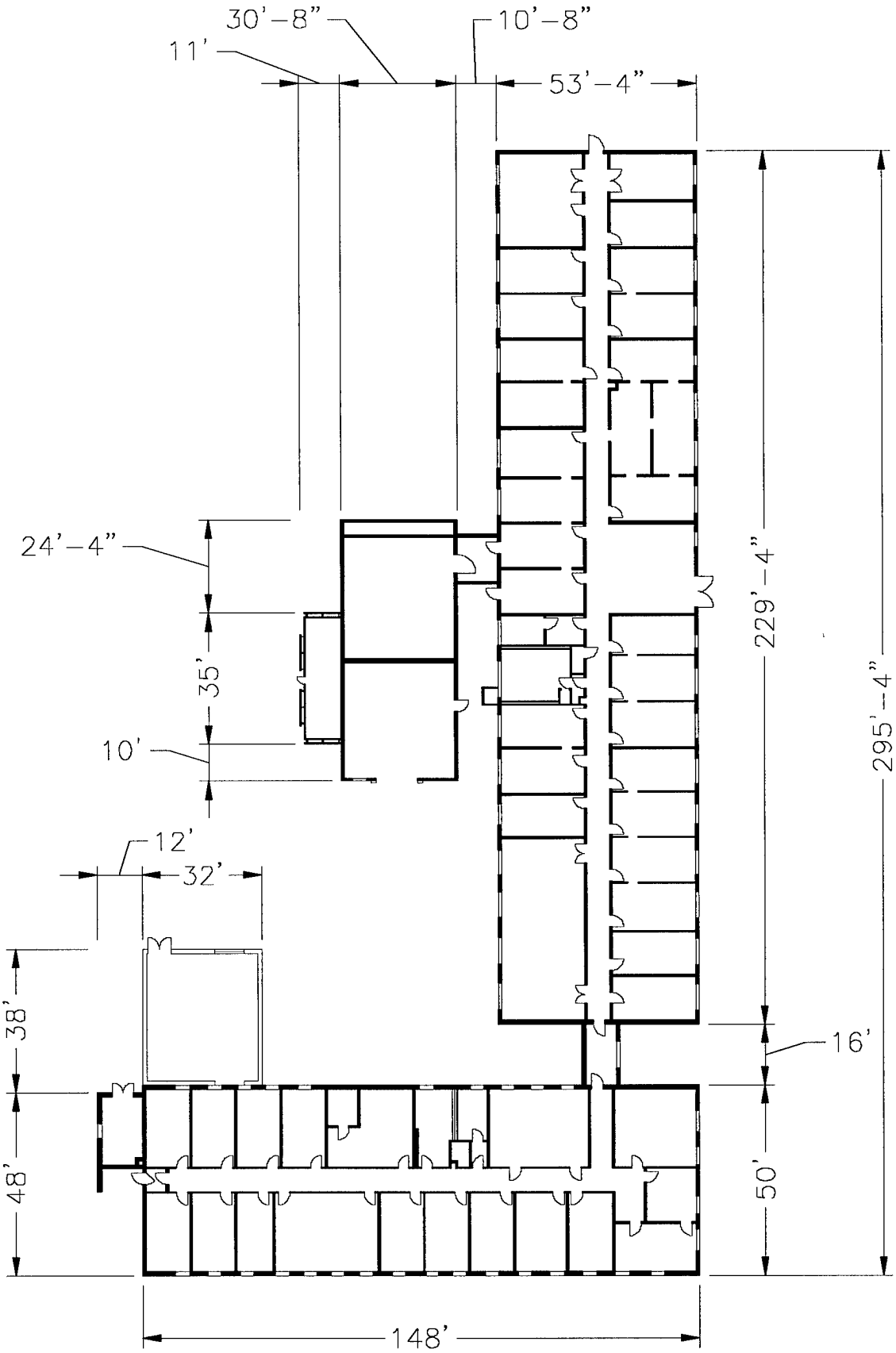
Comments: Currently, Building 839 supports the Base Informanagement Flight, and the Precision Measurement Equipment Lab.

X. FURTHER INFORMATION:

Surveyed By:

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

HAFB Report Number: **CRM Publication #3**
Photograph Citation: **CD-ROM #2-Photo #61**
Negatives On File: **49 CES/CEV, 550 Tabosa Ave, HAFB**
Date of Field Visit: **SPRING 1996**



Source: CE File #839-1 (c1959)

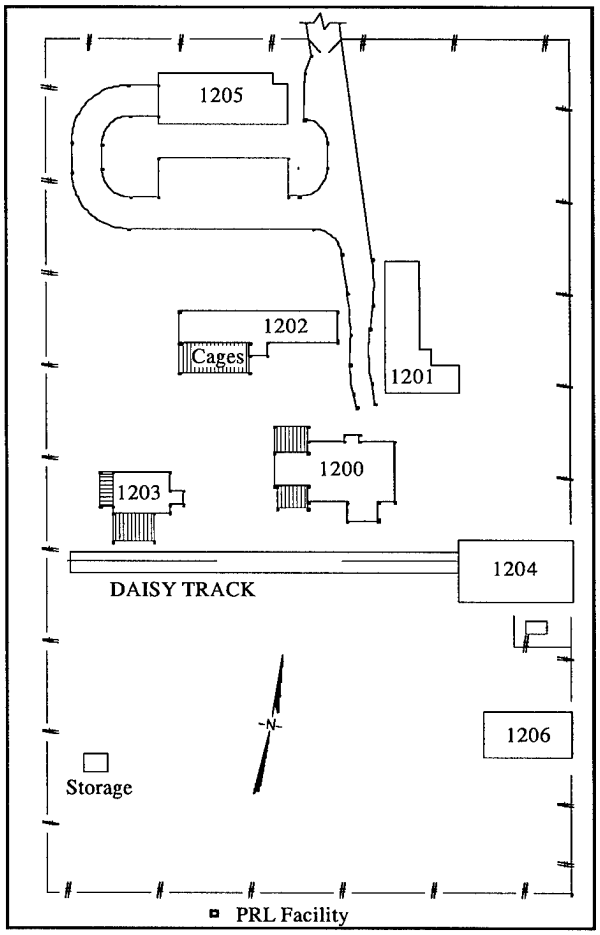
State of New Mexico Office of Cultural Affairs Historic Preservation Division	**BUILDING 839** Holloman Air Force Base Alamogordo, New Mexico	Project No. 35-95-HAFB-4	AutoCAD rendering by: *Mike Gardner* New Mexico State University **Sheet 1 of 1**	NEW MEXICO STATE UNIVERSITY

Field Survey: Materiel Development

IV. Materiel Development Facilities

- **Research Laboratories**
  - -Building 839
  - **Daisy Test Track:**
    - **-Building 1200**
    - **-Building 1201**
    - **-Building 1202**
    - **-Building 1203**
    - **-Building 1204**
    - **-Building 1205**
    - **-Building 1206**
    - **-PRL Facility**
  - Balloon/Parachute Operations:
    - -Building 524
    - -Building 849
    - -Building 850
    - -Building 855
- Manufacturing Sites
- Test Sites
  - -Building 640
  - High Speed Test Track:
    - -Building 835
    - -Building 1159
    - -Building 1160
    - -Building 1161
    - -Building 1162
    - -Building 1163
    - -Building 1175
    - -Building 1178
    - -Building 1645
- Proving Grounds
- Communications
  - -Building 1102
  - -Building 1103
  - -Building 1121
- Documentation
  - -Building 841
  - -Building 848
  - -Building 1182

Aeromedical Bldgs 1200-1206, PRL



Site Plan. Aeromedical Facilities.

Daisy Track and Aeromedical Laboratories

"Scientists and technicians of the Aeromedical Field Laboratory at the Air Force Missile Development Center have made important contributions in many fields of biodynamics research. In addition to their achievements related to escape physiology, such as establishing the limits of human toleration to the windblast and deceleration forces experienced in emergency escape from high-performance aircraft, they have probed deeply into a variety of other biodynamics problems."

--U.S. Air Force historian David Bushnell (n.d.e.: Foreword).

The Daisy Track

The Daisy Deceleration Test Track, designed for use by the Aeromedical Field Laboratories, was formally inaugurated in the summer of 1955, with the first test run occurring on 22 September 1955. "According to the original proposal made in 1953 by Colonel John Paul Stapp, who was then head of the lab, propulsion was to have been by compressed air catapult—hence the analogy with the popular Daisy air rifle which gave the track its name" (Bushnell n.d.e.: 22). A water braking system later replaced the powder-cartridge system. Human tolerance to windblast and deceleration was monitored on the Daisy Test Track using a menagerie of animals, anthropomorphic dummies, and human volunteers (Mattson and Tagg 1995: 97-135).

Pre-Sputnik

Research at the Holloman AFB Daisy Track and the associated aeromedical facilities conducted prior to the Sputnik launch emphasized studying forces encountered during ejection from supersonic jets. Other experiments studied the human response to crash forces, with results affecting the way the automotive industry designed such

Sputnik Launch
October 1957

"There is no clear analogy in American history to the crisis triggered by the launching of the Soviet earth satellite on October 4, 1957. This intrinsically harmless act of science and engineering was also, of course, both a demonstration of foreseeable Soviet capability to launch an ICBM, and a powerful act of psychological warfare. It immediately set in motion forces in American political life which radically reversed the Nation's ruling conception of its military problem, of the appropriate level of the budget, and of the role of science in its affairs."

-- W. W. Rostow (in Bulkeley 1960: 356).

features as bumpers, safety belts, and steering wheels (Mattson and Tagg 1995: 109). These early projects were revised as a direct response to the Sputnik launch. The Biodynamics of Human Factors in Aviation, established in 1954, for example, was in March 1958 revised and renamed the "Biodynamics of Space Flight" (Bushnell n.d.e.: 2). Designated tasks within this project were re-named from "Aircraft Crash Forces," to "Patterns of Deceleration in Space Flight" (Bushnell n.d.e.: 7). "Indeed, with the post-Sputnik revolution in Air Force research activity, scientists of the Aeromedical Field Laboratory at last became free to emphasize space work to their hearts' content" (Bushnell n.d.e.: 2).

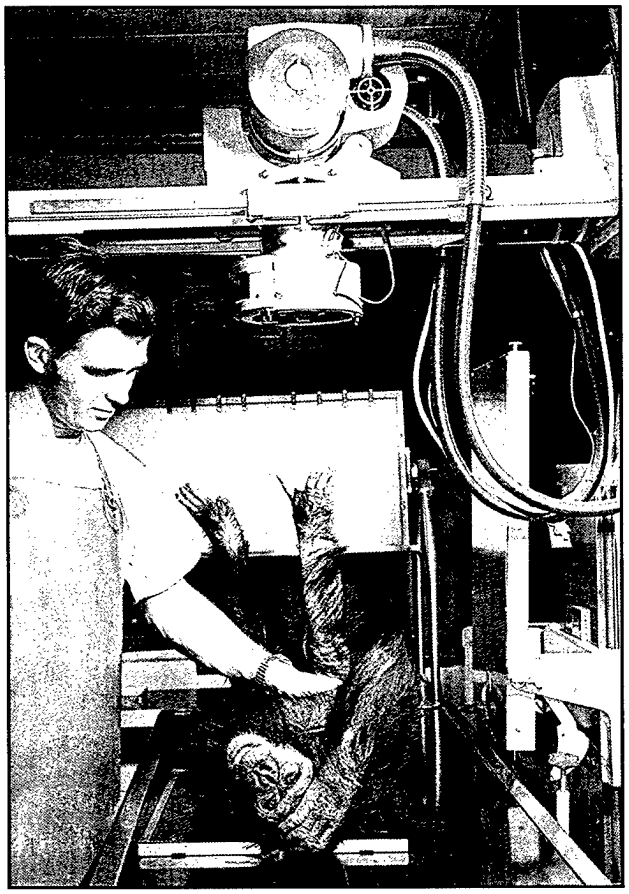
Re-entry into the Earth's Atmosphere

Centrifuge testing of animals in conjunction with the Aero Medical Laboratory at the Wright Air Development Center, and at the Aviation Medical Acceleration Laboratory in Johnsville, PA ensued. Internal injuries were encountered when "...the animals were sacrificed afterward," confirming the dangers inherent in prolonged exposure to high g-forces (Bushnell n.d.e.: 21).

Of particular concern was the effect on the human body of re-entry back into the earth's atmosphere from outer space. "In the case of re-entry, a vehicle coming back from extreme altitude or outer space must encounter high decelerative forces as it comes in contact with denser layers of air..." (Bushnell n.d.e.: 10). Scientists were tasked with deciding whether re-entry of future space vehicles should be designed to come "straight down, experiencing high gravitational forces, but holding them to short duration, or to follow a gradually descending path, with moderate g-forces but long duration" (Bushnell n.d.e.: 7).

"Laboratory personnel early placed their faith in the chimpanzee as an 'ideal' subject for use in applied military research programs. Over the years, the Laboratory colony gained recognition ... as the only one in the Department of Defense, and ... as the world's largest."

-- Air Force historian Lloyd Cornett (n.d.a.: 55).



RG 342-B. Vol. II. 09-001. Archives II.

"Seventy-five chimpanzees are currently in training at the Air Research & Development Command's Aeromedical Field Laboratory, Holloman AFB, New Mexico. Here, Dr. William Britz is shown taking x-rays of chimp Sam." U. S. Air Force photo. 23 December 1959.

Aeromedical Labs and Support Facilities

Buildings 1200, 1201, 1202, 1203, 1204, 1205, 1206, and 1264 provided support for some of the most important missions ever conducted at Holloman AFB. The aeromedical facilities were charged with maintaining a colony of animals, mostly primates, to research the effects of gravitational forces and radiation upon living organisms. Each building operated in support of the Daisy Test Track and the High Speed Test Track. Research conducted at these facilities enabled the Gemini and Apollo space programs to succeeed.

Mission Statement: 1963

By 1963, the mission statement assigned to the Holloman aeromedical research facilities was to "...design, perform, and analyze experiments which will define the effects of trauma-producing agents on biological specimens..." (Cornett n.d.a.: 8). The "trauma-producing agents" were further defined to include gravitational forces, atmospheric radiation, and chemicals.

To accomplish this mission, a colony of animals, mostly chimpanzees, was maintained for research conducted at Holloman AFB. Other agencies supported by the aeromedical facilities included NASA, the Los Alamos Scientific Laboratory, the Defense Atomic Support Agency (DASA), the Army, the Navy's Man-in-the-Sea Program, the Federal Aviation Agency, the National Bureau of Standards, and several other agencies sponsored by the Air Force.

USAF Support of Other Agencies

Toxic Hazards Work: A continuing effort at the Holloman facilities supported the Toxic Hazards Branch of the 6570th Aerospace Medical Research Laboratories at Wright-Patterson AFB, Ohio. This work was undertaken to "...determine the effects of various chemical agents on learned behavior" (Cornett n.d.a.: 174).

BZ Drug (US Air Force Project 7754): A series of tests conducted at the close of 1965 involved a classified Army compound labeled "BZ." As in previous drug experiments, these tests were conducted to determine "the decline in performance of subjects exposed to an injection of the compound." Taking previous tests a step further, subjects were injected, then placed in a pressure chamber to determine the effects of the drug at altitude" (Cornett n.d.a.: 188).

Los Alamos Scientific Laboratory Simulated Solar Flare Research (Project 6893): One of the many efforts supported under Project 6893 was an experiment with the Los Alamos Scientific Laboratory, an Atomic Energy Commission contractor located at Los Alamos, New Mexico. Holloman and Los Alamos cooperated to explore "the effects of solar radiation on learned behavior" (Cornett n.d.a.: 189).

Life Sciences (Project ESP 920E 0025): An on-going program conducted at the Holloman aeromedical facilities, in cooperation with sites across the United States, was one known simply as 'Life Sciences.' Begun in 1961, by 1964 the program's mission was refined to one broad objective: "...supporting the National Aeronautics and Space Administration in getting chimpanzee baseline data that could be correlated to man." (Cornett n.d.a.: 193). The laboratories supplied baseline data and furnished chimpanzees to various NASA research efforts. Between May 1961 and December 1965, personnel with the Holloman aeromedical facilities furnished 34 technical reports on topics ranging from the "refractive characteristics of chimpanzees," to "serum biochemical alterations during and following restraint" (Cornett n.d.a.: 193).

Flashblindness Experiments (Project 5710): In an effort to assist in the development of protective equipment and safety procedures in the event of nuclear war, primates at Holloman AFB were exposed to Light Amplification by Stimulated Emission of Radiation (LASER) beams. The Defense Atomic Support Agency provided funding for this project, which was designed to study the effects of nuclear weapons detonation upon the retinas of the eyes. "The Defense Atomic Support Agency wanted information on possible eye damage from flashblindness, an occurrence of nuclear weapons detonation" (Cornett n.d.a.: 195).

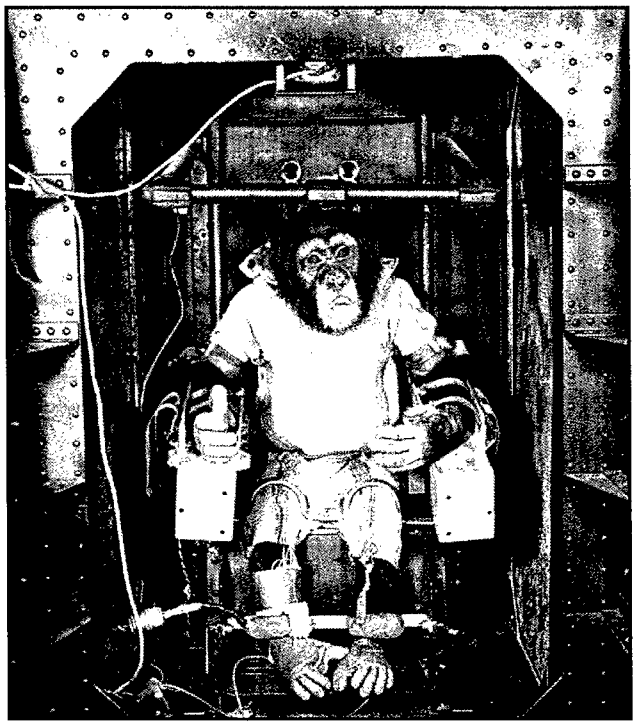
Zero-G Experiments (Project ESP 920E [9520] 0123): Another of the NASA projects undertaken by Holloman's aeromedical facilities was one titled the "Assessment of Mammal Growth and Development in Space Environment." This entailed a joint effort with the University of Southern California to design, develop, and build a laboratory model life cell capable of supporting a "long-term zero-G experiment with mice" (Cornett n.d.a.: 197).

F-111 Pilot Restraint Harness and F-4C ejection seat projects: On-going tests on the pilot restraint harness used in the fighter jet F-111 dated back to 1963. Tests used anthropomorphic dummies to research the harness and associated equipment in different positions (Cornett 1965: 200). Complaints that the seats used in the F-4C aircraft "...caused no end of discomfort and fatigue..." led to several ejection seat programs in an effort to improve crew safety and morale (Cornett n.d.a.: 195).

Support of the Arctic Aeromedical Laboratory: Evaluation was provided for a piece of Arctic survival equipment known as a mukluk (a boot made of either sealskin or reindeer hide.) The mukluk had reportedly been lost during ejections and parachute deployment. Dummies were attired with mukluks, and ejected from the High Speed Test Track. "Although the Arctic apparel stayed on during the ejection tests, further tests were recommended" (Cornett n.d.a.: 210).

Support of the Royal Canadian Air Force: Upon learning that the rocket booster used during emergency ejections enveloped the cockpit in flames for approximately 30 milliseconds, experiments at Holloman were funded by the Royal Canadian Air Force to ascertain pilot safety. To simulate the exposed skin of a pilot during an emergency ejection, scientists at Holloman removed the hair from along the backs of two laboratory mice. The mice died during a simulated ejection, and the tests were deemed inconclusive. A chimpanzee was shaven and tested next. The chimp survived, indicating that "pilot safety apparel" currently being worn was indeed "...adequate" (Cornett n.d.a.: 212).

Chimpanzee Rapid Decompression Experiments [Projects ESP 920E-7210 and -9909]: Decompression experiments sponsored by NASA were undertaken to support the upcoming Gemini and Apollo flights. In order to find out how astronauts might respond to a sudden loss in cabin pressure, nine Holloman chimpanzees were exposed to varying periods of decompression. The decompression chamber, made by General Electric, was capable of decompressing the tank from a chamber altitude of 35,000 feet to a near vacuum in less than one second. At the same time, scientists set up an oxygen system to recompress the tank within five seconds (Cornett n.d.a.: 212). The chimps were able to survive rapid decompression without damage to the central nervous system, allowing "cautious extrapolation" to humans (Cornett n.d.a.: 213).



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"The Aero Medical Ecology Lab of the Air Force Missile Development Center, Holloman AFB, NM, is conducting studies on Thermo humidity. Here one of the chimps used in these studies is instrumented and placed in the test chamber in preparation for test."

U. S. Air Force Photo. 26 February 1960.

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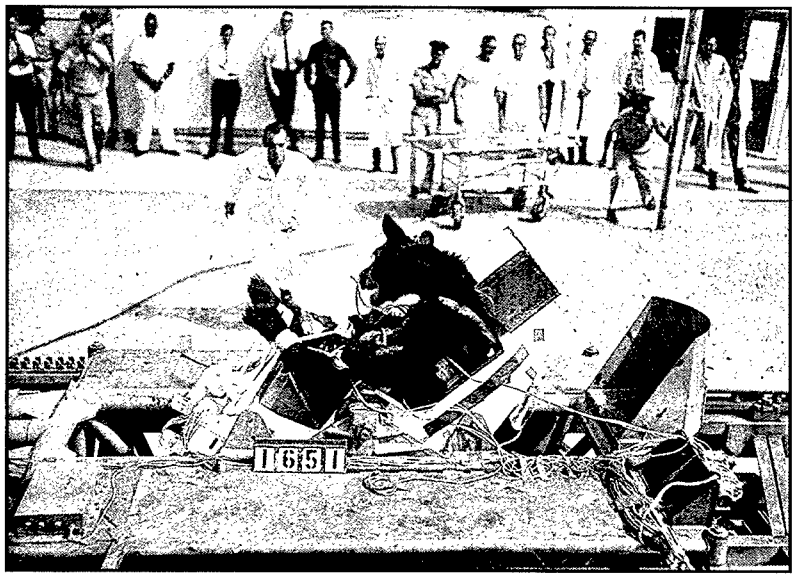
"HAM, an Air Force chimpanzee now training at the Aero-Medical Laboratories at Holloman Air Force Base, NM, has a blood sample taken by Dr. (Capt.) Jerry Fineg, Veterinarian of the Vet Services Branch (Vivarium Section). HAM, like a number of other monkeys, might be selected to go into space this year."

U. S. Air Force Photo October 1960.

Human Impact Series (NASA Project PRT-13335-G): National Aeronautics and Space Administration personnel wanted to determine whether or not astronauts could survive Apollo capsule landings under normal and/or adverse conditions (e.g. parachute failure). This program was initiated in September 1962 with a study using bears, as a "prelude to human testing" (Cornett n.d.a.: 228). The arrival of the bears to Holloman AFB attracted wide attention because they reached Holloman just after the Soviet Union launched a dog in Sputnik II. "There was speculation that perhaps the United States Air Force planned to outdo the Russians by placing not a mere dog but a great big bear in orbit. Actually, of course, there was no such intention..." (Bushnell n.d.a.: 47). Human participants in deceleration tests suffered first-degree harness burns, breathing problems, disorientation, back and neck injury, headaches, and vision impairment. Despite these results, "...none of the tests exceeded human tolerance...[demonstrating] that man could endure predicted Apollo landing forces without incapacitation or undue pain..." (Cornett n.d.a.: 229). The Apollo three-man "couch," the astronaut suits, and the "bubble" helmet were all successfully tested using the Daisy Test Track, in conjunction with the aeromedical facilities.

"The bear, at best, was an uncooperative animal. Until 1962, the general procedure required several men and much time. The bear was forced into a 'squeeze' cage, a specially-designed cage that could be reduced in area by sliding the front toward the back. Forced into virtual inactivity, the animal was tied and anesthesia administered. The technique was stressful, however, both to the animal and to the half-dozen or so persons involved...In 1962, solid-walled cages were developed, and nitrous oxide introduced to sedate the animals."

--Air Force historian Lloyd Cornett (n.d.a.: 62).



"An anesthetized American Black Bear is subjected to a forward-facing impact on the Daisy Decelerator in conjunction with the Apollo test at Holloman AFB, NM. 3 September 1963." U. S. Air Force photo.

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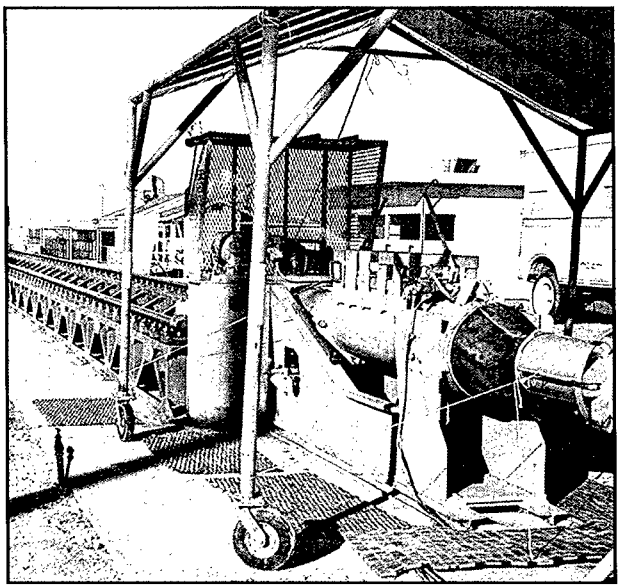
The Daisy Deceleration Test Track Site

The Engineering Laboratory at Holloman AFB provided the initial design of the 120-foot long Daisy Track, sled, and brake system, using specifications outlined by Doctor (Colonel) John P. Stapp in a Disposition Form dated 13 May 1953. Frank Tatsch Construction Company of Silver City, NM was selected to construct the track. The contract for the track's braking device went to Service Metals Fabricators Company of Santa Monica, CA (Chandler 1967; Mattson and Tagg 1995).

The track consisted of two solid steel rails, three inches in diameter set five feet apart, centerline to centerline. The rails were supported by a steel superstructure bolted to a reinforced concrete foundation. In February 1961, a contract was awarded for the track extension, which was accepted for operational use in October 1962. Perhaps the most important mechanical component of the Daisy Decelerator was the waterbrake. This assembly had two major parts, the waterbrake cylinder and a piston which was part of the sled. The operation of the brake depended "on the transfer of energy from the moving sled to the moving water" (Chandler 1967: 31).



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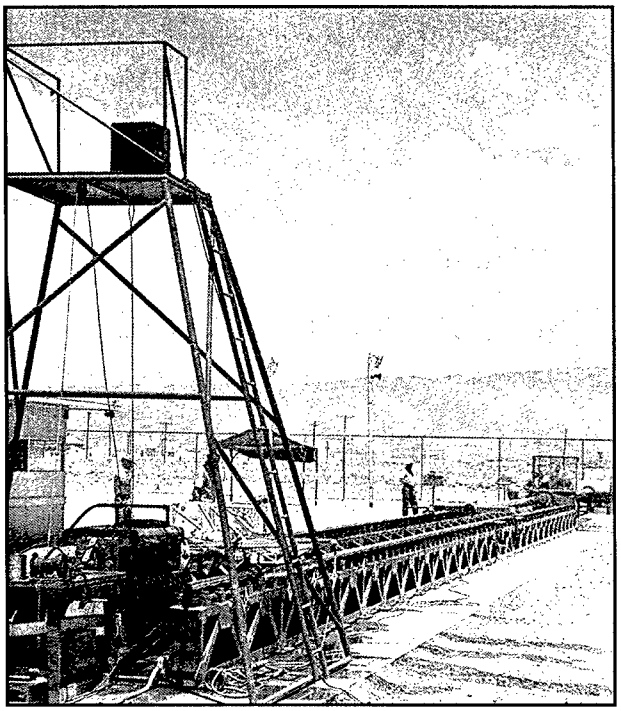
"Daisy Deceleration: 240-foot test track at the Aeromedical Field Laboratory, Holloman AFB. 2 January 1962." U. S. Air Force photo. Facing northwest.



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(Left) "New air propulsion unit shown following test run on the Daisy Deceleration Track at Holloman AFB, NM. 21 June 1960." U. S. Air Force photo. Facing southwest.

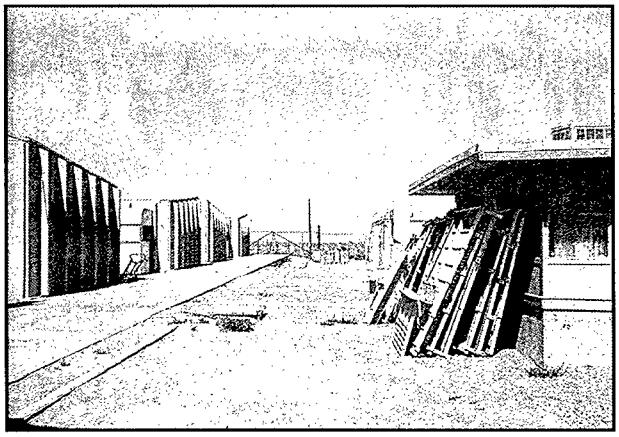
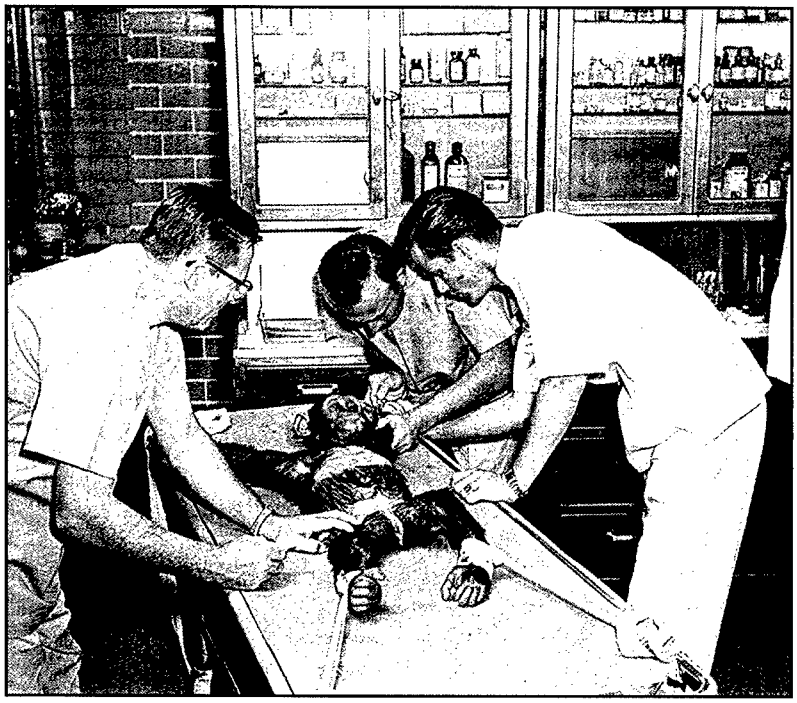


Photo CD-ROM on file. Civil Engineering, HAFB.

Photograph showing location of Daisy Track, 23 May 1996. The Daisy Track was moved to the International Space Hall of Fame in Alamogordo in 1987 for safekeeping. Facing west.

"Air Force Astro-Chimps: Seventy-five chimpanzees are currently in training at the Air Research and Development Command's Aeromedical Field Laboratory, Holloman AFB New Mexico. USAF psychologists have the unique problem of teaching the chimps to perform tasks designed to measure psychological and neurological function[s]. Earth-bound tasks, once mastered, can then be successfully compared with the chimp's ability to perform useful functions in space environments he will encounter. Here S/Sgt, R. Gatewood, Capt. J. Fineg, and A/1C Clark are shown taking a blood sample from chimp #49 following a Thermo-Humidity Test Sept 1959." U.S. Air Force photo.



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Summary

The Daisy Test Track, Building 1200, Building 1201, Building 1202, Building 1203, Building 1204, Building 1205, Building 1206, a wooden structure just to the south of these buildings referred to as the Primate Research Lab (PRL) facility, and Building 1264 all have achieved historic significance under Criterion A of the National Register of Historic Places for being associated with the nationwide effort to explore outer space.

Despite the fact that these properties have achieved historic significance, several of the facilities do not meet National Register criteria for historic integrity.

The Daisy Test Track was dismantled and removed for safekeeping to the International Space Hall of Fame in Alamogordo, NM on 13 January 1987 (Mattson and Tagg 1995: 120). Buildings 1200, 1203, and 1205 no longer retain historic integrity of design, materials, or workmanship. Building 1204 has been completely obscured by a recent renovation. Although not eligible as an individual property, the PRL facility does warrant consideration as a contributing feature in a HAFB Cold War-era Multiple Property nomination. Each of these facilities is discussed in detail in the individual field forms.

What does remain of the historic aeromedical complex warrants special managerial consideration. Although each of these facilities has been constructed within the last 50 years, the unique research conducted here confers exceptional importance upon those facilities still retaining historic integrity. It is recommended that the aeromedical facilities be nominated to the National Register of Historic Places as part of a Multiple Property listing. Those buildings not retaining historic integrity may be considered to be noncontributing features of the nomination. This assessment is discussed in the recommendations section of this report.

COLD WAR SURVEY: HOLLOMAN AIR FORCE BASE

NAME:
Current: SC Lab, Medical (VACANT).
Historic: Space Biology Laboratory.
Street Address: 841 Douglas Road, HAFB, 88330-7823.

Building Number: 1200

I. GENERAL INFORMATION:

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

Comments: Building 1200 is abandoned, and showing signs of deterioration.

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

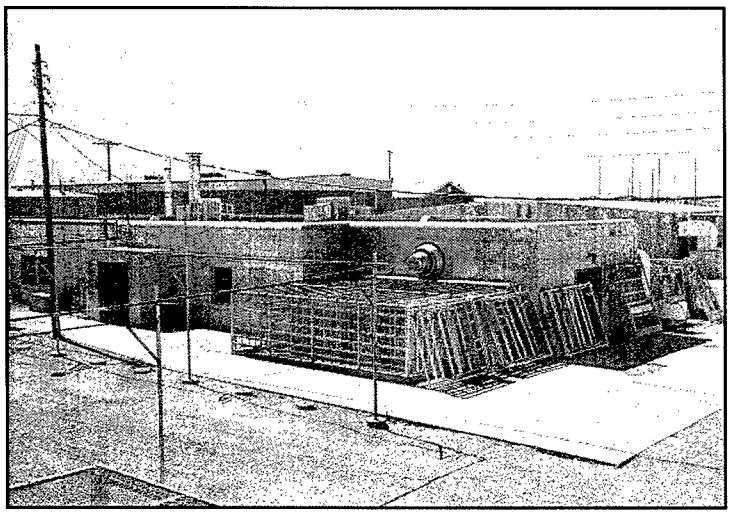
Comments: Alterations are architectural rather than structural.

Preliminary Determination of National or State Register Eligibility:

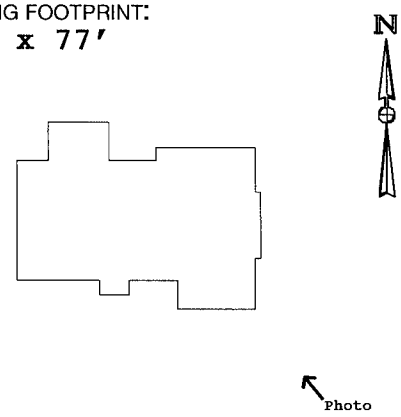
[ ] Exceptional importance [ ] Potentially eligible [ ] Further research recommended [x] Ineligible

Comments: Building 1200 no longer retains historic integrity. See Section VI.

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



BUILDING FOOTPRINT:
50′ x 77′



Date of completion: c1954

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 1200 is a rectangular, single-story, flat-roofed concrete masonry unit (CMU) building constructed as one of several laboratories dedicated to important aeromedical research using both animals and humans. None of the construction drawings were correctly stamped "As-built." According to Real Property Accountable Record/1200, the estimated date of construction is 1954. Subsequent improvements documented in CE File drawer #1200 include an addition to the medical lab (c1958), a covered passageway added to the boiler room (c1957), and a frame wall addition to the surgery room (c1957). Neither the builder nor the architect is known.

III. HISTORIC AND CURRENT USE:

Source: Real Property Accountable Record/1200; Field visit Summer 1995.

Current Function: Vacant.

Original Function: Space Biology laboratory/Animal experimentation.

Interim Functions: Animal experimentation/Storage.

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

Source: CE File #1200-1 (c1953).

Foundation: Concrete wall footings. Concrete slab on fill.

Exterior walls: Painted concrete masonry units (CMU).

Roof: BUR on concrete deck, supported by metal lathe and steel bar joists.

Notable interior features, including machinery:

Originally used as a medical laboratory, with work tables, work benches, built-in lockers, cabinets, operating tables, x-ray tables, etc.

V. CURRENT FEATURES IF DIFFERENT FROM ORIGINAL:

Source: Field visit Summer 1995.

Foundation:

Exterior walls:

Roof:

Notable interior features, including machinery:

One room is currently being used for storage. All medical and laboratory equipment has been removed.

VI. BRIEF STATEMENT OF HISTORIC SIGNIFICANCE:

Due to extensive alterations to the exterior, Building 1200 no longer retains historic integrity. Recommend, however, that this building be considered as a contributing feature in a basewide early Cold War National Register of Historic Places Multiple Property nomination.

VII. ASSOCIATED BUILDINGS:

Building 1200 was an integral part of Holloman's aeromedical facilities, including Buildings 1201, 1202, 1203, 1204, 1205, and 1264.

VIII. ADDITIONAL COMMENTS AND MAINTENANCE RECOMMENDATIONS:

Since its original construction c1954, Building 1200 has been used as a laboratory and medical facility for a wide variety of research animals, including trout, black bear, dogs, mice, and chimpanzees. Although currently abandoned, this building featured a lead-lined x-ray room, an autopsy room, an observation room, a surgery room, a dark room, and animal pens (c1954: CE File #1200-1). Built-in steel lockers, metal cages, x-ray tables, work benches, food bins, operating tables, scrub sinks, surgical lamps, sterilizers, etc. have been removed. Two exterior doors have been blocked in, and thirteen exterior windows have been blocked in. One exterior door and one exterior window have been added. Interior walls have been added, removed, or relocated. A storage room has been added to the south elevation. Animal cages remain at the west elevation. The presence of dead rodents, foul odors, torn pipe and duct insulation (possible containing asbestos) and peeling paint (possible lead-based) represent hazards to health and safety. Because of the unique and important nature of the research conducted here, recommend that this building be nominated as a contributing feature as part of an HAFB early Cold War National Register Multiple Property nomination.

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: The building has been located at its present location since c1954.

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: Most of the original doors and windows have been removed. All of the equipment has been removed. Most of the original finishes have been 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: Continues to be situated in an isolated setting with the other Aeromedical facilities.

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

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

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

Comments: Elevations have changed due to modified openings, an addition, and a covered passageway. Interior wainscot and cornice removed, wall tile added.

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

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

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

Comments: Exterior walls and cages remain intact. Some architectural features remain. Most of the original interior workmanship has been lost.

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: Building 1200 continues to be situated within the compound set aside for animal research. Chimpanzee research continues today in nearby buildings.

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 [x] Some elements remain [ ] Retains integrity

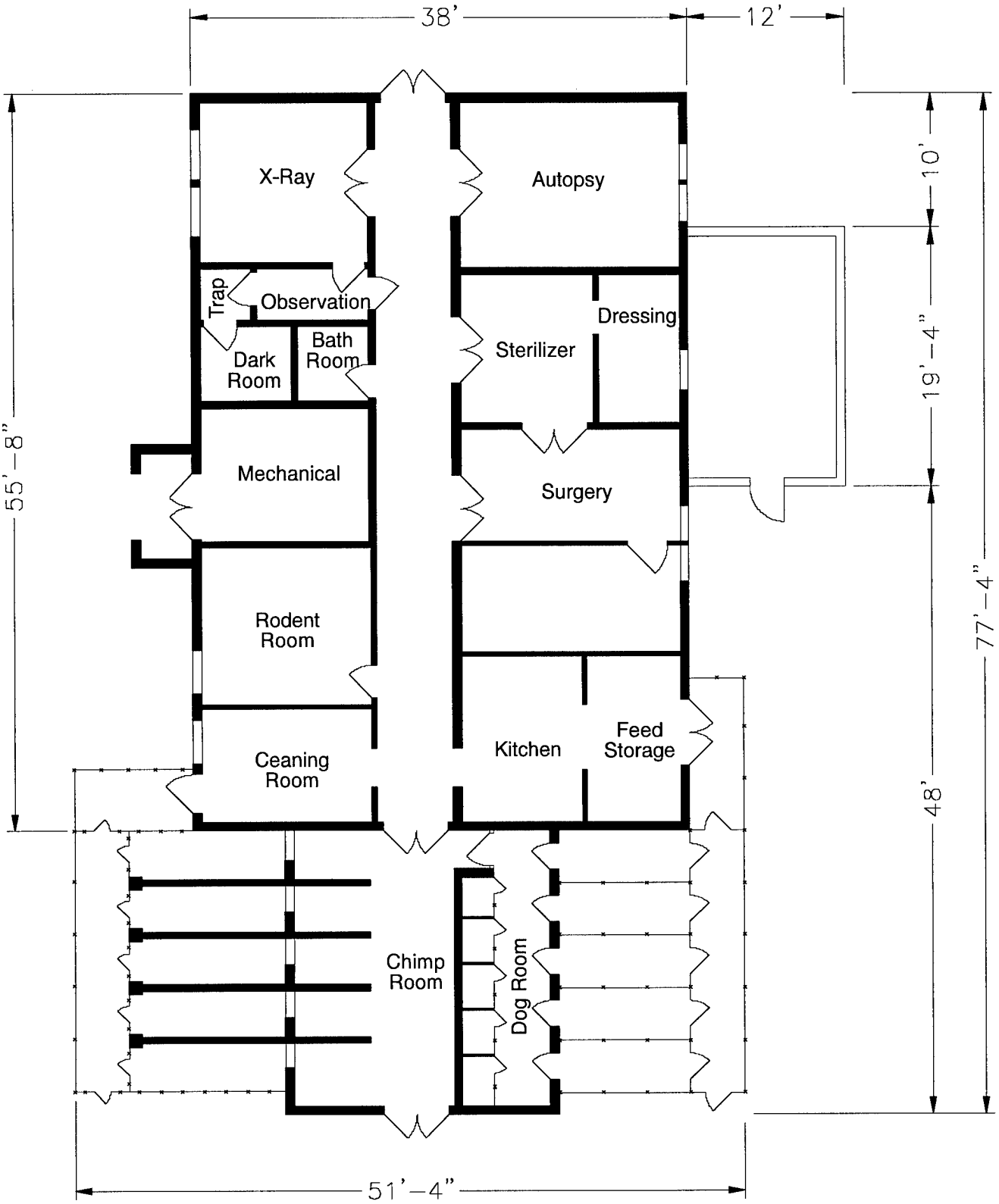
Comments: Although all of the equipment has been removed, this building still demonstrates a link with its past by virtue of its setting, the odors, and the animal cages.

X. FURTHER INFORMATION:

Surveyed By:

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

HAFB Report Number: **CRM Publication #3**
Photograph Citation: **CD-ROM #1-Photo #94**
Negatives On File: **49 CES/CEV, 550 Tabosa Ave, HAFB**
Date of Field Visit: **SUMMER 1995**



Source: CE File #1200-1 (c1954)

State of New Mexico Office of Cultural Affairs Historic Preservation Division	**BUILDING 1200** Holloman Air Force Base Alamogordo, New Mexico	Project No. 35-95-HAFB-4	AutoCAD rendering by: *Steve Merrill* New Mexico State University **Sheet 1 of 1**	NEW MEXICO STATE UNIVERSITY

COLD WAR SURVEY: HOLLOMAN AIR FORCE BASE

NAME:
Current: SC Lab Medical.
Historic: Aero. Medical Field Lab.
Street Address: 821 Douglas Road, HAFB, 88330-7823.

Building Number: 1201

I. GENERAL INFORMATION:

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

Comments: Structurally intact. In need of routine maintenance.

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

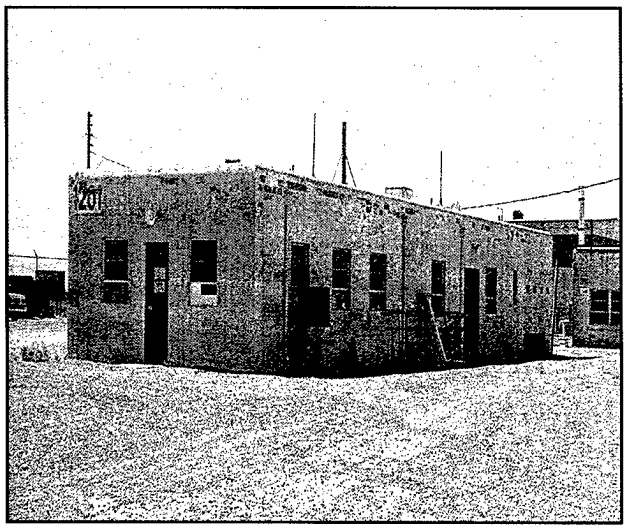
Comments: Mortuary/autopsy room added as subsequent improvement c1958.

Preliminary Determination of National or State Register Eligibility:

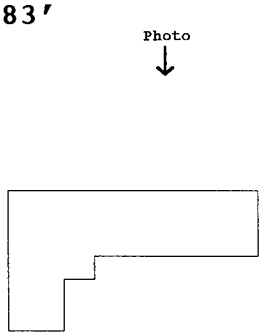
[x] Exceptional importance [ ] Potentially eligible [ ] Further research recommended [ ] Ineligible

Comments: Eligible under Criteria A and/or C at a national level.

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



BUILDING FOOTPRINT:
47' x 83'



Date of completion: c1951

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 1201 is an "L-shaped", single-story, flat-roofed, building constructed primarily using painted 8" structural clay tile and exhibiting asymmetrical door and window placement. Animal cages occupy the west elevation. Real Property Accountable Record/1201 indicates that this science laboratory was constructed c1951. The construction drawings consulted were stamped "As-Built," although no date was given. Both the architect and builder are unknown.

At least two structural modifications may be viewed as subsequent improvements to the original building, including the addition of a Mortuary/ Autopsy Room (c1958: CE File #1201-4), and the addition of a rooftop observation deck (c1952: CE File #1201-5).

III. HISTORIC AND CURRENT USE:

Source: Real Property Accountable Record/1201.

Current Function: Carpentry shop; Employee break room; Office space.

Original Function: Aerospace Medical Lab; Animal experimentation.

Interim Functions: "SC Lab Human Eng" (n.d.); "SC Lab Med (c1968).

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

Source: CE File #1201-1 (c1951).

Foundation: Concrete wall footings. Concrete slab on grade.

Exterior walls: Painted structural clay tile.

Roof: Built-up roof w/ gravel on sheeting, supported by 2x12 wood joists.

Notable interior features, including machinery:

Fixed chain link cages, lab tables, equipment tables, work tables, wood storage bins,sterilizer, incubator.

V. CURRENT FEATURES IF DIFFERENT FROM ORIGINAL: (Based on field visit Summer 1995).

[c1958 SUBSEQUENT IMPROVEMENT--MORTUARY/AUTOPSY]:

Foundation: Concrete wall footings. Concrete slab on grade.

Exterior walls: Painted cement masonry unit (CMU).

Roof: 5-Ply built up roof on concrete slab. Steel joists.

278 Notable interior features, including machinery:

Washer and dryer, kitchenette, tool room, table saw, furniture, lockers.

VI. BRIEF STATEMENT OF HISTORIC SIGNIFICANCE:

Building 1201 is eligible to the National Register under Criteria A and/or C at a national level of significance for its vital role in early aeromedical research in support of the early Cold War space exploration mission.

VII. ASSOCIATED BUILDINGS:

Building 1201 was associated with the other Aeromedical facilities, including Buildings 1200, 1202, 1203, 1204, 1205, 1206, and 1264.

VIII. ADDITIONAL COMMENTS AND MAINTENANCE RECOMMENDATIONS:

Building 1201 retains historic integrity as far as the structure itself goes. Very little physical evidence remains of this structure's original use as an animal laboratory. The cages have been removed. Two interior walls with doors have been added. One interior wall has been removed. Service sinks, work tables, wooden bins, an incubator, and other lab support items shown on c1951 construction drawings have been removed. An area of the original roof approx. 10' x 13' was reinforced with three inches of concrete for observation deck c1952 (CE File #1201-5). A mortuary/autopsy room was added c1958. These additions may be viewed as early improvements, and do not diminish Building 1201's historic integrity. Drawings itemize a "2-body" mortuary room, an autopsy table, a band saw, cabinets, a sterilizer, a photography area, and other laboratory equipment. This equipment has been removed. This room currently serves as a lounge area for employees. Due to the important research conducted here in support of this nation's space program, further research is warranted. Recommend that Building 1201 be included in a Cold War-era Multiple Property nomination. Suggested routine maintenance: This building is showing the signs of long-term neglect. Fill the stress cracks at the exterior corners. Scrape and paint exterior walls. Replace window glass and door hardware as needed.

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 in an isolated compound.

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

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

Comments: Original structure essentially intact. Interior lab equipment and cages removed.

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: Enclosed by chain link fence topped with barbed wire, along with other research facilities. Chimpanzee research continues in nearby buildings.

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

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

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

Comments: Clay tile walls still intact. Some glass block windows remain. Some glass block windows blocked in when addition constructed. Floor tiles removed.

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

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

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

Comments: Roof, walls, and exterior openings remain essentially the same. The east elevation changed due to an early addition. Interior partitions, openings, and finishes have changed.

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 [ ] Some elements remain [x] Retains integrity

Comments: Historic photographs show that the natural, historic, and aesthetic character of Building 1201 has been retained.

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 of feeling remains [ ] Some elements remain [x] Retains integrity

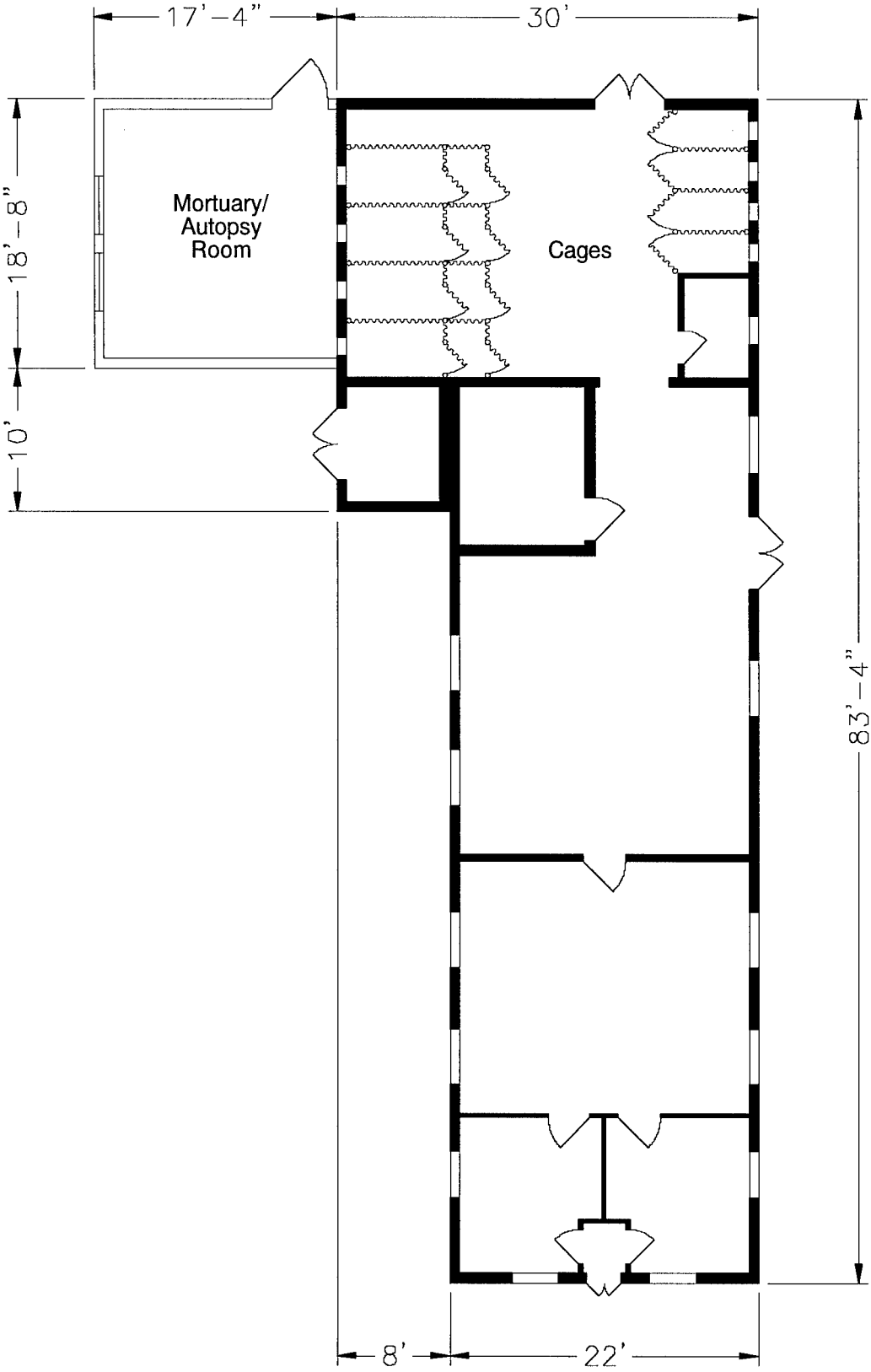
Comments: Building 1201 retains a visible link with its period of significance.

X. FURTHER INFORMATION:

Surveyed By:

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

HAFB Report Number: **CRM Publication #3**
Photograph Citation: **CD-ROM #1-Photo #91**
Negatives On File: **49 CES/CEV, 550 Tabosa Ave, HAFB**
Date of Field Visit: **SPRING 1995**



Source: CE File #1201-1 (c1951)

State of New Mexico Office of Cultural Affairs Historic Preservation Division	**BUILDING 1201** Holloman Air Force Base Alamogordo, New Mexico	Project No. 35-95-HAFB-4	AutoCAD rendering by: *Steve Merrill* New Mexico State University **Sheet 1 of 1**	NEW MEXICO STATE UNIVERSITY

COLD WAR SURVEY: HOLLOMAN AIR FORCE BASE

NAME:
Current: SC Lab Medical (VACANT).
Historic: Aero. Medical Field Laboratory.
Street Address: 871 Douglas Road, HAFB, 88330-7823.

Building Number: 1202

I. GENERAL INFORMATION:

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

Comments: Building is abandoned, and is showing signs of disrepair.

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

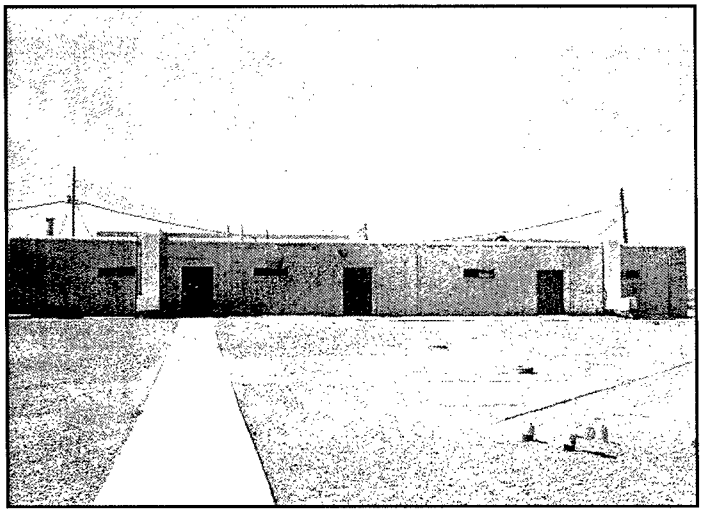
Comments: Alterations mainly represent subsequent improvements to original.

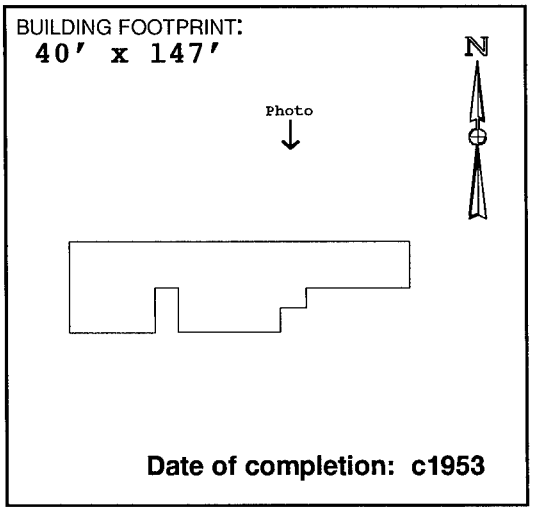
Preliminary Determination of National or State Register Eligibility:

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

Comments: Meets Nat'l Register criteria for significance at a national level.

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





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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 1202 is a narrow, rectangular, single-story, flat-roofed laboratory constructed using painted structural clay tile. Animal cages flank the southwest perimeter. The principal elevation faces north, with windows symmetrically placed at this elevation. According to Real Property Accountable Record/1202, the estimated date of completion for Building 1202 is c1953. Construction drawings in CE File #1202 were dated, though none were correctly stamped "As-Built." Although the builder is unknown, Voll and Nolan Architects (Roswell, NM) prepared the architectural drawings.

Several structural and architectural modifications should be considered to be subsequent improvements to the original building, including the addition of chimpanzee quarters (c1961: CE File #1202-3) and attached animal cages (c1959: CE File #1202-2), and minor alterations to Buildings 1200 and 1202 documented in CE File #1202-4 (c1967).

III. HISTORIC AND CURRENT USE:

Source: Real Property Accountable Record/1202; Field visit Summer 1995.

Current Function: Vacant.

Original Function: Aerospace medical field lab. Daisy Track support.

Interim Functions: "SC Lab Human Eng" (n.d.); "Sc Lab Med" (c1968).

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

Source: CE File #1202-1 (c1952).

Foundation: Concrete wall footings. Concrete slab on grade.

Exterior walls: Painted structural clay tile.

Roof: BUR w/gravel. Rigid insulation. Lightweight concrete deck on steel joists.

Notable interior features, including machinery: Designed functions for interior rooms included balloon storage, medical supply, deacceleration studies, missile and balloon assembly, bioelectronics, and communications.

V. CURRENT FEATURES IF DIFFERENT FROM ORIGINAL: (Field visit Summer 1995).

[C1961 SUBSEQUENT IMPROVEMENT--CHIMPANZEE QUARTERS]

Foundation: Poured concrete wall footings. Concrete slab on grade.

Exterior walls: Painted concrete masonry unit (CMU). Glazed clay tile.

Roof: 5-ply built-up roof on lightweight concrete deck.

Notable interior features, including machinery: Bolted equipment has been removed.

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VI. BRIEF STATEMENT OF HISTORIC SIGNIFICANCE:

Materiel development facility Building 1202 is eligible for the National Register of Historic Places under Criteria A and/or C for its crucial role in the national Cold War mission to conquer outer space.

VII. ASSOCIATED BUILDINGS:

Building 1202 associated with the surrounding aeromedical facilities, including Buildings 1200, 1201, 1203, 1204, 1206, 1264, and the Daisy Track.

VIII. ADDITIONAL COMMENTS AND MAINTENANCE RECOMMENDATIONS:

Building 1202 achieved historic significance for its early research on the effects of gravitational and accelerated forces on the human body. An original construction drawing features a "Deacceleration Study #1" room (1952: CE File #1202-1). This same drawing features a "Missile & Balloon Assembly" room adjacent to a "Bioelectronic & Communications" room. Important research in support of this Nation's space program continued throughout the 1960s. Early equipment and interior walls were removed in an effort to convert Building 1202 into a medical lab for animal research. Rust marks and drilled holes visible on the concrete floors mark where animal cages were at one time bolted to the floors. Although abandoned, miscellaneous cage parts and lab equipment are scattered throughout the building. The rooms still have distinctive animal odors and stains. Because of its crucial role in early space and other research, this building should be maintained and/or documented fully prior to any modifications which would alter its essential design features.

Suggested maintenance recommendations: Building 1202 is showing signs of disrepair due to abandonment. Building should be cleaned, scraped, painted, and vermin-proofed. Repair openings as needed to prevent further deterioration.

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

Comments: Animal cages added to building in 1961 (CE File #1202-3). Walls removed in an effort to convert the facility into a lab for animal research. (Subsequent improvements). All original lab equipment has been removed.

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 [ ] Retains most [x] Retains all or nearly all of its cultural setting

Comments: Continues to be located within a remote compound. The Daisy Track has been removed. Newer primate research isolation units and facilities alter the view somewhat.

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

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

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

Comments: Interior walls removed. At least two windows converted to doors. Doors added at south elevation. Personnel door blocked in at south elevation.

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

Comments: Early subsequent improvements to Building 1202 do not compromise the historic integrity of design, materials, or workmanship.

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 [ ] Some elements remain [x] Retains integrity

Comments: Although the interior cages and equipment have been removed, this building still retains integrity of feeling as a field lab for animal research.

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 of feeling remains [ ] Some elements remain [x] Retains integrity

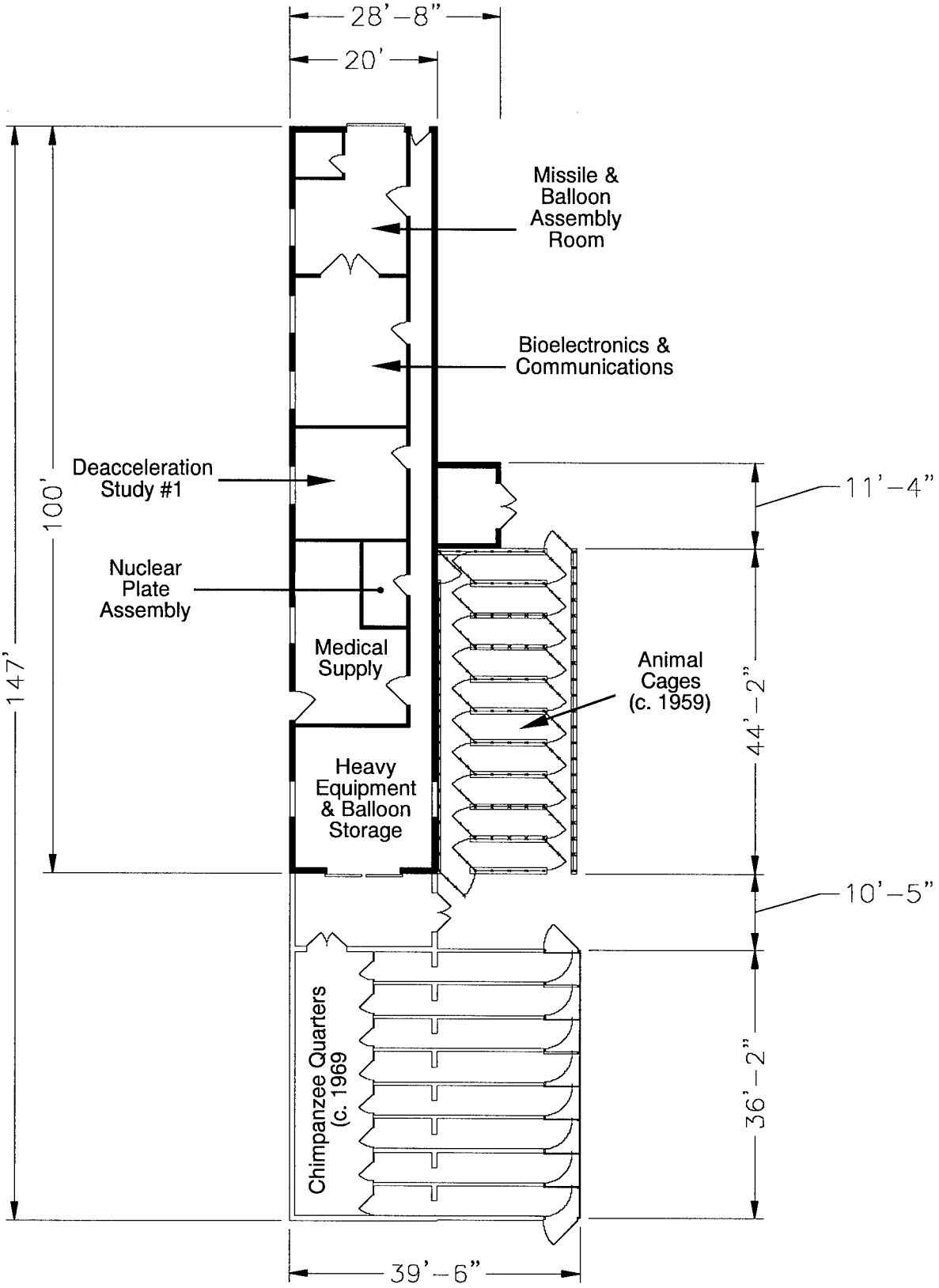
Comments: Historic photographs confirm that Building 1202 and the surrounding Aeromedical facilities retain a visible link with their period of significance.

X. FURTHER INFORMATION:

Surveyed By:

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

HAFB Report Number: **CRM Publication #3**
Photograph Citation: **CD-ROM #1-Photo #90**
Negatives On File: **49 CES/CEV, 550 Tabosa Ave, HAFB**
Date of Field Visit: **SUMMER 1995**



Source: CE File #1202-1 (c1952)

State of New Mexico Office of Cultural Affairs Historic Preservation Division	**BUILDING 1202** Holloman Air Force Base Alamogordo, New Mexico	Project No. 35-95-HAFB-4	AutoCAD rendering by: *Steve Merrill* New Mexico State University **Sheet 1 of 1**	NEW MEXICO STATE UNIVERSITY

COLD WAR SURVEY: HOLLOMAN AIR FORCE BASE

NAME:
Current: SC Lab Medical (VACANT).
Historic: SC Lab Medical.
Street Address: 861 Douglas Road, HAFB, 88330-7823

Building Number: 1203

I. GENERAL INFORMATION:

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

Comments: Current Building 1203 is vacant, and is deteriorating.

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

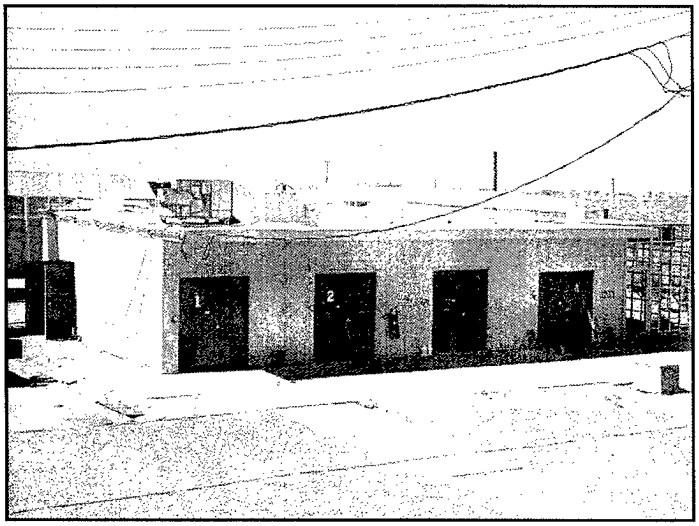
Comments: Original building demolished. Current building in disrepair.

Preliminary Determination of National or State Register Eligibility:

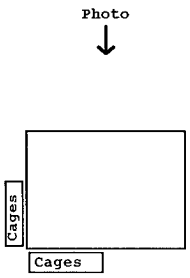
[ ] Exceptional importance [ ] Potentially eligible [ ] Further research recommended [x] Ineligible

Comments: Ineligible as an individual property. See Section VIII.

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



REPLACEMENT BUILDING FOOTPRINT:
31' x 45'



N

Date of completion: c1967

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.)

Construction drawings, although not stamped "As-Built," cite that the original Building 1203 was completed c1954. Photographs dated 1964 located at the National Archives II (College Park, MD) verify that this building was constructed as drawn. The original building was demolished c1967, and the current replacement built on the same foundation at about the same time (1967: CE File #1203-1A). The architect and the builder for the original building are unknown. Voll and Nolan Architects (Alamogordo, NM) prepared the architectural drawings for the replacement building. The original building received new animal cages on at least two different occasions (c1959: CE File #1202-2, and 1966: CE File #1203-3). The photograph above (left) shows the current building, built on the original Building 1203 foundation. Although no structural modifications to the replacement building were noted, several architectural modifications are discussed in this field form. The builders are not known.

III. HISTORIC AND CURRENT USE:

Source: Drawings located in CE File #1203; Real Property Accountable Record/1203; Field visit Summer 1995.

Current Function: Vacant.

Original Function: SC Medical Lab.

Interim Functions: The original Building 1203 served as an SC Medical Lab until c1959. The original building was replaced c1967 and became a primate research lab in support of the Daisy Test Track. Recently (c1994), the replacement Building 1203 served as an animal quarantine facility. This building is currently vacant.

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

Source: CE File #1203-1A *Replace Building 1203* (c1967).

Foundation: Concrete turned down footings/concrete slab.

Exterior walls: Concrete masonry units (CMU).

Roof: Built-up roof on rigid insulation on metal deck and steel joists.

Notable interior features, including machinery:

It is worth noting that the original wood frame structure with double-hung wood windows represents a departure from Base-wide CMU construction (demolished).

V. CURRENT FEATURES IF DIFFERENT FROM ORIGINAL:

Source: Field visit Summer 1995.

Foundation:

Exterior walls:

Roof:

Notable interior features, including machinery:

Building 1203 is currently vacant. Operating table, quarantine units, washdown equipment remain intact.

VI. BRIEF STATEMENT OF HISTORIC SIGNIFICANCE:

The original Building 1203 has been demolished. The replacement Building 1203 achieved historic significance at a national level, but does not retain all aspects of historic integrity. Recommend inclusion as a Multiple Property contributing feature, or reassessment once 50-year date of construction is met.

VII. ASSOCIATED BUILDINGS:

Building 1203 was associated with the other aeromedical lab facilities, including Buildings 1200, 1201, 1202, 1205, and 1264. Also associated with the Daisy Test Track, and support Buildings 1204, 1206 and the PRL Facility.

VIII. ADDITIONAL COMMENTS AND MAINTENANCE RECOMMENDATIONS:

The original SC Medical Lab Building 1203 was replaced by the current Building 1203 c1967. The current building has attained historic significance in its own right. Building 1203 is probably not eligible for the National Register as an individual property, because integrity of design, workmanship, and materials has been compromised. It should be viewed as a contributing feature, however, if a Cold War Multiple Property nomination is prepared. Photo-documentation is warranted for all of the Daisy Test Track support buildings. The current interior is very different from that shown on the latest construction drawings available (1967: CE File #1203-1A). The interior CMU partitions (south and west) separating chimp quarters have been removed. Doors accessing interior quarters and exterior cages have been blocked in. Double doors have replaced single doors on the north elevation and in the entryways inside the exterior north elevation.

Suggested routine maintenance: Clean and monitor entire building to prevent further deterioration.

IX. ASSESSMENT OF HISTORIC INTEGRITY:

[NOTE: ORIGINAL BUILDING 1203 DEMOLISHED. THIS ASSESSMENT IS OF THE CURRENT BUILDING 1203, CONSTRUCTED C1967.]

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: This building was constructed using the original 1203 foundation.

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: The interior CMU animal quarters represent one of the most distinctive features of this building. These have been removed. The principal elevation has changed due to the placement of double 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 [ ] Retains most [x] Retains all or nearly all of its cultural setting

Comments: The viewshed has altered due to the removal of the Daisy Track, and to the addition of newer primate research facilities currently in use. Continues to be located in a remote setting with other historic Aeromed labs.

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

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

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

Comments: Exterior single doors replaced with double doors. Quarantine labs still intact. Original skylights intact. Wide plywood soffit intact.

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

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

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

Comments: Further research is recommended.

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 [ ] Some elements remain [x] Retains integrity

Comments: It remains evident that this building was used for animal research during its period of significance.

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 of feeling remains [ ] Some elements remain [x] Retains integrity

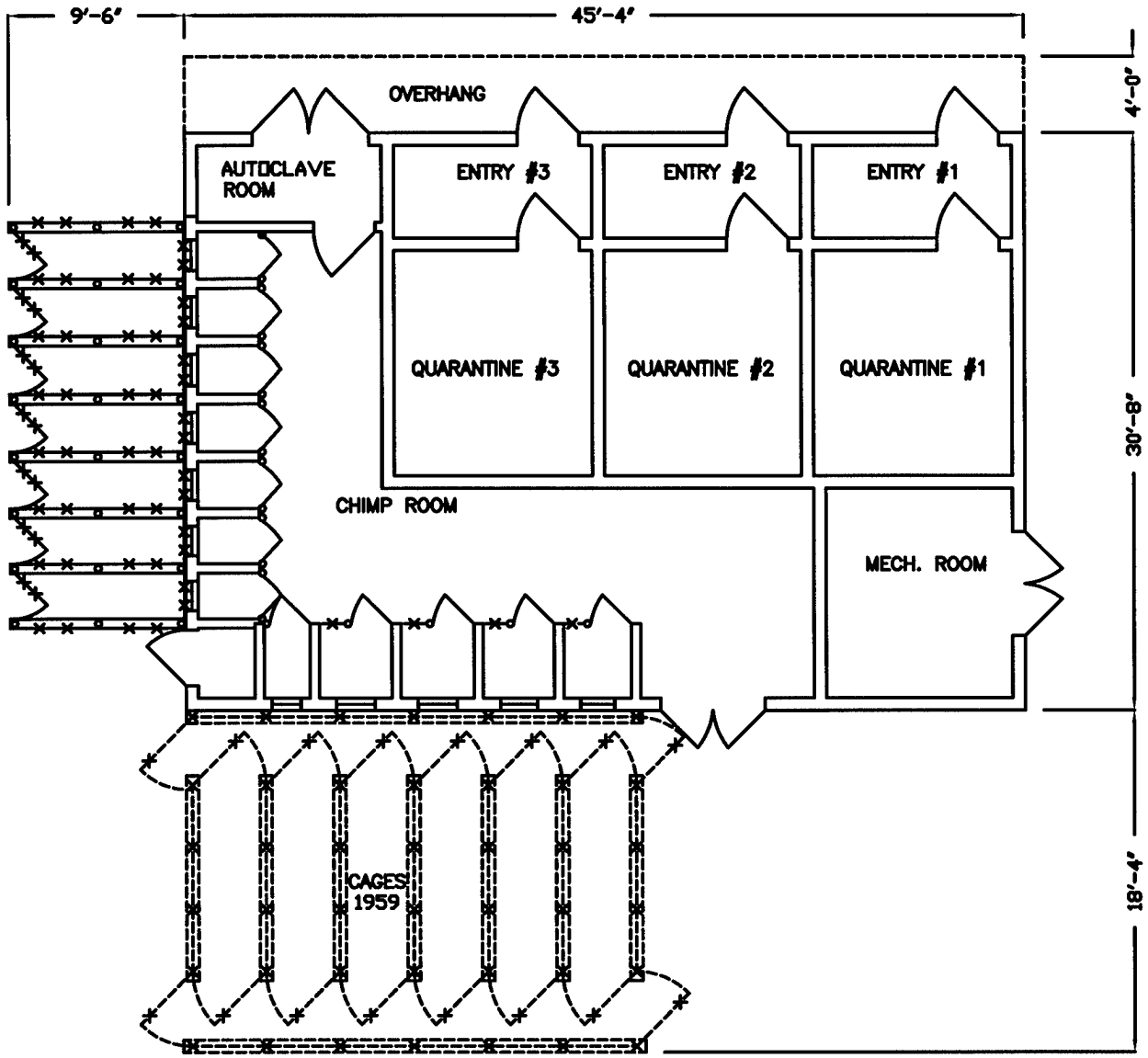
Comments: This building was only recently abandoned. It was constructed for use as a primate research laboratory, and operated in that capacity until c1994.

X. FURTHER INFORMATION:

Surveyed By:

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

HAFB Report Number: **CRM Publication #3**
Photograph Citation: **CD-ROM #1-Photo #93**
Negatives On File: **49 CES/CEV, 550 Tabosa Ave, HAFB**
Date of Field Visit: **SUMMER 1995**



Source: CE File #1203-1A (c1967)

State of New Mexico Office of Cultural Affairs Historic Preservation Division	**BUILDING 1203** Holloman Air Force Base Alamogordo, New Mexico	Project No. 35-95-HAFB-4	AutoCAD rendering by: *Mike Gardner* New Mexico State University **Sheet 1 of 1**	NEW MEXICO STATE UNIVERSITY

COLD WAR SURVEY: HOLLOMAN AIR FORCE BASE

NAME: **Building Number:**
Current: SC Lab: Virology and Immunology.
Historic: Daisy Test Track Building/Vivarium.
Street Address: 831 Douglas Road, HAFB, 88330-7823.

1204

I. GENERAL INFORMATION:

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

Comments: Building 1204 is in need of routine maintenance.

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

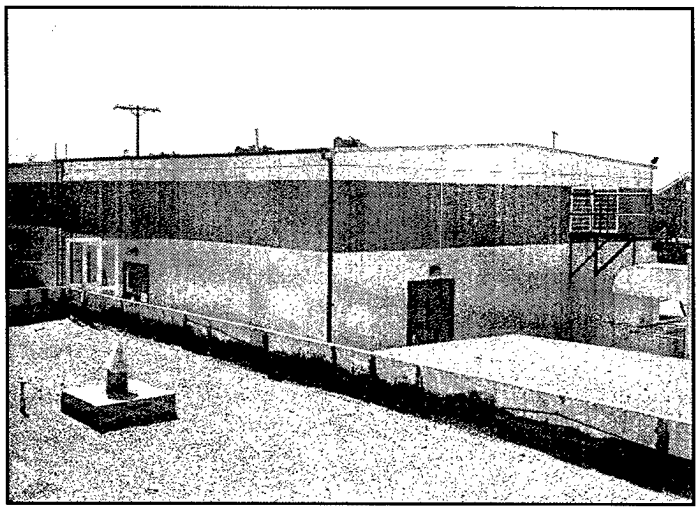
Comments: Nearly all of the original building is obscured.

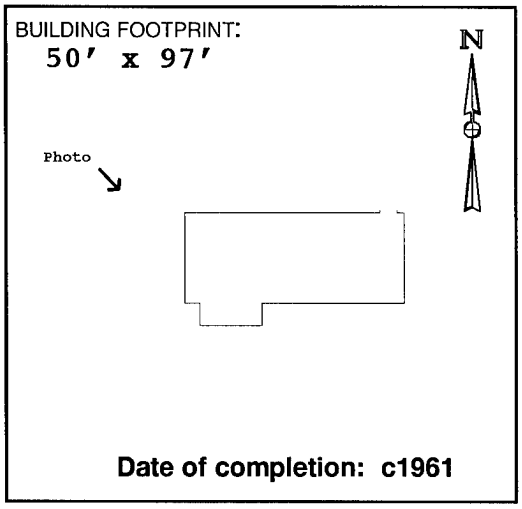
Preliminary Determination of National or State Register Eligibility:

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

Comments: Ineligible as an individual property. See Section VIII.

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





Date of completion: c1961

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.)

Real Property Accountable Record/1204 and drawing files indicate that the original Building 1204 was constructed to support the Daisy Test Track (c1961: CE File #1204-1). Subsequent drawings indicate that the original building was converted into a primate laboratory for the Primate Research Institute (c1987: CE File #1204-3). The original Building 1204 is completely obscured by an addition at the west elevation and by new exterior finishes.

Although access to the interior of Building 1204 was denied because of on-going, Acquired Immune Deficiency Syndrome (AIDS) related research using primates, personal communication with Building 1204 personnel confirmed that major renovations have occurred throughout the facility. The original builder and architect are unknown. Coupland, Moran & Associates provided the architectural drawings for the c1987 renovation.

III. HISTORIC AND CURRENT USE:

Source: Real Property Accountable Record/1204; CE Files #1204-3, -2, -1.

Current Function: Virology and Immunology Lab. Necropsies.

Original Function: Vivarium. Daisy Test Track support.

Interim Functions: Primate research.

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

Source: CE File #1204-1(c1961); Meeter, *The Holloman Story.* (Albuquerque: University of New Mexico, 1967).

Foundation: Concrete turned down wall footings.

Exterior walls: CMU infill between CMU pilasters.

Roof: Metal roof panel on steel purlins.

Notable interior features, including machinery:
Originally housed electronic equipment used in Daisy Track tests, including tape recorders, velocity counters, oscillographs, etc. (Meeter 1967: 103).

V. CURRENT FEATURES IF DIFFERENT FROM ORIGINAL:

Source: (1987: CE File #1204-3).

Foundation: Concrete turned down wall footing, column footings.

Exterior walls: Stucco over existing masonry; New CMU with stucco.

Roof: Membrane roofing over plywood. Metal deck on steel purlins.

Notable interior features, including machinery:
Necropsy room, modern mortuary equipment, and medical equipment.

VI. BRIEF STATEMENT OF HISTORIC SIGNIFICANCE:

Building 1204 no longer retains historic integrity due mainly to the fact that it is completely obscured by recent renovations.

VII. ASSOCIATED BUILDINGS:

Historically, associated with the Daisy Track and support Buildings 1204 and 1206. Later was associated with the other aeromedical facilities, including Buildings 1200, 1201, 1202, 1203, 1205, and 1264. Currently engaged in disease research using primates.

VIII. ADDITIONAL COMMENTS AND MAINTENANCE RECOMMENDATIONS:

The Vivarium, as Building 1204 was originally called, was the original site for aerospace medical research (Meeter 1967: 103). The Vivarium provided direct support to the Daisy Test Track during its period of historic significance. The original Building 1204 is hidden by the existing Building 1204, constructed c1987. Currently, Building 1204 is being used in support of on-going research using primates to study viruses that are deadly to humans. Although access was denied to most of the interior, personal communication with Coulston Foundation employees, and an inspection of the exterior, confirms that the original Building 1204 is no longer visible. The original Building 1204 is no longer eligible for the National Register. The new building has not achieved historic significance. Recommend that the current Building 1204 be considered as a non-contributing feature should a Cold War Multiple Property nomination be prepared. No special management consideration for the current facility is warranted, although continued research into the relationship between the Vivarium and the other aeromedical facilities is advised.

Suggested routine maintenance: Although relatively new, Building 1204 is in need of routine maintenance. Holes beneath the sidewalk and spalling at the foundation indicate that the site may need to be re-graded to promote positive drainage away from the building.

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: Original Building 1204 is almost completely obscured by additions.

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: Original design features are completely obscured by interior and exterior renovations.

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 [ ] Retains most [x] Retains all or nearly all of its cultural setting

Comments: Building 1204 continues to be situated in an isolated compound north of the main base, and enclosed by a fence topped with barbed wire.

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

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

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

Comments: Exterior concrete masonry unit walls remain. Exterior doors and windows replaced or blocked in.

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

Comments: No evidence of original workmanship remains visible.

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: Physical evidence of the original Building 1204 support for Daisy Track testing has been lost.

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 of feeling remains [x] Some elements remain [ ] Retains integrity

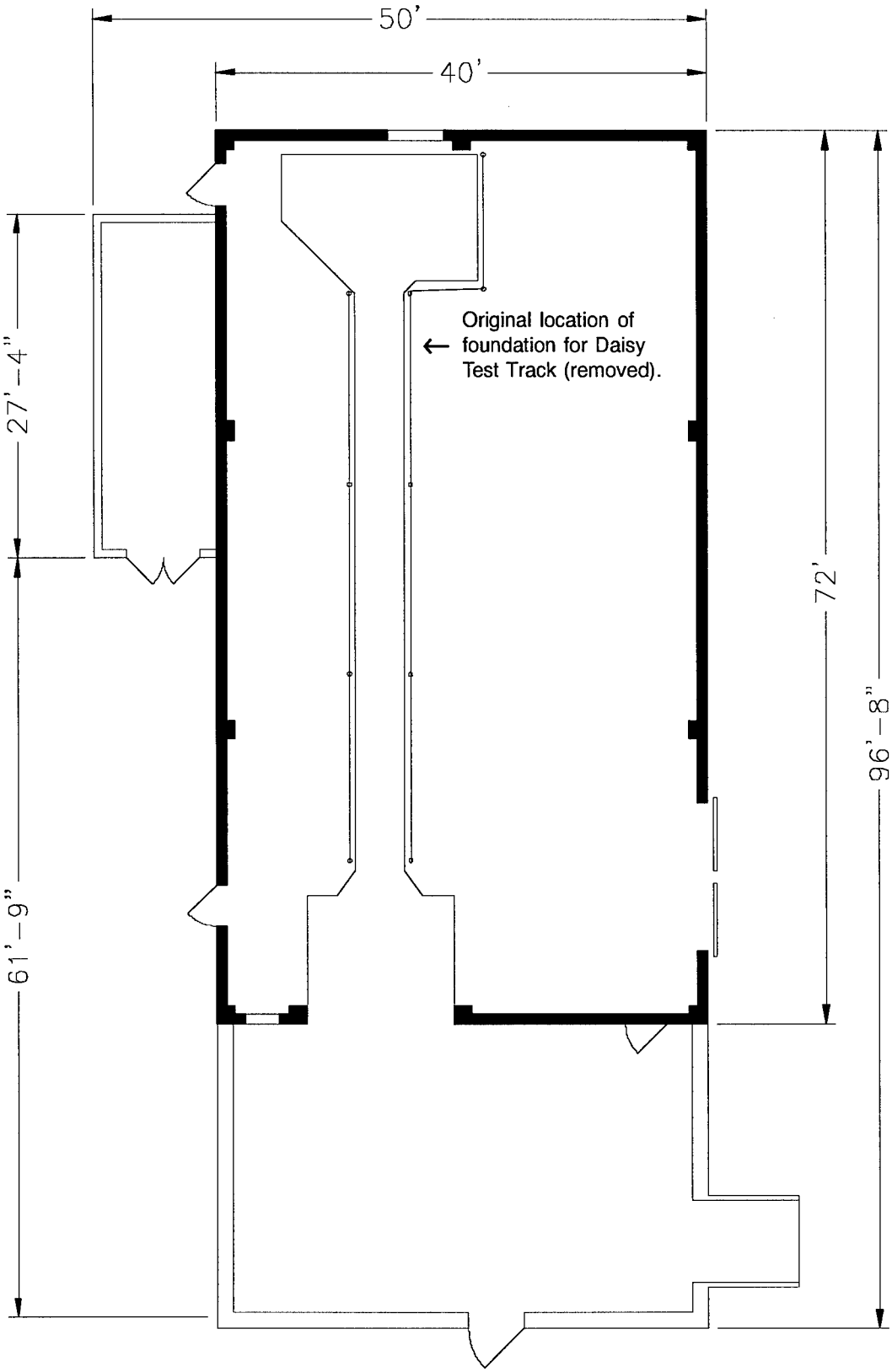
Comments: Building 1204 continues to support on-going primate research.

X. FURTHER INFORMATION:

Surveyed By:

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

HAFB Report Number: **CRM Publication #3**
Photograph Citation: **CD-ROM #1-Photo #99**
Negatives On File: **49 CES/CEV, 550 Tabosa Ave, HAFB**
Date of Field Visit: **SUMMER 1995**



Source: CE File #1204-1 (c1961)

State of New Mexico Office of Cultural Affairs Historic Preservation Division	**BUILDING 1204** Holloman Air Force Base Alamogordo, New Mexico	Project No. 35-95-HAFB-4	AutoCAD rendering by: *Steve Merrill* New Mexico State University **Sheet 1 of 1**	NEW MEXICO STATE UNIVERSITY

COLD WAR SURVEY: HOLLOMAN AIR FORCE BASE

NAME:
Current: SC Lab Medical.
Historic: SC Lab Storage Components.
Street Address: 881 Douglas Rd, HAFB, 88330-7823.

Building Number: 1205

I. GENERAL INFORMATION:

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

Comments: Building 1205 is in need of routine maintenance.

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

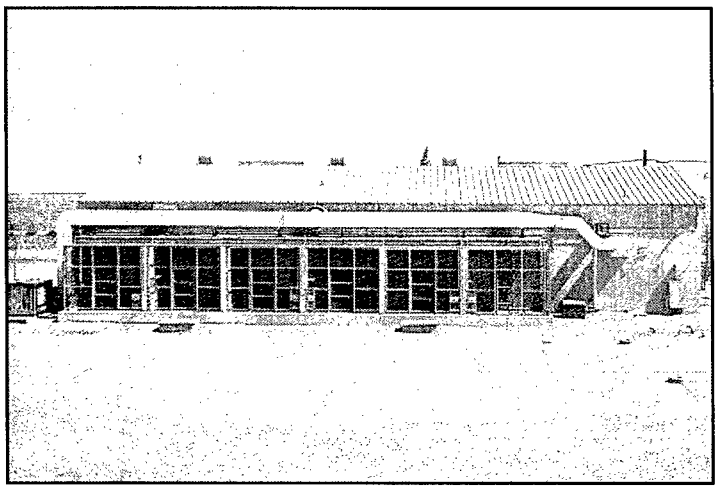
Comments: Access to the interior was denied due to disease research.

Preliminary Determination of National or State Register Eligibility:

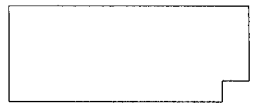
[ ] Exceptional importance [ ] Potentially eligible [ ] Further research recommended [x] Ineligible

Comments: Ineligible as an individual property. See Section VIII.

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



BUILDING FOOTPRINT:
32' x 82'



N

Photo

Date of completion: c1959

293

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 1205 is a rectangular, one-story structure with rigid steel bent frames forming the gable roof outline. The exterior walls are concrete masonry units (CMU) with single doors at the elevations and only one window at the east elevation. Animal cages line the south elevation. Original construction drawings are dated 1959, however there is no "As-built" date noted. Building 1205 was altered c1968 by the addition of interior walls and exterior cages (1968: CE File #1205-2.) Recent renovations blocked in the large slider doors at each gable end, and provided three personnel doors with concrete ramps at the north elevation. There were no construction drawings available to date these renovations. The architect and builder are unknown.

III. HISTORIC AND CURRENT USE:

Source: Drawings in CE File #1205; Field visit Summer 1995.

Current Function: Medical research into diseases deadly to humans.

Original Function: Support building for Daisy Track and aeromedical labs.

Interim Functions: Unknown.

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

Source: CE File #1205-1 (c1959).

Foundation: 6" reinforced concrete slab with turned-down footing.

Exterior walls: Concrete masonry units (CMU).

Roof: Metal roofing supported by steel purlins on steel bent frame.

Notable interior features, including machinery:

None noted on construction drawings.

V. CURRENT FEATURES IF DIFFERENT FROM ORIGINAL:

Source: Field visit Summer 1995. Note: Access to the interior of Building 1205 was denied.

Foundation:

Exterior walls:

Roof:

Notable interior features, including machinery: None noted.

VI. BRIEF STATEMENT OF HISTORIC SIGNIFICANCE:

Building 1205 no longer retains historic integrity, and does not meet the "exceptional importance" criteria imposed on buildings constructed within the last fifty years. Recommend further research in the event of a Holloman AFB Cold War-era Multiple Property nomination to determine exactly what activities occurred here. By including Building 1205 as either a non-contributing or contributing feature in relation to the other aeromedical facilities, known research will be documented.

VII. ASSOCIATED BUILDINGS:

Building 1205 continues to be situated within the aeromedical facility compound, with Buildings 1200, 1201, 1202, 1203, 1204, and 1206. The associated Daisy Track has been removed.

VIII. ADDITIONAL COMMENTS AND MAINTENANCE RECOMMENDATIONS:

On-going primate research into diseases and viruses deadly to humans prohibited access to the interior. A view of the exterior, however, revealed that modifications have altered the exterior elevations to such an extent that historic integrity has been lost in terms of design, materials, and workmanship.

Original construction drawings indicate that this building was constructed as a storage building, presumably in support of the Daisy Track and the surrounding aeromedical buildings. Building 1205's conversion to a primate research facility has meant a loss of historic integrity in terms of feeling and association as well. Including this property as a contributing feature in a Cold War Multiple Property listing will ensure that the original construction features and known significant activities will be documented in the nomination. No special management consideration is necessary in the interim.

Suggested routine maintenance: Scrape, prime, and repaint the exterior concrete walls.

IX. ASSESSMENT OF HISTORIC INTEGRITY:

NOTE: ACCESS TO THE INTERIOR WAS DENIED. THIS ASSESSMENT OF INTEGRITY IS BASED ON AN INSPECTION OF THE EXTERIOR ONLY.

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 within an isolated compound, surrounded by a chain-link fence, topped with barbed wire.

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: Double slider doors replaced at each gable end with single door. Three personnel doors added at north elevation. Window added at east elevation.

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: The viewshed has been altered due to the addition of primate isolation huts, and the construction of Building 1208 adjacent to Building 1205. The surrounding landscape and patterns of land use remain essentially the same.

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

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

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

Comments: This building is missing nearly all of its original architectural features. Roof appears to have been replaced in-kind. Guillotine doors added.

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

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

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

Comments: Building 1205 appears to retain very little of its original craftsmanship.

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: If Building 1205 was originally constructed for use as a storage facility, it has been converted for use as a medical research facility.

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

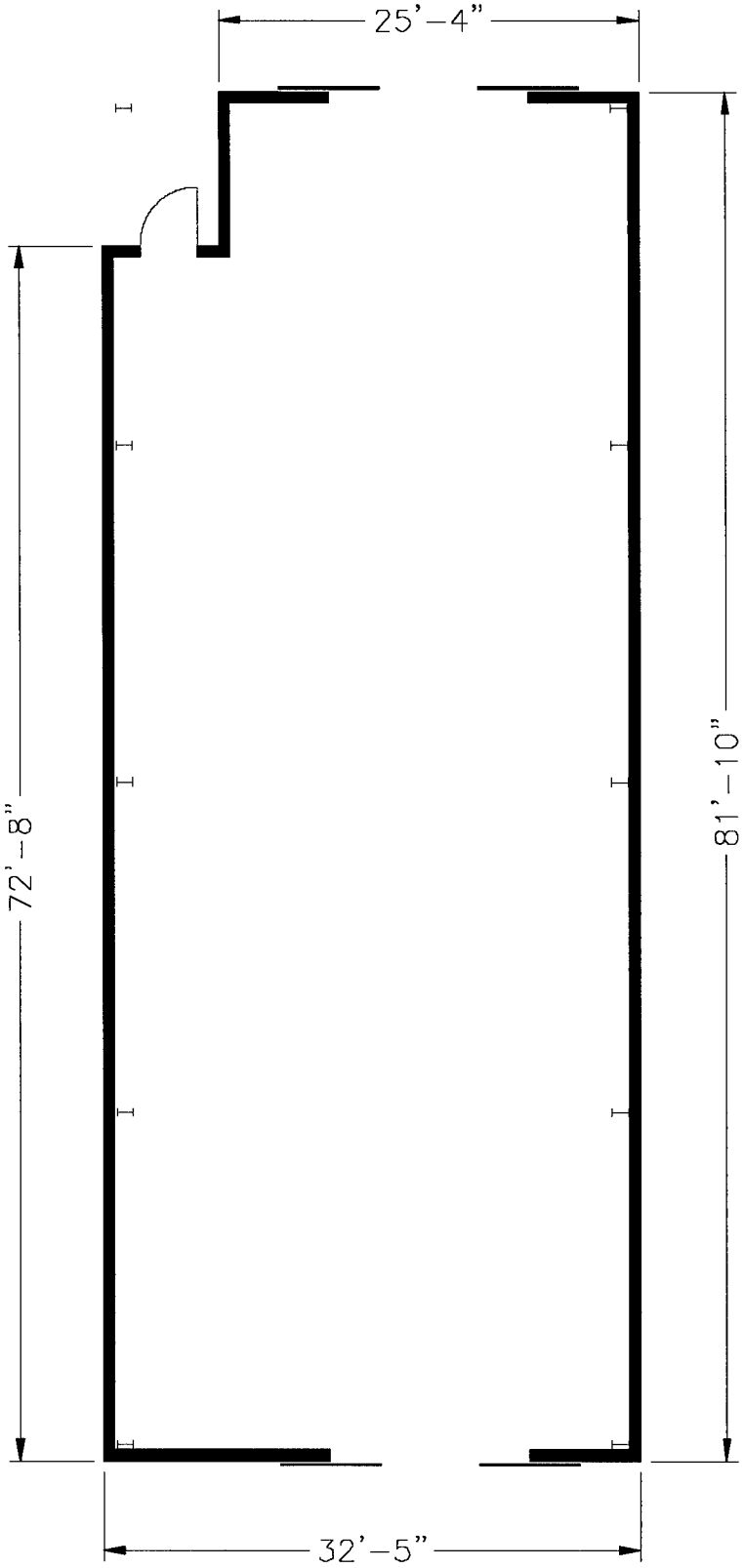
Comments: Historically associated with the aerospace medical facilities. Continues to be situated with these facilities. Currently involved with disease research using primates.

X. FURTHER INFORMATION:

Surveyed By:

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

HAFB Report Number: **CRM Publication #3**
Photograph Citation: **CD-ROM #1-Photo #96**
Negatives On File: **49 CES/CEV, 550 Tabosa Ave, HAFB**
Date of Field Visit: **SUMMER 1995**



Source: CE File #1205-1 (c1959)

State of New Mexico Office of Cultural Affairs Historic Preservation Division	**BUILDING 1205** Holloman Air Force Base Alamogordo, New Mexico	Project No. 35-95-HAFB-4	AutoCAD rendering by: *Eugene N. Kilmer* *(505) 323-0641* Mag Drafting **Sheet 1 of 1**

COLD WAR SURVEY: HOLLOMAN AIR FORCE BASE

NAME:
Current: Research Equipment Storage.
Historic: Daisy Track sled shed.
Street Address: 811 Douglas Road, HAFB, 88330-7823.

Building Number: 1206

I. GENERAL INFORMATION:

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

Comments: Building 1206 is in need of minor routine maintenance only.

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

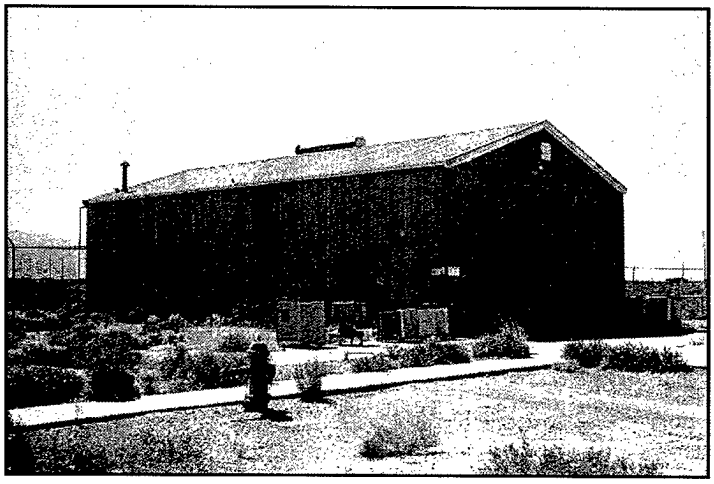
Comments: Remains essentially as it was originally constructed.

Preliminary Determination of National or State Register Eligibility:

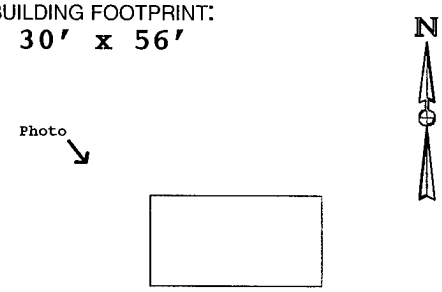
[ ] Exceptional importance [ ] Potentially eligible [x] Further research recommended [ ] Ineligible

Comments: Currently ineligible as an individual property. See Section VIII.

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



BUILDING FOOTPRINT:
30′ x 56′



Date of completion: c1966

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 1206 is a 30′ x 56′ gable-roofed, metal, bent-frame storage shed with double metal slider doors at each gable end. A metal roof and metal siding enclose the structure. There are no windows. Two flush metal doors provide personnel access at the north and west elevations. The principal elevation faces west. Real Property Record/1206 indicates that this shed was completed c1966. Only one construction drawing was located for this building. Although stamped "As-built," the stamp was not correctly placed in the revision block. No modifications to the structure noted. Both the architect and the builder are unknown.

III. HISTORIC AND CURRENT USE:

Source: Real Property Accountable Record/1206.

Current Function: Medical equipment storage.

Original Function: Storage for the Daisy Track sleds.

Interim Functions: Storage.

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

Source: CE File #1206-1 (c1966).

Foundation: 6" concrete slab with concrete turned-down footing.

Exterior walls: Metal siding on steel bent frame.

Roof: Factory finished metal roof on bent frame.

Notable interior features, including machinery: Pulley system.

V. CURRENT FEATURES IF DIFFERENT FROM ORIGINAL:

Source: Field visit Fall 1996.

Foundation:

Exterior walls:

Roof:

Notable interior features, including machinery: Used for medical equipment storage.

VI. BRIEF STATEMENT OF HISTORIC SIGNIFICANCE:

Building 1206 does not meet the "exceptional importance" criteria imposed on properties constructed within the last fifty years. This shed was constructed c1966 to provide shelter for the Daisy Track sleds. This unique role and the fact that it retains historic integrity suggests that Building 1206 should be documented in a Cold War Multiple Property listing as a contributing feature in relation to the surrounding aeromedical facilities.

VII. ASSOCIATED BUILDINGS:

Associated with the aeromedical research buildings, including 1264, 1200, 1201, 1202, 1203, 1204, 1205, and the Daisy Track.

VIII. ADDITIONAL COMMENTS AND MAINTENANCE RECOMMENDATIONS:

Building 1206 was constructed to shelter the sleds used on the nearby Daisy Deceleration Track. Utilitarian in nature, Building 1206 was constructed using a concrete foundation, metal siding, and metal roof with no exterior embellishments, and no interior finishes. The steel bent frame is left exposed.

The sleds were brought up the concrete ramp at the principal elevation, and through the sliding double metal doors. All of the characteristic features of the original design remain intact. A pulley shown on original construction drawings is still installed in the center of the building.

Currently, the sled shed is used to store research and medical equipment, including necropsy tables, laboratory equipment, and animal cages. Although no special management consideration is warranted in terms of Building 1206 as an individual property, this storage facility should be considered as a contributing component of the aeromedical facilities site. Recommend photo-documentation prior to future modifications, and inclusion as a contributing feature if a Cold War Multiple Property nomination is prepared for the Base.

Suggested routine maintenance: Repair damaged slider doors.

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 within the aeromedical complex, 60+ feet south of Building 1204 and the previous location of the Daisy Test Track.

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: Utilitarian in design intent: no embellishments, no interior finishes, no windows. Large slider doors at east and west elevations.

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

[ ] Unable to determine [ ] Retains very little [ ] Retains most [x] 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: Continues to be located within an isolated complex of buildings dedicated to primate research, and enclosed by a chain-link fence. Several buildings have been vacated. The Daisy Test Track has been removed.

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

Comments: Concrete, steel bent frame construction, metal roof and metal siding remain evident. Slider doors and metal personnel doors appear to be original.

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

Comments: This shed does not appear to have been modified since it was originally constructed some thirty years ago.

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 [ ] Some elements remain [x] Retains integrity

Comments:

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 of feeling remains [ ] Some elements remain [x] Retains integrity

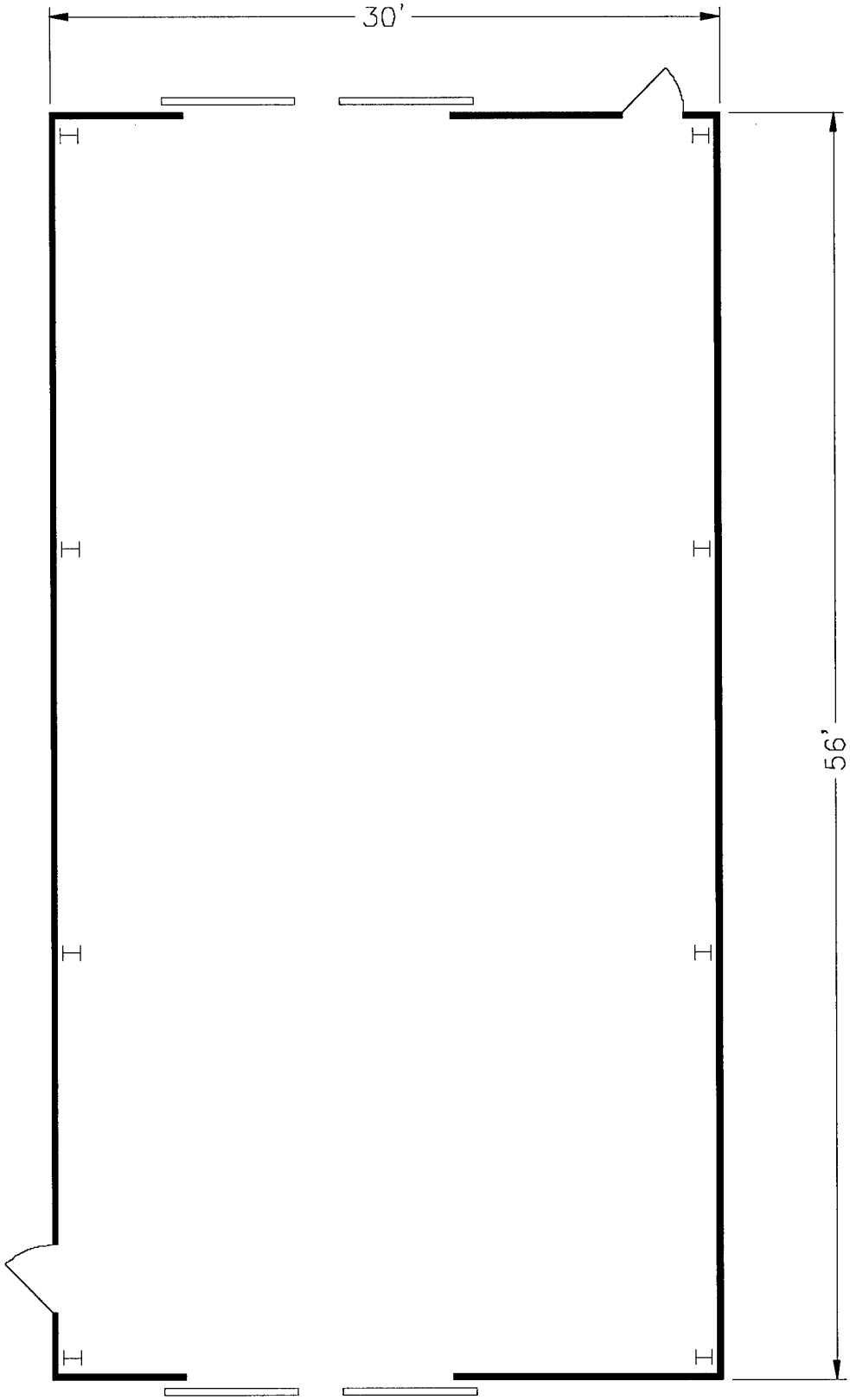
Comments: Although no longer the site of Daisy Track testing, the sled retains integrity of feeling and association through its continuing use as a research support building.

X. FURTHER INFORMATION:

Surveyed By:

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

HAFB Report Number: **CRM Publication #3**
Photograph Citation: **CD-ROM #1-Photo #98**
Negatives On File: **49 CES/CEV, 550 Tabosa Ave, HAFB**
Date of Field Visit: **FALL 1996**



Source: CE File #1206-1 (c1966)

State of New Mexico Office of Cultural Affairs Historic Preservation Division	**BUILDING 1206** Holloman Air Force Base Alamogordo, New Mexico	Project No. 35-95-HAFB-4	AutoCAD rendering by: *Steve Merrill* New Mexico State University **Sheet 1 of 1**	NEW MEXICO STATE UNIVERSITY

COLD WAR SURVEY: HOLLOMAN AIR FORCE BASE

NAME: Primate Research Lab Facility:
Current: (Vacant).
Historic: (Unknown).
Reference: HAFB Map Sheet 5 of 12 (T-23).

[PRL]

I. GENERAL INFORMATION:

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

Comments: The wood deck surrounding the cistern has collapsed.

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

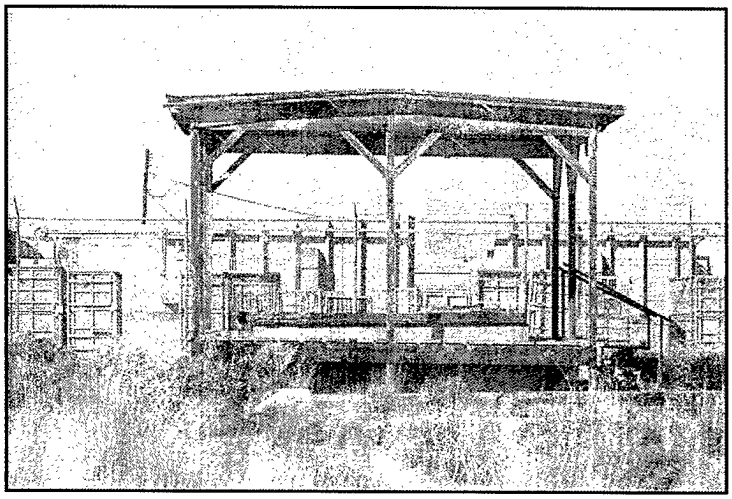
Comments: No construction drawings were located for this structure.

Preliminary Determination of National or State Register Eligibility:

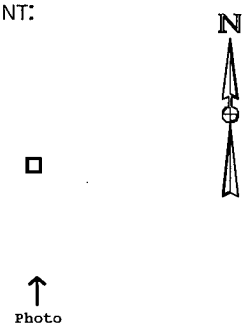
[ ] Exceptional importance [ ] Potentially eligible [ ] Further research recommended [x] Ineligible

Comments: Potentially a contributing feature to the aeromedical facilities.

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



BUILDING FOOTPRINT:
16′ x 16′



Date of completion: Unknown

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.)

This 15′-8″ x 16′-0″ wood frame structure is open on all sides, and is located overtop a 12′-2″ deep cistern. The cistern sits mostly below grade. The cistern's outside dimensions are 11′-2″ square with 6″ thick walls. An elevated wood deck walkway encircles the top of the cistern. Wood posts support a wood frame roof which canopys the outside walkway. Wood stairs at the north elevation rise from grade to the walkway. The original construction date is unknown, although it is visible in photographs dated as early as 1959 (National Archives RG 342 Volume 1, Photo Group 04-149). The architect and builder are unknown. Although no known construction drawings exist for this structure, this structure does not appear to have been altered since its construction.

III. HISTORIC AND CURRENT USE:

Source: Field visit Summer 1995.

Current Function: Structure is abandoned.

Original Function: May have supplied water to the Daisy Test Track.

Interim Functions: Unknown.

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

[Note: No construction drawings were located for this structure.]

Foundation:

Exterior walls:

Roof:

Notable interior features, including machinery:

V. CURRENT FEATURES IF DIFFERENT FROM ORIGINAL:

Source: Field visit Summer 1995.

Foundation: 12" square concrete footings, supporting 4x4 wood posts.

Exterior walls: Open. Cistern: Reinforced concrete.

Roof: Rolled roofing on 1x12 wood sheathing. Tapered 2x10 joists.

Notable interior features, including machinery:

The cistern roof is constructed of 2x10s braced at the ends and the metal. A hinged hatch is cut in.

VI. BRIEF STATEMENT OF HISTORIC SIGNIFICANCE:

This structure may have supplied water to the Daisy Track sled brakes. Although not meeting National Register criteria as an individual property, this shelter appears to retain historic integrity and should be considered as a contributing component of the aeromedical facilities site.

VII. ASSOCIATED BUILDINGS:

Appears to have been associated with the Daisy Test Track, and the other aeromedical laboratories, including 1264, 1200, 1201, 1202, 1203, 1204, 1205, and 1206.

VIII. ADDITIONAL COMMENTS AND MAINTENANCE RECOMMENDATIONS:

The size of the cistern, the depth, and the fact that most of the cistern is below grade suggests that this structure was used to store water. There appear to be traces of a waterline below a west elevation opening sill. The water may have been pumped to the nearby Daisy Test Track to provide water for the sled braking system. There is no evidence of plumbing into the cistern, indicating that water was either pumped into the cistern, or trucked in. Recommend contacting personnel associated with the aeromedical facilities during the early 1950s for further information. Scattered materials at this site such as 1/2" thick glass, miscellaneous metal fragments, a reinforced concrete curb, a concrete pad, and pipes should be researched further to help verify the original function of this structure. If a Multiple Property nomination is prepared for the aeromedical facilities, recommend that this structure be considered as a contributing feature. This structure is beginning to deteriorate, and should be photo-documented in the interim.

Suggested routine maintenance: Attach band board to cistern. Repair the wood walkway. Install supports for cistern cover to prevent further sagging. Repair roof.

IX. ASSESSMENT OF HISTORIC INTEGRITY:

NOTE: NO CONSTRUCTION DRAWINGS LOCATED. BASED ON VISUAL INSPECTION ONLY.

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: Photographs verify that this structure has been at its present location since at least 1959 (National Archives II. RG 342, Volume I: 04-149).

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: Structure does not appear to have been modified.

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 [ ] Retains most [x] Retains all or nearly all of its cultural setting

Comments: The viewshed has been altered due to the placement of primate isolation huts, new construction, the abandonment of several buildings, and the removal of the Daisy Track. Continues to be situated adjacent to primate research facilities.

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

Comments: Although not verified by construction drawings, this structure appears to be as it was originally constructed, using concrete and wood. The roof is badly deteriorated, suggesting that it also is original.

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

Comments:

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 [ ] Some elements remain [x] Retains integrity

Comments: Although the Daisy Track is no longer in place, this structure retains its original character as a water storage facility.

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 of feeling remains [ ] Some elements remain [x] Retains integrity

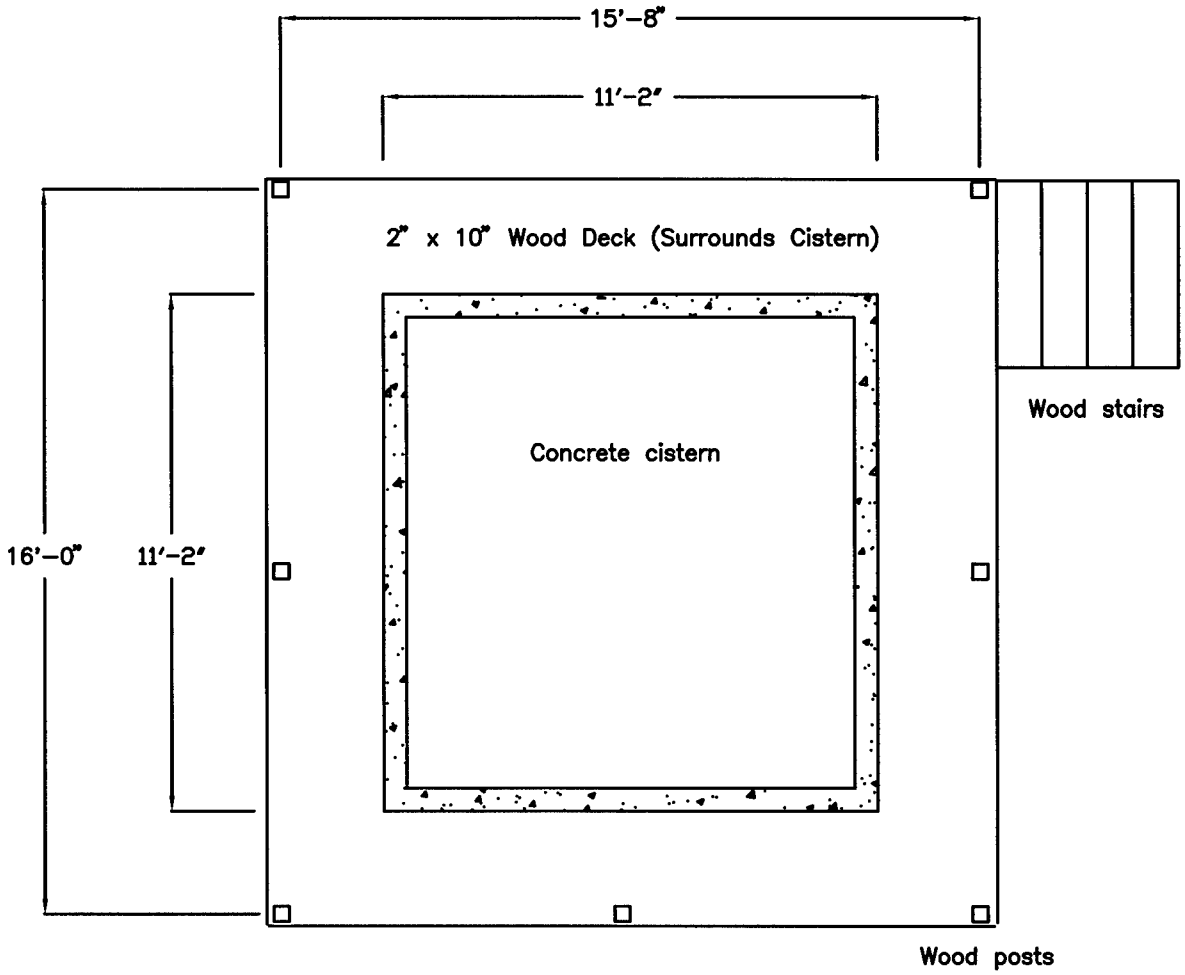
Comments: Except for deterioration, this structure appears to be original.

X. FURTHER INFORMATION:

Surveyed By:

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

HAFB Report Number: **CRM Publication #3**
Photograph Citation: **CD-ROM #1-Photo #26**
Negatives On File: **49 CES/CEV, 550 Tabosa Ave, HAFB**
Date of Field Visit: **FALL 1996**



Source: Field measurements, S. Cooper. Fall 1996.

State of New Mexico Office of Cultural Affairs Historic Preservation Division	**PRL SHELTER** Holloman Air Force Base Alamogordo, New Mexico	Project No. 35-95-HAFB-4	AutoCAD rendering by: *Mike Gardner* New Mexico State University **Sheet 1 of 1**	NEW MEXICO STATE UNIVERSITY

Field Survey: Materiel Development

IV. Materiel Development Facilities

•Research Laboratories

-Building 839

Daisy Test Track:

-Building 1200
-Building 1201
-Building 1202
-Building 1203
-Building 1204
-Building 1205
-Building 1206
-PRL Facility

Balloon/Parachute Operations:

-Building 524
-Building 849
-Building 850
-Building 855

•Manufacturing Sites

-Building 1178
-Building 1645

•Communication

-Building 1102
-Building 1103
-Building 1212

•Documentation

-Building 841
-Building 848
-Building 1182

Balloon and Parachute Bldgs 524, 849, 850, 855

The photograph below was taken of the "Balloon Research and Development Test Branch, Air Force Cambridge Research Laboratories" now known as Building 850 (28 May 1963).

RG 342-B. Vol. II. 06-011. Archives II.

COLD WAR SURVEY: HOLLOMAN AIR FORCE BASE

NAME:
Current: Base Parachute and Dinghy Shop.
Historic: Base Parachute and Dinghy Shop.
Street Address: 980 Delaware Ave.,HAFB, 88330-8018.

Building Number: 524

I. GENERAL INFORMATION:

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

Comments: In need of minor routine maintenance.

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

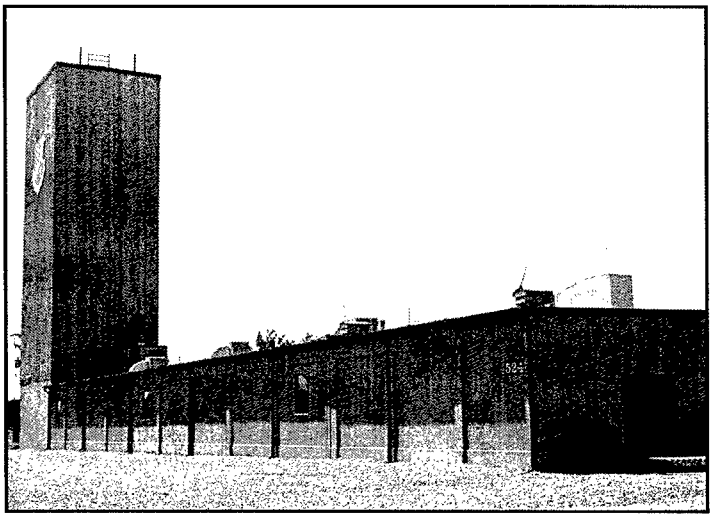
Comments: Original windows at principal facade have been removed.

Preliminary Determination of National or State Register Eligibility:

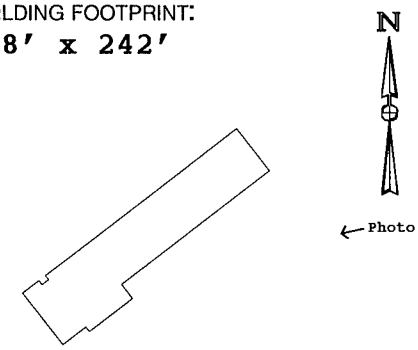
[ ] Exceptional importance [ ] Potentially eligible [x] Further research recommended [ ] Ineligible

Comments: Potentially eligible once 50-year construction date is met.

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



BUILDING FOOTPRINT:
48′ x 242′



Date of completion: c1955

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 524 is a long, rectangular, one-story block structure with a unique 90′-tall drying tower which occupies 23′ x 33′ of the floor plan. The tower walls are constructed using metal siding over a steel frame with a cast-in-place foundation wall. Except for the drying tower, offices, and mechanical rooms at the southwest end of the building, the floor plan is dedicated to long folding and parachute packing rooms. Real Property Accountable Record/524 indicates that Building 524 was completed c1955. The sewing and folding rooms were lengthened in a subsequent improvement c1961 (CE File #524-1). Kenneth S. Clark, Santa Fe, NM provided the architectural drawings. The builder is unknown.

III. HISTORIC AND CURRENT USE:

Source: Real Property Accountable Record/524.

Current Function: Parachute shop and dinghy shop.

Original Function: Parachute shop and dinghy shop.

Interim Functions: Parachute shop and dinghy shop.

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

Source: (c1954: CE File #702-1).

Foundation: Poured concrete footings and foundation walls.

Exterior walls: Pilaster columns (8" x 12" x 16" block filled w/concrete) with CMU walls between.

Roof: 5-ply Built-up roof (BUR). Rigid insulation. Tongue and groove wood deck. Steel joists.

Notable features, including machinery: A 90' parachute drying tower was constructed using metal channel studs supported by concrete walls, and sheathed with corrugated asbestos cement siding. The roof of the tower is a built-up roof on rigid insulation and metal deck supported by a steel frame.

V. CURRENT FEATURES IF DIFFERENT FROM ORIGINAL:

Source: Field visit Summer 1995.

Foundation:

Exterior walls:

Roof:

Notable interior features, including machinery: The folding room is approximately 142' long by 23' wide, unobstructed space. It contains built-in tables for chute folding and packing. The sewing room consists of approximately 64' x 23' unobstructed space.

VI. BRIEF STATEMENT OF HISTORIC SIGNIFICANCE:

Although Building 524 may not meet the "exceptional importance" stipulation, this facility does warrant special consideration due to its continuity of function and unique design features. Building 524 may be eligible under Criteria A and C once the fifty-year designation is met.

VII. ASSOCIATED BUILDINGS:

Building 524 continues to support military maneuvers and rescue missions. No known direct association historically with any other Base facility.

VIII. ADDITIONAL COMMENTS AND MAINTENANCE RECOMMENDATIONS:

Originally completed c1955, Building 524 continues to serve as the Base parachute shop. Additional building length was constructed as a subsequent improvement in 1961 at the east elevation. This building is architecturally unique, featuring a 90' tall, enclosed parachute drying tower. Nearly all of the original building materials used to construct this building remain visible. Exterior windows containing fixed-light panes have been removed at the north and south elevations. Corrugated asbestos cement siding on the tower was replaced with corrugated metal siding. Interior design, materials, workmanship, and room layout remain essentially as they were originally constructed. This building's unique functional features, and its continuity of parachute and dinghy operations, make it a likely candidate for the National Register of Historic Places once the 50-year mark is reached (in the year 2005), despite the removal of exterior windows at the principal elevation. Recommend interior photo-documentation.

Suggested routine maintenance: Repair exterior wood soffit. Redo faulty concrete repair at the exterior column pilasters. Scrape, prime, and paint exterior walls. Monitor settling at southwest corner and underpin as necessary. Prune tree at main elevation.

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

Comments: Forty-foot addition provided additional length to the folding and dinghy rooms. Nearly all of the 15- and 12-light exterior windows have been removed and openings blocked in. The 90' parachute tower and original folding and sewing rooms are intact.

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

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

Comments: Building 524 continues to be situated near Base Operations, and flightline.

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

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

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

Comments: Gypsum panels, exposed steel joists and wood sheathing, concrete floors, block walls, interior doors intact. Windows, wainscoting, and asbestos siding removed.

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

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

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

Comments: Building 524 continues to function as a parachute shop, including the drying tower and sewing/folding rooms. Work benches and storage bins have been removed.

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 [ ] Some elements remain [x] Retains integrity

Comments:

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

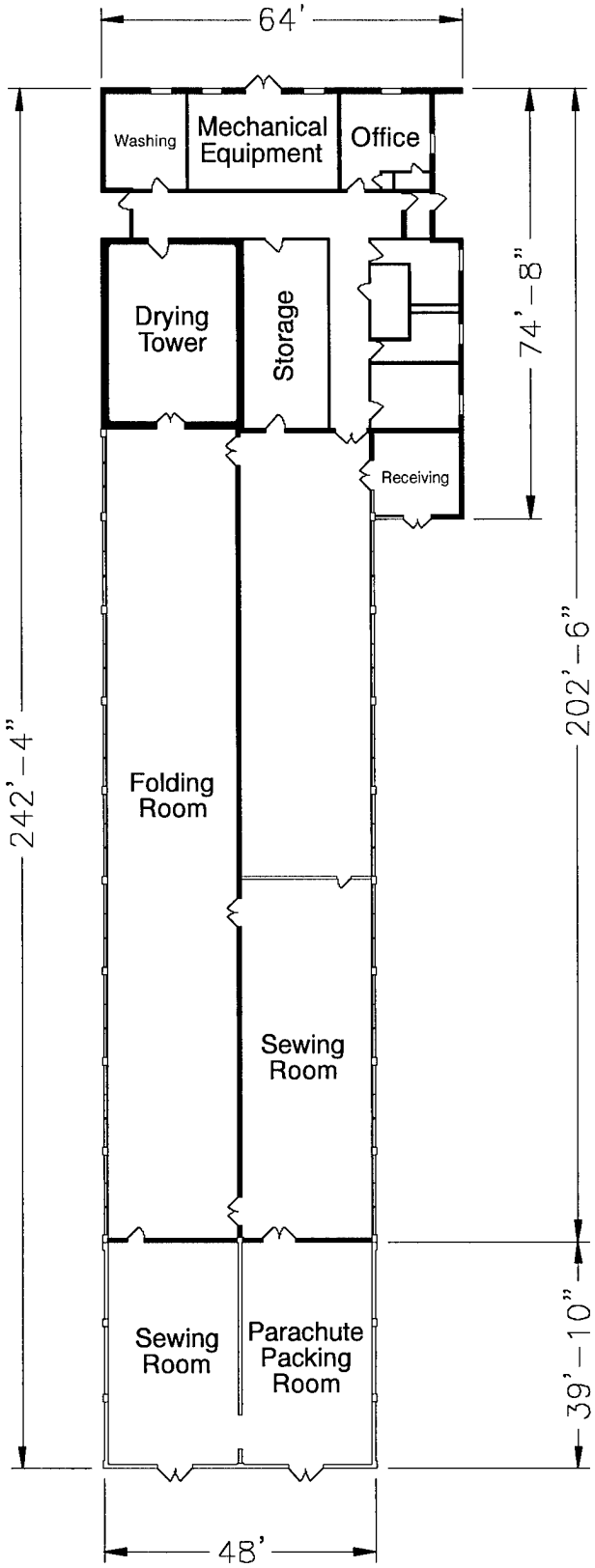
[ ] Unable to determine [ ] Little or no integrity remains [ ] Some elements remain [x] Retains integrity

Comments: This building retains nearly all historic integrity of feeling and association. Building 524 continues to support parachute mending, drying, and repacking operations.

X. FURTHER INFORMATION:

Surveyed By: Jean Fulton
Sonya Cooper
2500 Jordan Road
Las Cruces, NM 88001

HAFB Report Number: **CRM Publication #3**
Photograph Citation: **CD-ROM #1-Photo #36**
Negatives On File: **49 CES/CEV, 550 Tabosa Ave, HAFB**
Date of Field Visit: **SUMMER 1995**



Source: CE File #524-1 (c1962)

State of New Mexico Office of Cultural Affairs Historic Preservation Division	**BUILDING 524** Holloman Air Force Base Alamogordo, New Mexico	Project No. 35-95-HAFB-4	AutoCAD rendering by: *Steve Merrill* New Mexico State University **Sheet 1 of 1**	NEW MEXICO STATE UNIVERSITY

Balloons and Research

"It is interesting to note that the V-2 and Aerobee aeromedical flights aroused strong complaints from certain animal lovers in the United States and abroad, but the flights also inspired a surprising number of human volunteers to write and offer themselves as passengers in the next rocket...including at least one letter from a resident at the Washington State Penitentiary" (Bushnell n.d.e.: 4).

Space Biology Research

A significant amount of the preliminary research conducted as a prelude to manned space flight was performed by the Air Force Missile Development Center at Holloman, AFB using test tracks, rockets, and balloons.

Space Research Using Rockets

Space biology research began to expand as a field of practical interest shortly after the end of World War II, with the years between 1946 and 1952 at Holloman heralding the "...practical beginning of Air Force research in space biology" (Bushnell n.d.e.: 7).

As an adjunct to the Aero Medical Laboratory at Wright-Patterson Air Force Base in Ohio, the Aeromedical Field Laboratory at Holloman AFB began studying the effects of conditions present above the earth's atmosphere upon living organisms. Of particular importance was determining the effects of cosmic radiation, and studying the condition known as "subgravity," or "virtual weightlessness" (Bushnell n.d.e.: 33).

Initial tests conducted in 1948 using the V-2 rocket resulted in the deaths of several test animals, including at least three monkeys and several mice. Improvements in respiratory apparatus and parachute recovery systems resulted in the successful launch and return of subsequent test animals. On 20 September 1951, an Aerobee rocket carried an "...arkfull of animals to an altitude of 236,000 feet and brought them all back alive" (Bushnell n.d.e.: 3). Included in the menagerie was a monkey instrumented to record heart beat, respiration, and blood pressure, nine mice studied for reactions to cosmic radiation, and two other mice contained in a rotating drum for the photographic observation of their reactions to subgravity.

"It is interesting to note that the V-2 and Aerobee aeromedical flights aroused strong complaints from certain animal lovers in the United States and abroad, but the flights also inspired a surprising number of human volunteers to write and offer themselves as passengers in the next rocket... including at least one letter from a resident at the Washington State Penitentiary" (Bushnell n.d.e.: 4).

Space Research Using Balloons

Balloons were inducted early on as an even better mechanism than rockets for conducting research into the effects of cosmic rays upon living organisms. Rockets at that time were not capable of staying aloft at high altitudes long enough to study the effects of radiation. "Balloons, on the other hand, could maintain high altitudes for prolonged periods..." providing accurate yet inexpensive research data (Bushnell n.d.e.: 4). Dr. Jakob A.G. Eugster of Berne, Switzerland was one of the "world pioneers" in biological research concerning cosmic rays. For one experiment, Eugster sent a sample of his own skin, excised and then reimplanted after being wafted over in a balloon to Holloman AFB from Switzerland (Bushnell n.d.c.: 23).

"Some of these skin segments have shown after-effects from their exposure to cosmic rays, but apparently none of a very serious nature" (Bushnell n.d.c.: 23).

By 1950, Holloman had its own balloon unit, offering "...launch and recovery services for both local and off-base projects" (Bushnell n.d.e.: 5). Between September 1950 and the end of 1952, the Holloman Balloon Branch launched some twenty-one aeromedical balloon flights, performing a variety of tests using mold, grasshopper eggs, radish seeds, fruit flies, hamsters, cats, mice, and dogs. Six hundred and eighty-three balloon launches took place between the years 1951 and 1957 (Bushnell n.d.c.: 6). One unforeseen result of these balloon experiments was the frequent misidentification of the glistening polyethylene balloons as flying saucers from outer space. "On several occasions uninvited tracking assistance was received from jet fighters of the Air Defense Command..." sent to investigate balloon-inspired flying saucer reports" (Bushnell n.d.c.: 12).

In general, it could be said there was some hazard in cosmic rays, as in most everything else, but that the risk was not so great as to offset the positive advantages of exploring the vertical frontier. *(Bushnell n.d.c.: 23).*

Manned Balloon Flights

Manned balloon flights provided a wealth of information, including observations of weather and astronomical phenomena. These flights studied the effects of stress, cosmic radiation, and inert gases upon the human body. "There was also an urgent need for improvements in manned capsule or sealed-cabin environments, not only for the design of high-performance aircraft—including experimental rocket planes—but also as a step toward a manned satellite, and true space flight" (Bushnell n.d.c.: 25).

Project Man-High

Balloon studies using human beings began with Project Daedalus. This project, later dubbed "Project Man-High," culminated in Joe Kittinger's famous leap from above the earth's atmosphere on 2 June 1957. The Winzen Research Man-High capsule claimed the distinction of being the first true, self-contained, space cabin, serving as a research vehicle for the study of requirements for manned space flight.

In August of that same year, Lt. Col. David G. Simons was sent aloft over Minnesota. Thirty-two hours later, Simons landed in South Dakota, prompting researchers to conclude that "Human performance in an environment equivalent to space is now known to be possible..." (Bushnell n.d.c.: 26).

Ultimately, the floating balloon laboratories provided the necessary information used to design self-contained space capsules. Experiments using rockets and balloons, a menagerie of animals, and a handful of courageous human volunteers allowed researchers to successfully cross the threshold into space.

COLD WAR SURVEY: HOLLOMAN AIR FORCE BASE

NAME:
Current: SC Lab.
Historic: Electronics and Atmospheric Storage.
Street Address: 1331 Kelly Road, HAFB, 88330-7908.

Building Number: 849

I. GENERAL INFORMATION:

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

Comments: In need of routine maintenance.

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

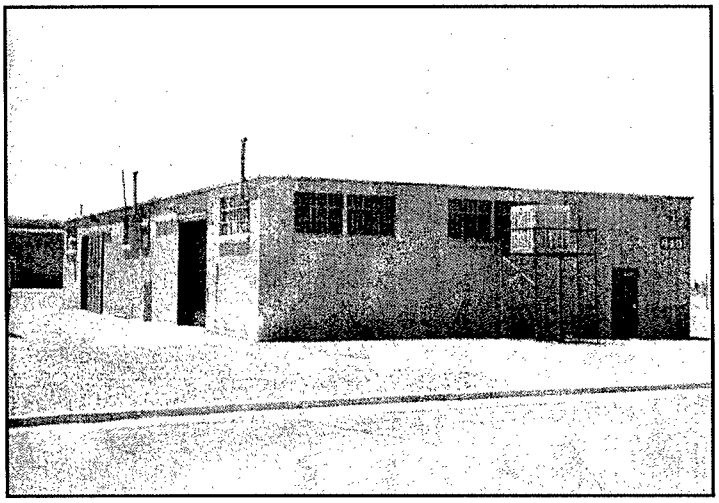
Comments:

Preliminary Determination of National or State Register Eligibility:

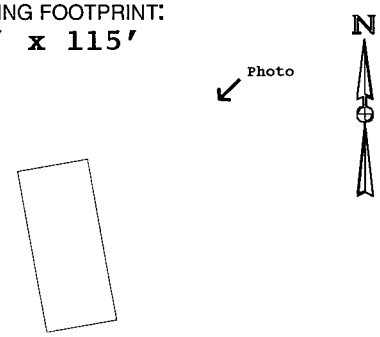
[ ] Exceptional importance [ ] Potentially eligible [x] Further research recommended [ ] Ineligible

Comments: Does not meet "exceptional importance" rule. See Section VIII.

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



BUILDING FOOTPRINT:
49' x 115'



Date of completion: c1953

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 849 is a single-story, rectangular-shaped, flat-roofed, concrete frame structure with block infill walls, and metal doors. Painted exterior CMU walls are asymmetrically fenestrated, with the tops of the windows located at the bottom of the eave line. The windows are covered by security bars. Most of the window panes have been painted the same color as the walls. Originally constructed to support the Building 850, this shop continues to operate in that capacity.

This shop was originally designed with a large, open floor plan that has since been partitioned into 3 areas. These three areas remain open, with structural elements left exposed. Real Property Accountable Record/848 gives a completion date of c1953. None of the drawings in CE File #849 were stamped "As-built." Neither the architect nor the builder is known.

III. HISTORIC AND CURRENT USE:

Source: Real Property Accountable Record/849.

Current Function: Shop support for research using balloons.

Original Function: Electronics and atmospheric research storage.

Interim Functions:

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

Source: CE File #848-1 (c1952).

Foundation: Concrete footing. Stem wall. 6" concrete slab.

Exterior walls: 8" concrete masonry units (CMU).

Roof: B/U on 1" rigid insulation. 5" concrete deck supported by two-way concrete beams and columns.

Notable interior features, including machinery:
Large, open interior. Large slider doors at east and west elevations.

V. CURRENT FEATURES IF DIFFERENT FROM ORIGINAL:

Source: Field visit Spring 1996; Real Property Accountable Record/849.

Foundation:

Exterior walls:

Roof:

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Notable interior features, including machinery:
1/2-ton hoist system manufactured by Budgit. 1-ton crane manufactured by Loadstar.

VI. BRIEF STATEMENT OF HISTORIC SIGNIFICANCE:

Although currently ineligible, Building 849 may meet National Register Criteria A and/or C once the fifty-year construction date is met in the year 2003. Recommend photo-documentation prior to modifications.

VII. ASSOCIATED BUILDINGS:

Continues to provide shop support for Building 850 research using high-altitude balloons.

VIII. ADDITIONAL COMMENTS AND MAINTENANCE RECOMMENDATIONS:

Although there have been minor modifications to the original structure, Building 849 retains historic integrity in all seven aspects. Recommend that Building 849 be reassessed once the fifty-year construction date is met in the year 2003, due to the important balloon payloads constructed here.
The original large interior space has been divided into three rooms by partitions. Two original sliding exterior doors have been replaced with roll-up doors. Each retains its original opening location and size. The windows appear to be original, although many of the panes have been painted. Security bars shown on early construction drawings remain intact. Welding and carpentry shops continue to be used for constructing and repairing balloon gondolas used to carry research payloads.

Suggested Routine Maintenance: Improve drainage at north elevation. Inspect weld joints at metal air conditioning unit support. Sand, prime, and paint metal if support does not need to be replaced. Repair concrete door aprons at east elevation. Repair broken glass. Patch and paint lintel above roll-up door. Repair wood soffit at west elevation. Fill and compact at southwest corner to promote positive drainage. Maintain metal slider doors. Sand, prime, and paint CMU walls as required.

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

Comments: Partitions added to large work area to separate space into three work areas.

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

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

Comments: Building 849 remains situated in original setting, near Building 850, and near balloon launch pad (1952: CE File #848-1).

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

Comments:

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

Comments: Although interior partitioning has been added, nearly all of the original workmanship remains evident. Vinyl tile covers part of the slab.

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 [ ] Some elements remain [x] Retains integrity

Comments:

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

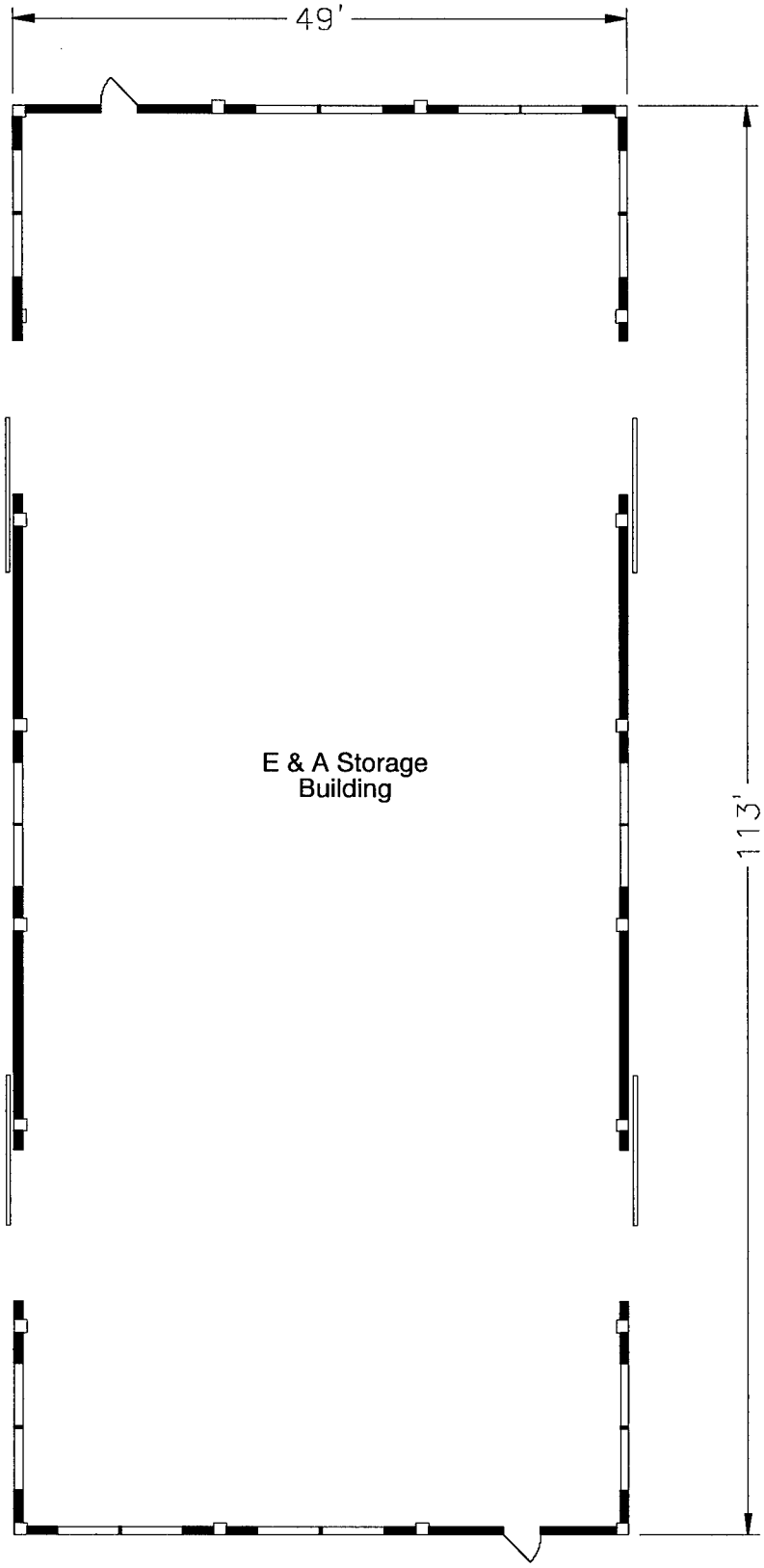
Comments: Building 849 continues to serve in the same capacity for which it was originally designed and constructed.

X. FURTHER INFORMATION:

Surveyed By:

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

HAFB Report Number: **CRM Publication #3**
Photograph Citation: **CD-ROM #2-Photo #65**
Negatives On File: **49 CES/CEV, 550 Tabosa Ave, HAFB**
Date of Field Visit: **SPRING 1996**



Source: CE File #849-1 (c1952)

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State of New Mexico Office of Cultural Affairs Historic Preservation Division	**BUILDING 849** Holloman Air Force Base Alamogordo, New Mexico	Project No. 35-95-HAFB-4	AutoCAD rendering by: *Steve Merrill* New Mexico State University **Sheet 1 of 1**	NEW MEXICO STATE UNIVERSITY

COLD WAR SURVEY: HOLLOMAN AIR FORCE BASE

NAME:
Current: Science Lab Geophysics.
Historic: Electronics & Atmospheric Research Test.
Street Address: 1283 Forty Niner Ave., HAFB, 88330-7908.

Building Number: 850

I. GENERAL INFORMATION:

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

Comments: Building 850 is in need of minor routine maintenance.

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

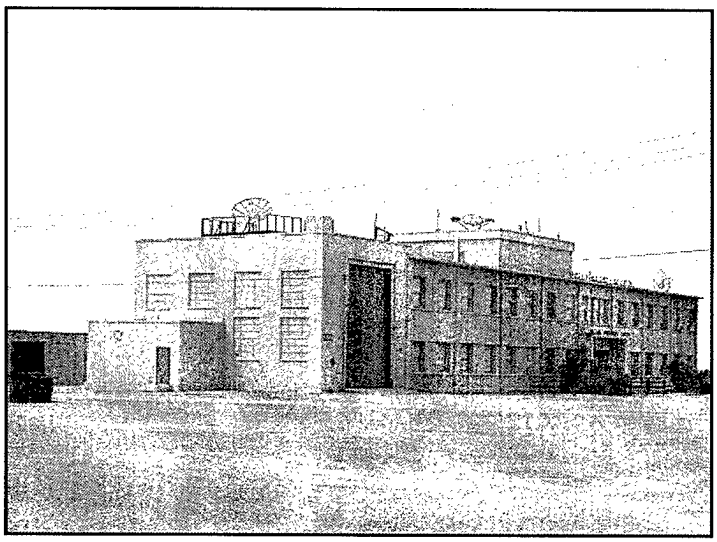
Comments: Remains essentially as it was originally constructed.

Preliminary Determination of National or State Register Eligibility:

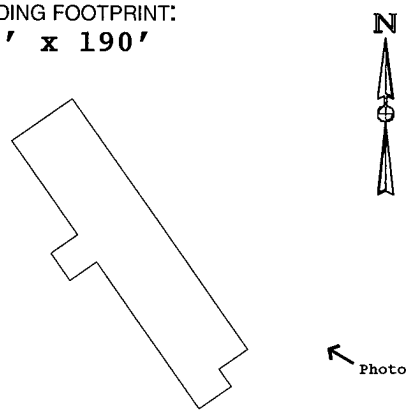
[x] Exceptional importance [ ] Potentially eligible [ ] Further research recommended [ ] Ineligible

Comments: Building 850 is eligible under Criterion A.

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



BUILDING FOOTPRINT:
48' x 190'



Date of completion: c1953

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 850 is a rectangular, 2-story, concrete structure with concrete masonry unit (CMU) walls. A central corridor runs the length of each floor. Rooms and offices flank the corridor on both floors. The corridor opens at one end into a large open Rocket/Balloon Laboratory, exhibiting an uninterrupted 2-story height. The principal facade faces north. Fenestration is symmetrical, with the main entrance located at the center of the building. No structural modifications to this building were noted.

Real Property Accountable Record/850 indicates that this building was constructed c1953. Construction drawings in CE File #850 are stamped "As-built," however, no associated date is delineated in the revision block. Architect: W. C. Kruger (Santa Fe, NM). The builder is unknown.

III. HISTORIC AND CURRENT USE:

Source: Real Property Accountable Record/850.

Current Function: Science Lab-Geophysics.

Original Function: Science Lab-Geophysics.

Interim Functions:

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

Source: CE File #850-1 (c1952).

Foundation: Concrete footings, grade beams, column spread footings.

Exterior walls: Concrete masonry units (CMU) between concrete frame.

Roof: Two-way concrete slab supported by concrete beams. B/U roof. Rigid insulation atop slab.

Notable interior features, including machinery: 2-story Rocket/Balloon Laboratory.

V. CURRENT FEATURES IF DIFFERENT FROM ORIGINAL:

Source: Field visit Spring 1996.

Foundation:

Exterior walls:

Roof:

Notable interior features, including machinery: Note: Rail crane and hoist in Rocket/Balloon Lab manufactured by Allegheny Tech., Inc.

VI. BRIEF STATEMENT OF HISTORIC SIGNIFICANCE:

Building 850 maintains all aspects of historic integrity, and is eligible for the National Register under Criteria A for its support of critical Cold War-era research using high-atmosphere balloon payloads, and under Criterion C for its distinctive design characteristics, including the 2-story Rocket/Balloon Laboratory. Special management consideration is warranted.

VII. ASSOCIATED BUILDINGS:

Building 849 provided welding and other shop support to the balloon operations conducted at Building 850.

VIII. ADDITIONAL COMMENTS AND MAINTENANCE RECOMMENDATIONS:

Building 850 retains historic integrity in terms of location, setting, design, materials, workmanship, feeling, and association. Important and unique biodynamic and atmospheric research conducted here during the 1950s and 1960s suggests that Building 850 has achieved a national level of significance. Further research is warranted. Similar research using balloon payloads continues today.

Two windows were removed when an existing roll-up door at the principal elevation was replaced. Otherwise, nearly all of the doors and windows at each level appear to be original. Doors and windows which have been replaced have retained their original openings. Glazed tile wainscot, and "shielded radio room partitions" drawn on c1952 construction drawings were not noted in the field. It is also unclear how much interior partitioning has occurred, because no original architectural floor plans were located. Window and door placement at the exterior, however, indicate that interior partitioning has been minimal.

Suggested routine maintenance: Scrape, prime, and paint exterior wood window sills. Reglaze windows. Replace exterior threshold at hall door. Repair stem wall. Regrade at foundation to promote positive drainage.

IX. ASSESSMENT OF HISTORIC INTEGRITY:

NOTE: ORIGINAL FLOOR PLANS SHOWING INTERIOR FINISHES AND ROOM USE WERE NOT LOCATED.

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

Comments: This building retains the essential characteristics of its original design, including the two-story rocket/balloon lab adjacent to offices & shops.

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

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

Comments: Continues to be situated with contemporary buildings, several of which are in support of on-going research using balloons Balloon launch is located to the northwest.

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

Comments: Exterior remains as it was originally constructed, with few modifications. Office floor tile and painted CMU walls appear to be original. Carpet and wainscoting may obscure original finishes.

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

Comments: Early photographs verify that the exterior has changed very little. Interior finishes including carpeting, wainscoting, and dropped ceilings may obscure original finishes.

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 [ ] Some elements remain [x] Retains integrity

Comments:

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 of feeling remains [ ] Some elements remain [x] Retains integrity

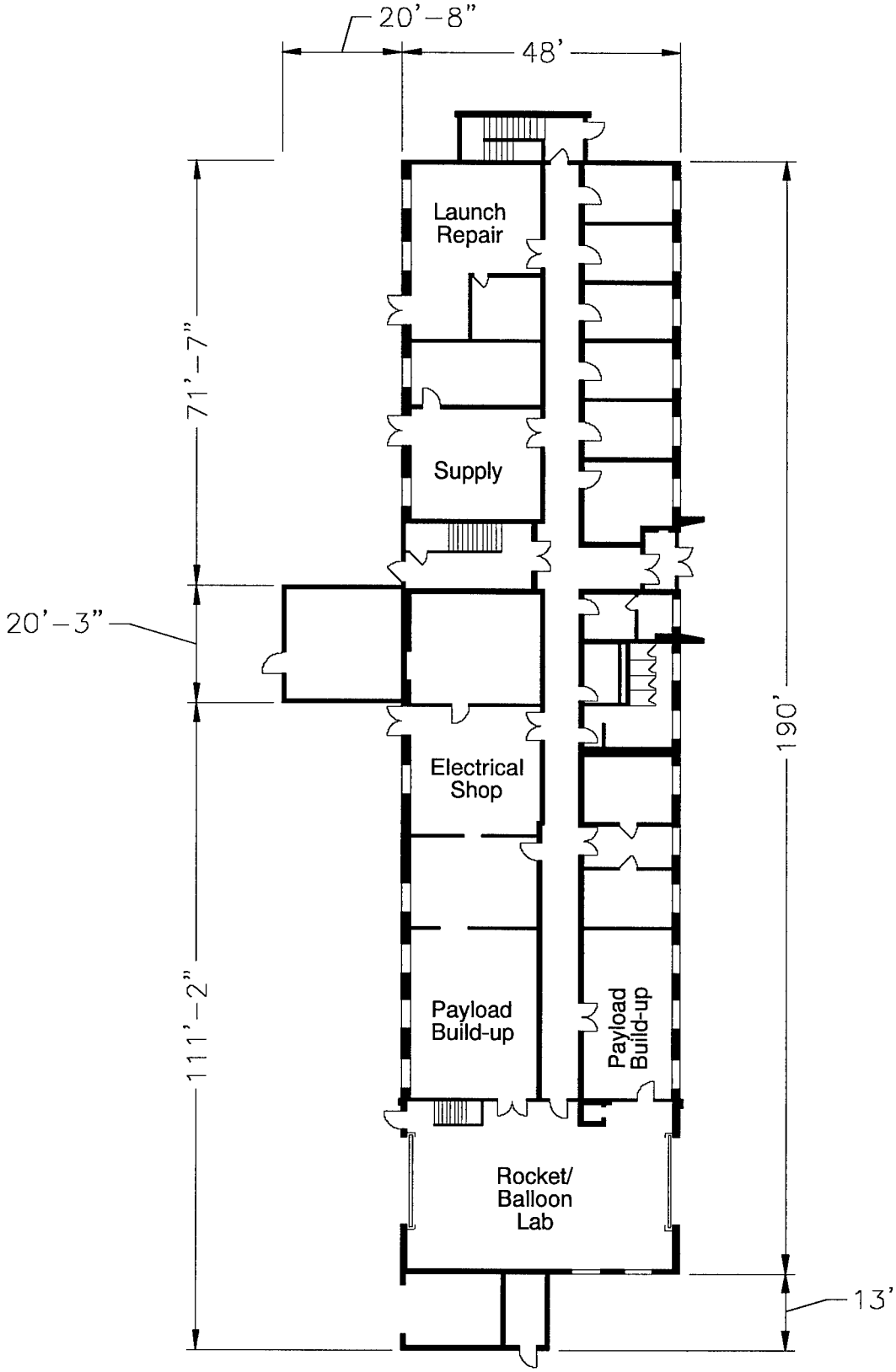
Comments: Building 850 continues to function in the same capacity for which it was originally designed.

X. FURTHER INFORMATION:

Surveyed By:

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

HAFB Report Number: **CRM Publication #3**
Photograph Citation: **CD-ROM #1-Photo #14**
Negatives On File: **49 CES/CEV, 550 Tabosa Ave, HAFB**
Date of Field Visit: **SPRING 1996**



Source: CE File #850-1 (c1952)

State of New Mexico Office of Cultural Affairs Historic Preservation Division	**BUILDING 850** Holloman Air Force Base Alamogordo, New Mexico	Project No. 35-95-HAFB-4	AutoCAD rendering by: *Mike Gardner* New Mexico State University **Sheet 1 of 1**	NEW MEXICO STATE UNIVERSITY

COLD WAR SURVEY: HOLLOMAN AIR FORCE BASE

NAME:
Current: (Non-USAF) Administrative Offices.
Historic: Electronic Counter Measure Lab.
Street Address: 1292 Forty Niner Ave., HAFB, 88330-7908.

Building Number: 855

I. GENERAL INFORMATION:

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

Comments: Building 855 is in need of minor routine maintenance.

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

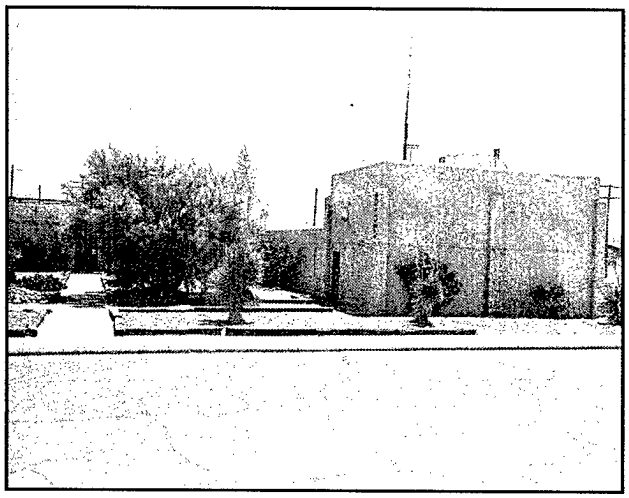
Comments: Several structural modifications to original building.

Preliminary Determination of National or State Register Eligibility:

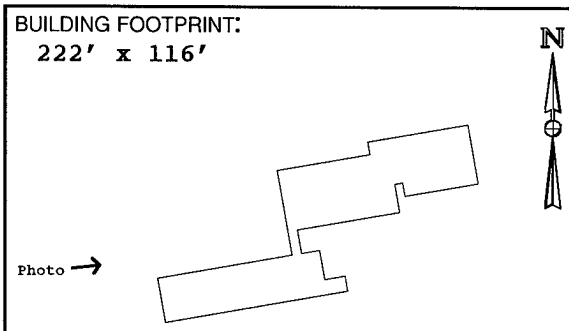
[ ] Exceptional importance [ ] Potentially eligible [ ] Further research recommended [x] Ineligible

Comments: Building 855 has not retained historic integrity.

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



BUILDING FOOTPRINT:
222' x 116'



Date of completion: c1955

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.)

Real Property Accountable Record/855 indicates that this building was completed c1955. Constructed originally for use as an electronic countermeasures laboratory, this facility has been modified since to provide administrative offices, including office space for US Army Corps of Engineers personnel.

Building 855 was originally constructed using poured concrete and concrete masonry unit (CMU) walls with pilasters, and exhibited a flat roof. The floorplan has changed considerably over the years, due to the addition of a laboratory at the west elevation as a subsequent improvement, and the addition of a vehicle maintenance facility. Neither the architect nor the builder is known.

Structural modifications: West Lab Area (1957: CE File #855-2). Vault addition (n.d. CE File #855-7). Vehicle maintenance facility addition (1987: CE File #855-11).

III. HISTORIC AND CURRENT USE:

Source: Real Property Accountable Record/855.

Current Function: Administrative offices (Non-Air Force).

Original Function: Electronic Countermeasures Laboratory.

Interim Functions: "Elct R-L" (n.d.); "Msl/Space Rsch Eng" (c1970); "Ops, SP" (n.d.); "Admin Ofc Non-AF" (c1993); "Named/Number Div Hq" (n.d.); "Hq Group" (c1992).

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

Source: CE File #855-1 (c1954).

Foundation: Concrete wall footing.

Exterior walls: Concrete masonry units (CMU).

Roof: B/U roof on 4" lightweight concrete deck supported by steel joists.

Notable interior features, including machinery: "Shield Room."

V. CURRENT FEATURES IF DIFFERENT FROM ORIGINAL:

Subsequent Improvement: [West Lab Addition (1957) CE File #855-2.]

Foundation: Concrete spread column footings, grade beams in Systems Test Lab.

Exterior walls: [Continuous footings elsewhere] Concrete masonry units (CMU).

Roof: B/U gravel on rigid insulation and concrete deck on steel bar joists.

Notable interior features, including machinery:
The Systems Test Lab is constructed differently than the rest of the Lab areas, showing a grade beam foundation, structural slab and beam roof, and high ceiling.

VI. BRIEF STATEMENT OF HISTORIC SIGNIFICANCE:

Building 855 has not retained historic integrity, and is therefore not eligible for inclusion on the National Register of Historic Places.

VII. ASSOCIATED BUILDINGS:

Apparently Building 805 *(Security Storage Area: West Area)*, and Building 2044 *(Laboratory: Atom Peak)* were associated with Building 855 at one time (CE File #855-2, "As-built" drawings dated 1958, entitled "*Electronics Lab Countermeasure*," consisting of 21 plates.)

VIII. ADDITIONAL COMMENTS AND MAINTENANCE RECOMMENDATIONS:

This survey was unable to determine what Cold War-era research was conducted at this building, so a determination of historic significance could not be made. This building has not, however, retained historic integrity. Building 855 is therefore not eligible for inclusion on the National Register, and no special management consideration is warranted.

A 20' x 30' vault was added at the south elevation sometime between 1967 and 1969. The east elevation is almost entirely obscured by Building 859, a shed-like building of corrugated metal siding and a metal roof. The c1957 West Lab Addition may represent a subsequent improvement to the original building. A split-face concrete masonry unit addition obscures the east elevation, and alters the north and south elevations (1987: CE File #855-11). The building appears to have been landscaped since its original construction.

Suggested maintenance recommendations: Repair asphalt at north elevation near the air conditioning unit. Backfill the hole under the south sidewalk.

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

Comments: Floorplan has changed extensively. All of the elevations except the west elevation have also 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 [ ] Retains very little [x] Retains most [ ] Retains all or nearly all of its cultural setting

Comments: The construction of new buildings to the north, landscaping, and the addition of a split-faced wall have altered the original setting.

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

Comments: Original 110' x 30" structure retains most of the exterior materials. Original interior materials changed out or hidden by other finishes.

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

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

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

Comments: Additions hide most of the original craftsmanship.

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: This building retains no feeling as an electronic countermeasure facility.

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

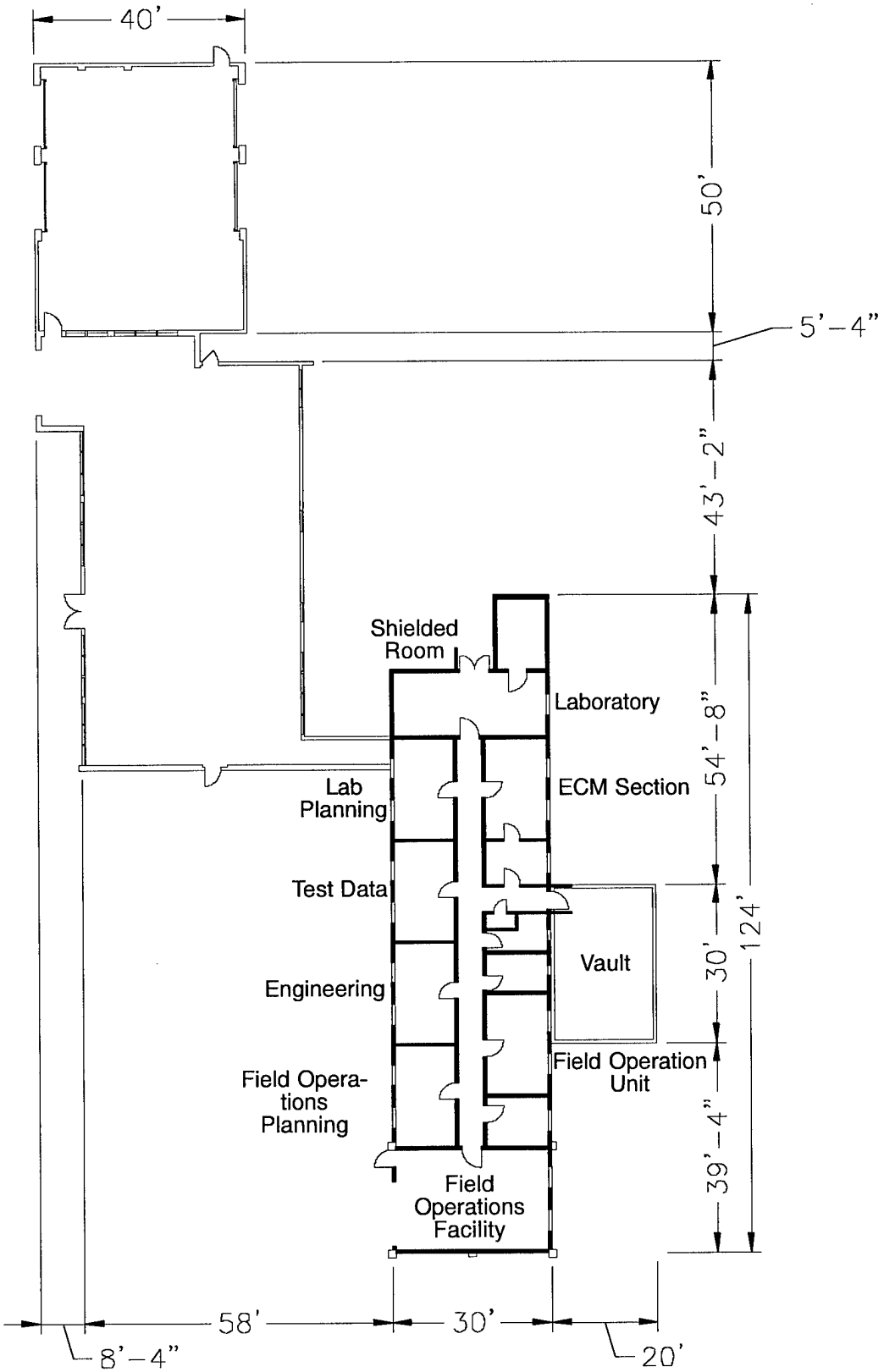
Comments: Building 855 is used for miscellaneous functions, particularly as office space.

X. FURTHER INFORMATION:

Surveyed By:

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

HAFB Report Number: **CRM Publication #3**
Photograph Citation: **CD-ROM #2-Photo #63**
Negatives On File: **49 CES/CEV, 550 Tabosa Ave, HAFB**
Date of Field Visit: **SPRING 1996**



Source: CE File #850-1 (c1954)

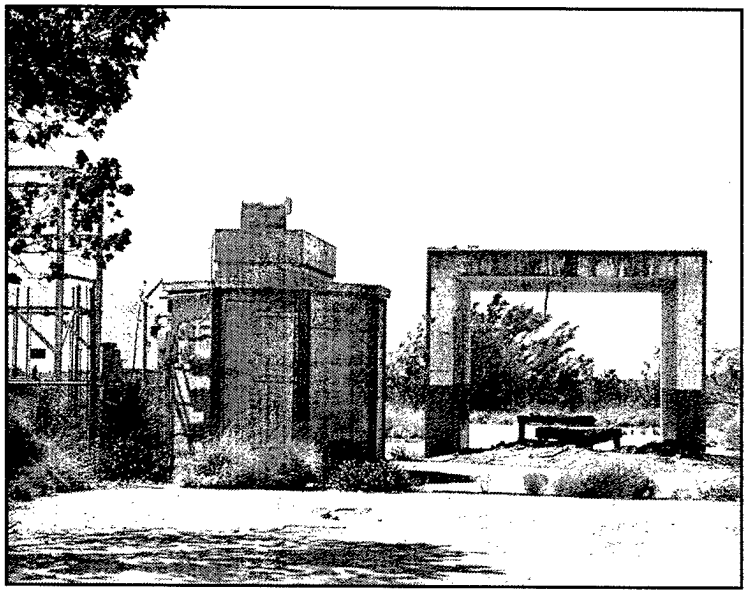
State of New Mexico Office of Cultural Affairs Historic Preservation Division	**BUILDING 855** Holloman Air Force Base Alamogordo, New Mexico	Project No. 35-95-HAFB-4	AutoCAD rendering by: *Mike Gardner* New Mexico State University **Sheet 1 of 1**	

Field Survey: Materiel Development

IV. Materiel Development Facilities

- **Research Laboratories**
  - -Building 839
  - Daisy Test Track:
    - -Building 1200
    - -Building 1201
    - -Building 1202
    - -Building 1203
    - -Building 1204
    - -Building 1205
    - -Building 1206
    - -PRL Facility
  - Balloon/Parachute Operations:
    - -Building 524
    - -Building 849
    - -Building 850
    - -Building 855
- Manufacturing Sites
- **Test Sites**
  - **-Building 640**
  - High Speed Test Track:
    - -Building 835
    - -Building 1159
    - -Building 1160
    - -Building 1161
    - -Building 1162
    - -Building 1163
    - -Building 1175
    - -Building 1178
    - -Building 1645
- Proving Grounds
- Communications
  - -Building 1102
  - -Building 1103
  - -Building 1121
- Documentation
  - -Building 841
  - -Building 848
  - -Building 1182

Jet Test Cell Bldg 640



COLD WAR SURVEY: HOLLOMAN AIR FORCE BASE

NAME:
Current: (Vacant).
Historic: Jet Test Cell.
Street Address: 1252 Eighth Street, HAFB, 8830-8026.

Building Number: 640

I. GENERAL INFORMATION:

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

Comments: This site may have an archaeological component.

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

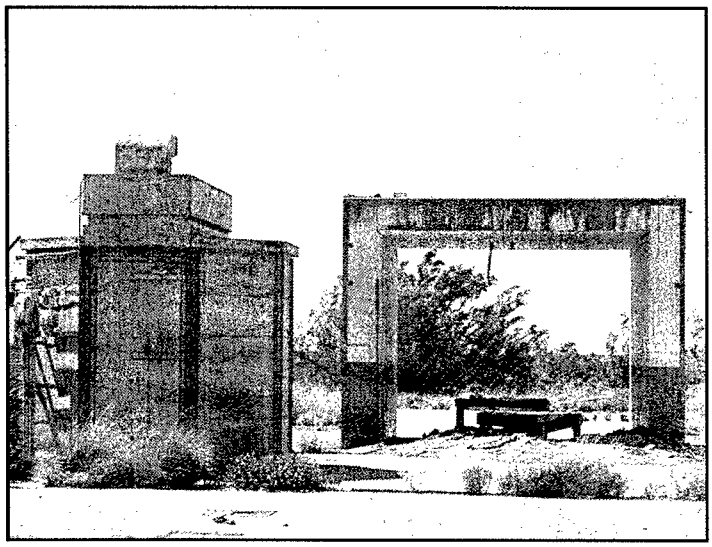
Comments: Deterioration due to abandonment, neglect, and vandalism.

Preliminary Determination of National or State Register Eligibility:

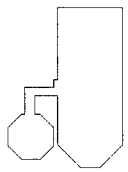
[ ] Exceptional importance [ ] Potentially eligible [x] Further research recommended [ ] Ineligible

Comments: Does not meet "exceptional importance" criteria. See Section VIII.

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



BUILDING FOOTPRINT:
41′ x 44′



N

↑ Photo

Date of completion: c1960

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 640 is a test cell canopy exhibiting thick concrete walls on two sides and a thick, concrete, flat roof. This canopy is open on two sides, and is an integral part of a larger test cell site consisting of an octagonal control room, concrete pads, and conduit trenches. The control room is a prefabricated structure, with an overall outside width of 10′-4″, and exhibiting thick walls and windows. A screened preparation shed structure has been removed. This test cell was completed c1960 (Real Property Accountable Record/640, and has been vacant since c1989 (Personal communication with Airfield Manager, Bob Schaeffer). According to Real Property Accountable Record/640, an addition to an original 16′-6″ x 15′-0″ structure was completed c1959. An addition to the ramp was completed c1959. The test cell (Building 640) itself was completed c1960. The footprint dimensions cited above represent the dimensions of the concrete pad. All structures associated with this site have deteriorated due to abandonment, neglect, and vandalism. Neither the architect nor the builder is known.

III. HISTORIC AND CURRENT USE:

Source: Real Property Accountable Record/640; Personal communication with Airfield Manager, Bob Schaeffer.

Current Function: (Vacant).

Original Function: Jet Test Cell.

Interim Functions: X-Ray Facility for Training Jets.

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

Source: CE File #640-1 (c1958).

Foundation: Concrete slab on compacted gravel fill.

Exterior walls: *Test Cell*: Poured concrete. *Control House*: Pre-fab.

Roof: *Test Cell*: Poured concrete. *Control House*: Unknown.

Notable interior features, including machinery: None noted.

V. CURRENT FEATURES IF DIFFERENT FROM ORIGINAL:

Source: Field visit Fall 1995.

Foundation:

Exterior walls:

Roof:

Notable interior features, including machinery: None noted.

VI. BRIEF STATEMENT OF HISTORIC SIGNIFICANCE:

Although this test cell does not meet the "exceptional importance" stipulation, it remains potentially eligible for the National Register under Criterion C once the fifty-year construction date is met if its historic integrity is maintained.

VII. ASSOCIATED BUILDINGS:

A similar test cell in the vicinity has been demolished.

VIII. ADDITIONAL COMMENTS AND MAINTENANCE RECOMMENDATIONS:

Building 640 is part of a larger site consisting of concrete pads, conduit trenches, an octagonal control house, and a preparation shed (no longer in existence). The octagonal control house was manufactured by Space Corporation (Dallas, TX), Part Number 381-100, Semi-Port Number 4820 546 1808, Serial Number 10, Manufacture Date: 5 February 1958 (Plate mounted on exterior wall). The preparation shed was located adjacent to the test cell, and featured a corrugated metal roof and large double doors. The shed was enclosed with hardware mesh (1958: CE File #640-1, Sheets 1 through 10).

Although this site currently does not meet the "exceptional importance" criteria, this test cell site may be eligible under Criterion C once the fifty-year construction completion date is reached (in the year 2010). This site is unique, and warrants further research.

This site is slated for demolition (Letter dated July 1995, Real Property Accountable Record/640). A similar test cell site once located adjacent to this site has already been lost. Recommend that complete documentation, including measured drawings, photographs, and historical and archaeological research be conducted prior to any action taken regarding this structure.

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: This is an estimate based on original construction drawings dated 1958, yet not stamped "As-Built". What remains of this site is situated within the airdrone infield.

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: The concrete open canopy is intact, though deteriorating. An associated control house has been vandalized. A preparation shed has been removed.

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

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

Comments: This continues to be situated in a remote area west of the NE-SW runway in the airdrone infield.

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

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

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

Comments: Concrete structure relatively intact. Copper piping, electrical wiring, etc. has been removed. Site has been vandalized.

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

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

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

Comments: The design, materials, and workmanship of this site are unique.

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 [ ] Some elements remain [x] Retains integrity

Comments: Continues to be situated near an active runway, accessed by the same road, in a remote setting within the airdrone infield.

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 [x] Some elements remain [ ] Retains integrity

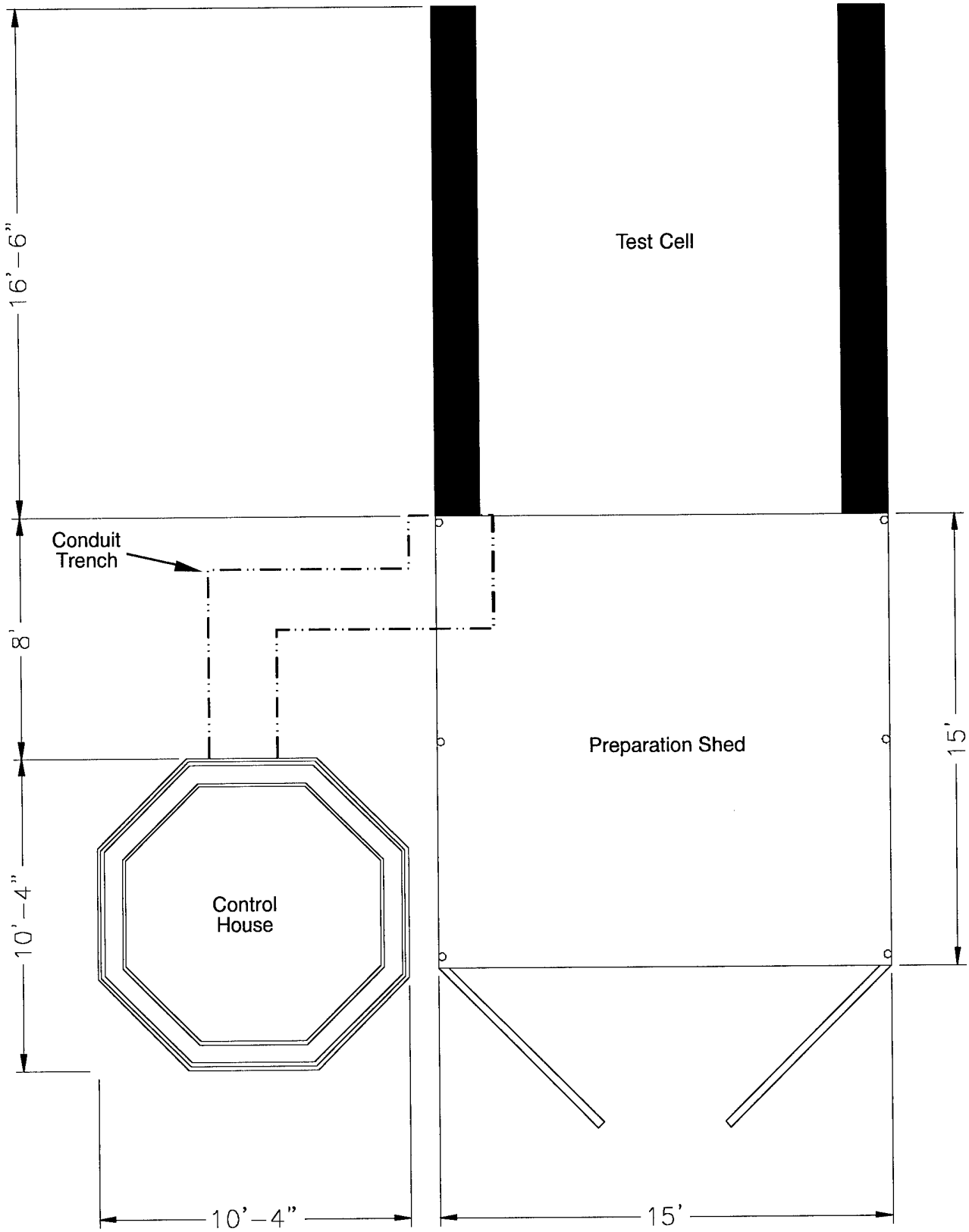
Comments: This site has deteriorated to the point that it could no longer function as it was originally designed. Further research recommended.

X. FURTHER INFORMATION:

Surveyed By:

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

HAFB Report Number: **CRM Publication #3**
Photograph Citation: **CD-ROM #2-Photo #82**
Negatives On File: **49 CES/CEV, 550 Tabosa Ave, HAFB**
Date of Field Visit: **FALL 1995**



Source: CE File #640-1 (c1958)

State of New Mexico Office of Cultural Affairs Historic Preservation Division	**BUILDING 640** Holloman Air Force Base Alamogordo, New Mexico	Project No. 35-95-HAFB-4	AutoCAD rendering by: *Mike Gardner* New Mexico State University **Sheet 1 of 1**	NEW MEXICO STATE UNIVERSITY

Field Survey: Materiel Development

IV. Materiel Development Facilities

•Research Laboratories

-Building 839

Daisy Test Track:

-Building 1200
-Building 1201
-Building 1202
-Building 1203
-Building 1204
-Building 1205
-Building 1206
-PRL Facility

Balloon/Parachute Operations:

-Building 524
-Building 849
-Building 850
-Building 855

•Manufacturing Sites

•Test Sites

-Building 640

High Speed Test Track:

-Building 835
-Building 1159
-Building 1160
-Building 1161
-Building 1162
-Building 1163
-Building 1175
-Building 1178
-Building 1645

•Proving Grounds

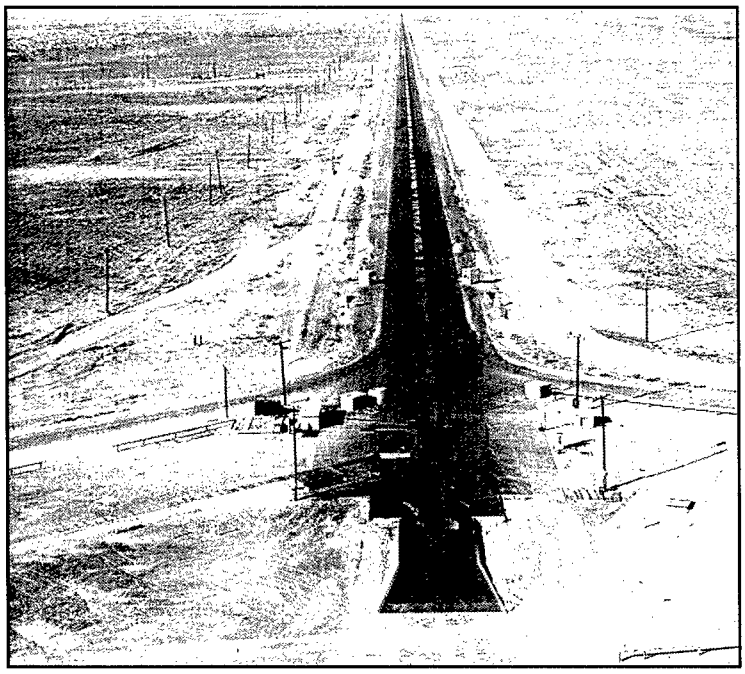
•Communications

-Building 1102
-Building 1103
-Building 1121

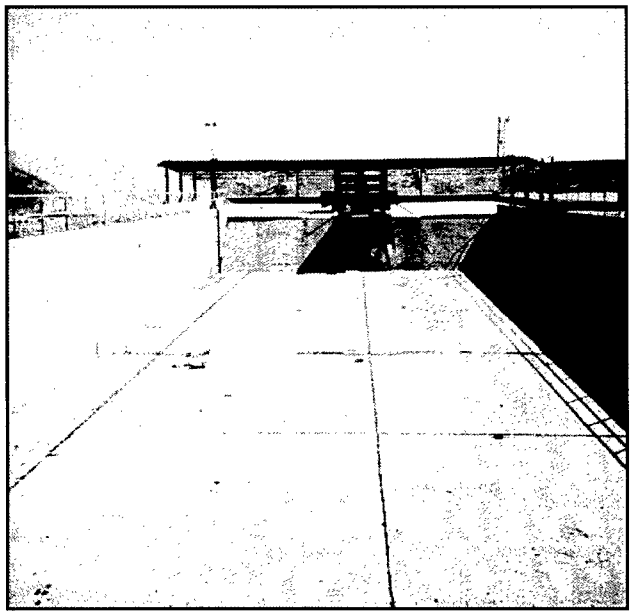
•Documentation

-Building 841
-Building 848
-Building 1182

Test Track Bldgs 835, 1159-1163, 1175, 1178, 1645



Test Track facing north, May 1963. RG 342-B. Volume II. 06-042. Archives II.



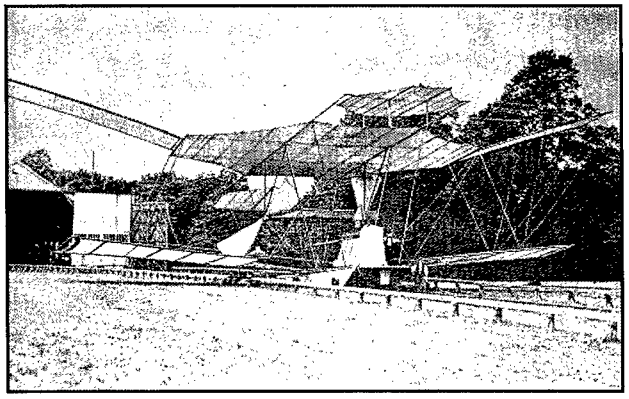
Facing south. Winter 1997.

Buildings 1159, 1160 and the concrete Test Stand itself (pictured above) comprise Holloman's unique Horizontal Test Stand Facility.

The High Speed Test Track

Background

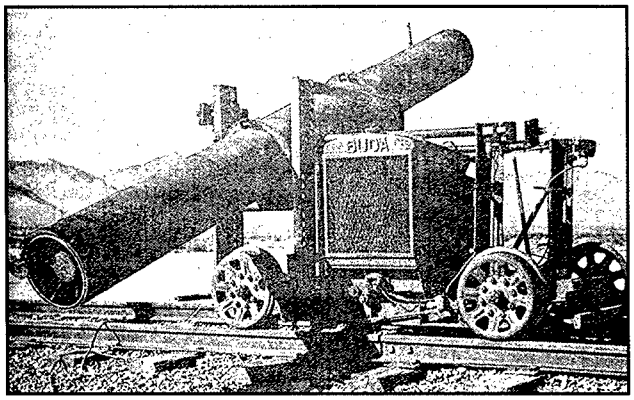
Although track-type testing had only recently gained wide recognition in the1950s as an important research technique, an inventor named Hiram Maxim used a track system as early as 1894 to test the lift of an airplane he was developing. Maxim mounted his aircraft on wheels, and powered it down the track using a steam engine driving the propeller. "The lift became so great that it tore up the track...Maxim abandoned the experiment after an expenditure of $100,000" (*Istracon* 1961: 2.1).



Photograph showing Hiram Maxim's airplane test track c1894. *(Istracon 1961: 2.1).*

During and just after World II, it became apparent that the weapons industry, particularly missile manufacturers, needed a method to make dynamic tests to prove new designs. "To this end tracks were built and various means of propulsion were attempted" (*Istracon* 1961: 2.2). The first successful track runs in the United States were made using a gasoline-powered railroad car. "The need for higher speeds and acceleration was soon apparent" (*Istracon* 1961: 2.2).

In the early 1960s, four large general-purpose tracks and 20 or so small special-purpose tracks existed in the United States. England, France, Italy, and Russia also possessed rocket sled tracks



"Early track vehicle using a gasoline-powered railroad car" *(Istracon 1961: 2.2).*

(*Istracon* 1961: 2.3). Tracks in the United States were generally located in rather remote, yet easily accessible regions of the southwest. Track locations at Holloman AFB (NM), Hurricane Mesa (AZ), Edwards AFB (CA), and China Lake (CA) all took advantage of ideal weather conditions and sparsely populated regions.

Holloman AFB

A $451,000 contract for the initial 3550-foot test track at HAFB was awarded to the Ponsford Brothers of El Paso, TX on 26 August 1949. Initially used to launch the *Snark* missile, a variety of tests necessited that the track be lengthened in 1956 to just over 5,000 feet (Bushnell, n.d.d: Chronology).

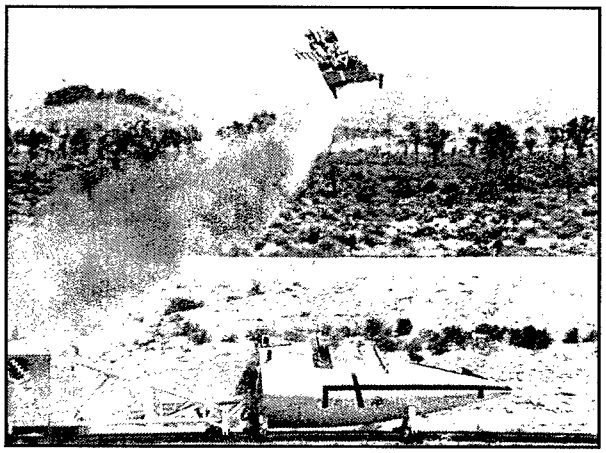
Over 35,000 feet long upon its formal dedication in 1959, Holloman's High Speed Test Track was billed as the "longest, most precisely aligned and completely instrumented high speed test track in the free world" (*Test Track Directorate* 1969: 1.1).

The High Speed Test Track was used in a variety of test procedures designed to meet national Cold War initiatives. Relatively simple tests were conducted to determine the structural integrity of missile and aircraft components. Complex test procedures evaluated inertial guidance systems "...destined for the nation's missile arsenal" (Cornett n.d.c.: 1).

Initially conceived and constructed to test the MX-775 (Northrop) *Snark* missile, and the MX-904 (Hughes) *Falcon* precursor, projects sponsored by the Atomic Energy Commission and tests for the MX-1964 (Convair) aircraft were also conducted in the early 1950s. The *Sleighride* project, Q-2 drone tests, and recovery tests for the *Matador* missile defined other important early missions. Advances in space biology, automobile safety, and improvements to the track itself were provided during tests conducted using the High Speed Test Track. Additional track testing evaluated supersonic aircraft escape systems, parachute recovery devices, and warhead fuses (Bushnell n.d.d: 1-43).

Escape Systems for Supersonic Jets

By the early 1950s Holloman's High Speed Test Track was used in experiments conducted to study the effects of rapid deceleration and windblast. Of utmost importance in the early 1950s was the imposing problem of safely ejecting pilots from the then new "supersonic" jets. At the time research at Holloman began, escape systems were thought to be at worst inadequate, and at best, untested (Misrach 1990: 3).



RG 342. Volume I. 04-160. Archives II.

"The successful supersonic ejection of a fully attired dummy from an X-15 sled run at Edwards AFB, CA shows the effect of stabilizing fins on seat which plus other features eliminated dangerous tumbling in catapult from high speed vehicle c1961."

A supersonic jet can "...shoot through the heavens at 2,000 miles per hour, compared, say, with a twin-engine civilian plane poking along at 200 miles per hour" (Misrach 1990: 3). A pilot bailing out at supersonic speed had to initially face the ejection force required to get the pilot out of the plane. The pilot then faced the sudden onslaught of windblast, and wind-drag deceleration. This was often "...followed by dangerous tumbling and spinning" (Bushnell n.d.d: 45). Bailout from supersonic jets is "...especially hazardous owing to the effects of windblast, and particularly to the fact that personnel jumping from such aircraft is very likely to be injured by contact with the tail sections of the plane" (USAF News Release: 12 August 1957).

Colonel John Paul Stapp

Deceleration and windblast tests at Holloman AFB using animals and anthropomorphic dummies were conducted at the Daisy Track and at the High Speed Test Track as precursors to research using human beings. Deceleration and windblast tests using humans were initiated in 1953 (Bushnell n.d.e: Chronology).

Colonel John Paul Stapp achieved international acclaim as the "fastest man on earth" during a deceleration test which took place on 10 December 1954. This memorable sled run reached a maximum speed of 937 feet per second. This was fast enough for the sled to overtake and pass a T-33 aircraft that was flying overhead. The windblast endured by Col. Stapp reached as high as 7.7 pounds per square

inch, or better than 1,100 pounds per square foot. The water brakes brought the sled to a stop in just 1.4 seconds from maximum velocity. The jolt Col. Stapp received has been compared with that an automobile driver would experience "...were he to crash in a solid brick wall at 120 miles per hour" (Bushnell n.d.d.: 45). Colonel Stapp's famous ride was fictionalized in a Twentieth Century Fox motion picture called the "Threshold of Space" filmed in the fall of 1955 and released the following year. Appearing on the cover of *Time* magazine, and as a guest on the television show "This Is Your Life," Stapp received national attention again when he received a speeding ticket in Alamogordo, NM for traveling 40 miles per hour in a 25 mile per hour zone (Bushnell n.d.d.: 49). The judge dismissed the fine against Stapp, issued a new citation against a fictitious 'Captain Ray Darr,' and paid the $12.50 fine from his own pocket (Mattson and Tagg 1995: 107).

632 M. P. H. to a Stop in 1.5 Second

Officer in Rocket Sled Sets Record—Gets Black Eyes in Halt

New York Times. 20 December 1954.

Guidance Missile Testing

At the direction of the Secretary of the Air Force, and upon the recommendation of the Scientific Board of the United States Air Force, the Central Inertial Guidance Test Facility was activated by the Air Research and Development Command in May 1959. Personnel experience with guidance testing begun some four years earlier "...led to the siting at the Holloman installation" (Bushnell n.d.f.: Foreword). Tests using simulated environments, static laboratory testing, free flight testing at the White Sands Missile Range, and dynamic tests using the High Speed Test Track all documented the range of expected g-forces to be encountered by a missile system, component, or space vehicle during operations. Though perhaps "undramatic and unspectacular" compared with biomedical experiments (Bushnell n.d.f.: 38), these early high speed tests provided crucial information used in the development of the Minuteman and Titan intercontinental missiles, and a variety of other national defense systems.

Simulated Nuclear Blasts

Already renowned for an ability to test guidance missile systems, Holloman AFB subsequently became one of the primary centers for testing space vehicles and weapons in a simulated nuclear blast environment.

After the Nuclear Test Ban Treaty was signed between the United States and the former Soviet Union on 5 August 1963, it became imperative that artificial means be developed to test the effects of nuclear blasts upon weapons systems and other equipment reentering the earth's atmosphere. Prior to the Test Ban Treaty, research labs (including the Air Force Weapons Lab at Kirtland AFB, NM) were accustomed to using actual nuclear detonations in their tests. After the Treaty was signed, "...the cost, the complexity of the tests, and, naturally enough, political considerations, made it expedient to look at some other methods to determine the effects of nuclear blasts on re-entry vehicles" (Cornett n.d.b.: 2).

A simulated blast environment was achieved by passing test equipment through dense and

explosive gases as they moved down the High Speed Test Track. Test track sled-borne telemetry was provided to obtain information on crucial areas of system performance: "...velocity output accuracy, platform stabilization, accelerometer output, effects of shock mounting, and stabilizer gyro drift" (Bushnell n.d.f.: 26). By the late 1960s, attention was diverted from simulated nuclear environments, and was focused instead on studying the effects of "electromagnetic radiation" (Cornett n.d.b.: 45).

Data Collection

Data collection continues to be at the heart of every test conducted at Holloman's High Speed Test Track. Among the most common tests conducted at the Track during the early phases of the Cold War included tests of missile guidance systems to ensure that missiles were equipped to hone in on intended targets. "The sled environment can closely simulate actual missile launch conditions, except for the long boost time of long-range missiles" (*Test Track Directorate* 1969: 7.1). This capability, the recoverability of test equipment, and the relatively low cost of track testing make using Holloman's Test Track advantageous.

Environment

"The environment in which the guidance system is subjected during a sled run can be tailored somewhat for vibration, acceleration, and deceleration, as dictated by the system design specifications" (*Test Track* Directorate 1969: 7.1). Maximum velocities of 1,400-1,600 feet per second were frequently programmed for missile tests. In addition to simulated nuclear blasts, equipment at the Track was also subjected to simulated rainfall to study the effects of rain erosion (*Test Track Directorate* 1969: 7.10).

Telemetry

Data of interest culled from Track tests included physical quantities, such as temperature, pressure, vibration, strain, acceleration, drag force, and velocity. Measurements were collected from unmanned and sometimes nonrecoverable vehicles through telemetry, Velocity Measuring Systems (VMS), and timer/programmer systems.

The basic idea behind a telemetry system is the conversion of physical quantities into electrical signals by transducers (e.g. strain gauges, thermocouples, gyros, pressure transmitters, vibration pickups, or accelerometers). Each signal provides a source of modulated energy which may then be amplified and transmitted to a telemetry receiving station (Stiltz 1961). Telemetry techniques required sled-borne instrumentation, radio-frequency equipment, and equipment for processing and/or recording telemetered data.

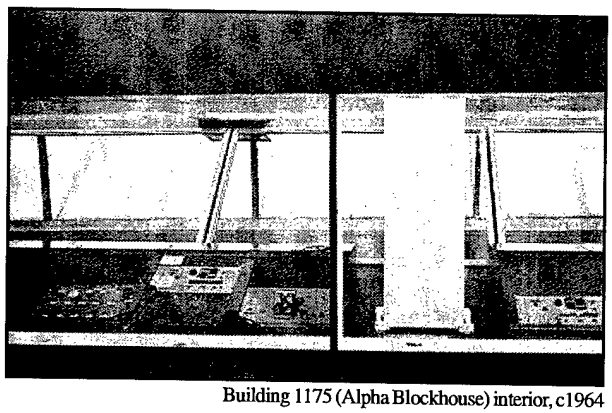
Modulation is the process of impressing information on a carrier (such as a wave) for transmission. Receiver output is routed to a set of discriminators and/or a magnetic tape recorder in the telemetry receiving station. The discriminators separate the signals and reconvert them to the form in which they appeared at the output of the transducers in the sled (Stiltz 1961).

The Velocity Measurement System measures sled position, velocity, and acceleration by the utilization of a sled-borne light beam that is broken by interrupters spaced along the track. These broken beam lights are converted into an electrical signal and transmitted to the receiving station. The timing and programming system "... provides timing reference signals,

programming for camera and instrumentation, on-off operations, countdown, and actual firing of the sleds" (Istracon 1961: 3.27).

Holloman Track Facilities

The primary facilities at the Holloman Track associated with data collection include Building 1161 (Midway), Building 1162 (Bravo Blockhouse), Building 1163 (Coco



Building 1175 (Alpha Blockhouse) interior, c1964 (*Test Track Directorate* 1964: 58).

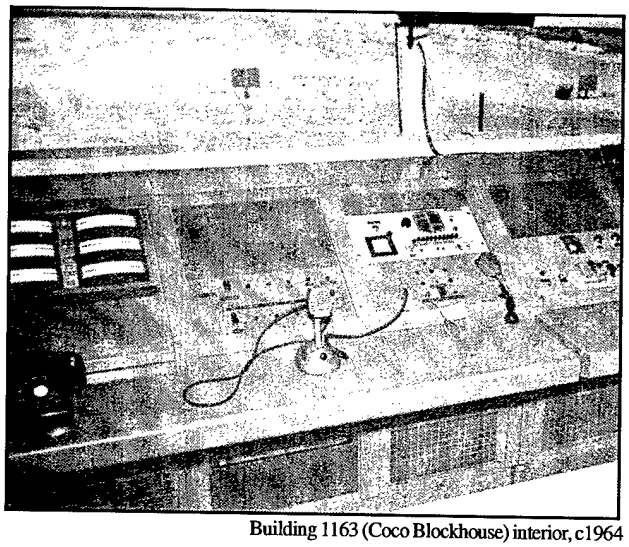
Blockhouse), and Building 1175 (Alpha Blockhouse).

The Midway building continues to serve as the main data receiving and recording facility for the Test Track. This building originally housed three telemetry ground stations consisting of discriminators (which separate and demodulate the signals from the sled transducers), data display instrumentation, magnetic tape recording, and data processing instrumentation. Midway also housed a Velocity Measurement System ground station containing a recording system, time data system, digital tape system, receivers, and preamplifiers. The Midway console controlled range timing with timing/programming equipment. Antenna towers on the roof continue to permit carrier transmission from any point along the track.

Track Blockhouses

Most of the firings on the track were controlled from blockhouses Alpha, Bravo, or Coco, with Alpha and Coco located at each end of the track, and Bravo at its midpoint. Each blockhouse console contained timing amplifiers, program amplifiers, and firing amplifiers. Two of the three blockhouses monitored the liquid engines used to push sled test vehicles during pre-firing events.

The blockhouses and the Midway building are still in use today. The blockhouses contain the same consoles and perform the same functions as they did when they were originally constructed. The use of each blockhouse depends on the length of track required to run



Building 1163 (Coco Blockhouse) interior, c1964 (*Test Track Directorate* 1964: 57).

the test, and the specified firing location along the track. Mobile stations were also used at intervals between the blockhouses to perform the same functions. Due to technological advancements in electronic instrumentation, Midway currently requires much less space for its operations, and has been remodelled to reflect these changes (Personal communication, Dennis Belknap, High Speed Test Track personnel).

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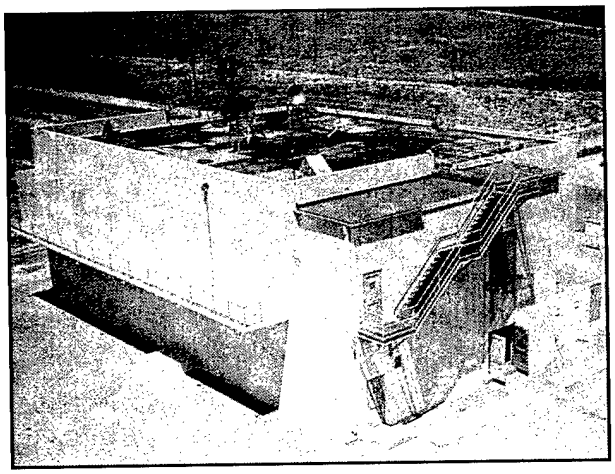
(Left) "Northrop Aircraft Technicians and Dr. Alfred E. Lombard, Jr. (center, standing) fit a special crash helmet on Col. John Paul Stapp during the Supersonic Sled test run at Holloman AFB, NM. Col. Stapp was subjected to a force of 30 g's during the test. The time of the run from start to finish was 7 seconds, the speed over 600 mph, and the length of the track was 3500 feet. This special helmet may become the new oxygen mask helmet for the Air Force . USAF Photo. 10 December 1954." Alpha Blockhouse (Building 1175) is shown in the background.

RG 342-B. Vol.II. 06-011. Archives II.

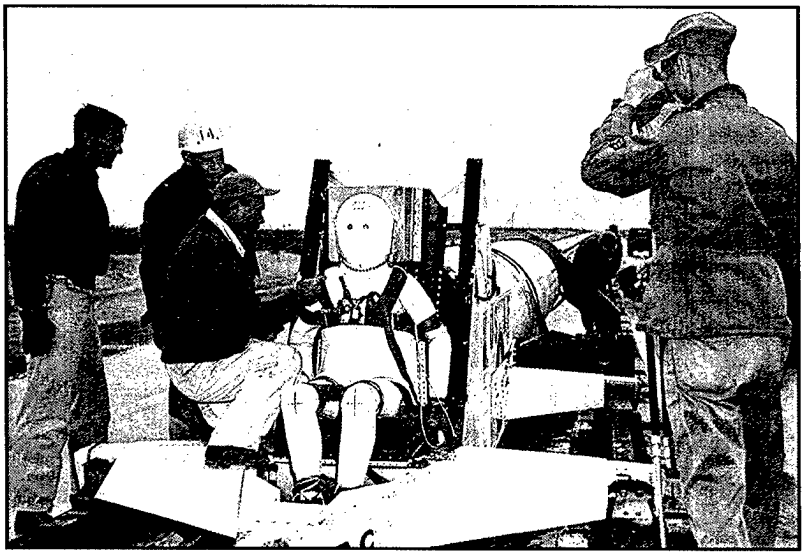
This aerial photograph of the High Speed Test Track Midway facility (Building 1161) was taken 7 May 1963. US Air Force Photo.



RG 342-B. Vol. II. 06-011. Archives II.

(Above) "Building 1161 (Midway) data collection center for track instrumentation, Holloman AFB 7 May 1963."

"Air Force Missile Development Center, NM: Workmen examine this dummy shortly after the rocket sled he was riding was stopped from a speed of 1,200 miles per hour by means of a water brake. The dummy was wearing a new windblast protection suit and helmet and the experiment, conducted by the Aeromedical Field Laboratory here, was made to see how both developmental models stood up under actual conditions. A solid propellant booster, commonly known as the "Megaboom," built by Astrodyne, Inc. of McGregor, TX was used to propel the sled and the dummy to a speed almost twice that of sound in the recent test on the 35-thousand foot captive missile test track located here." USAF Photo 1958.



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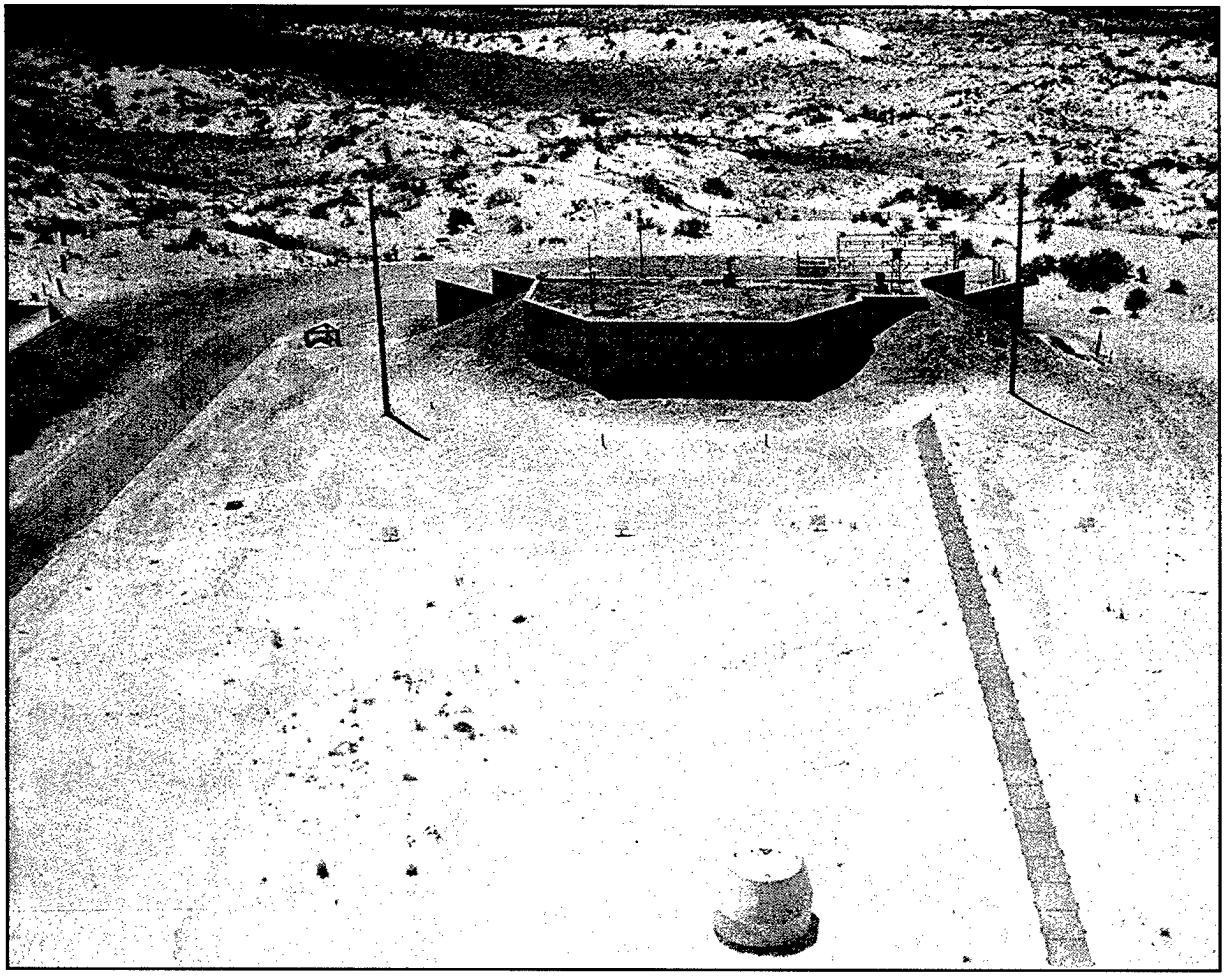


RG 342-B. Vol. II. 06-011. Archives II.

US Air Force aerial photo of Coco blockhouse (Building 1163) taken 7 May 1963.

COLD WAR SURVEY: HOLLOMAN AIR FORCE BASE

NAME: **Building Number:**
Current: Electroplating and Heat Treatment Shop.
Historic: Engine Test Building.
Street Address: 1278 Wagner Street, HAFB, 88330-7904. **835**

I. GENERAL INFORMATION:

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

Comments: Building 835 appears to be recently vacated.

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

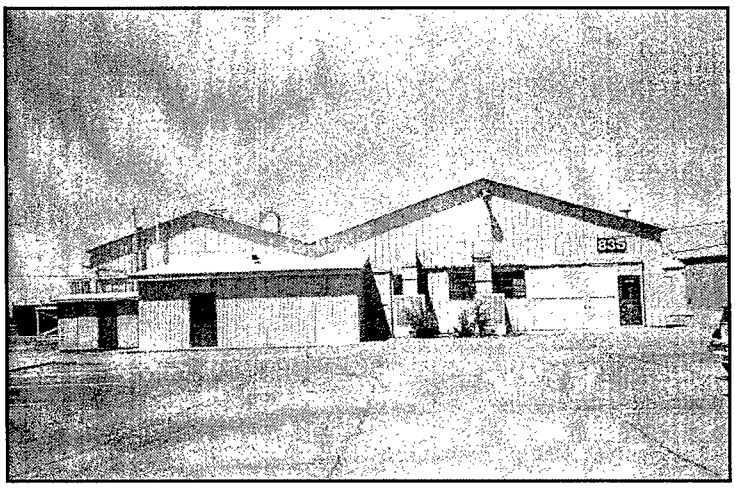
Comments: Shed additions at north elevation. Minor partitioning.

Preliminary Determination of National or State Register Eligibility:

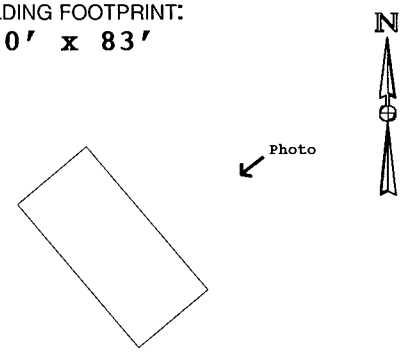
[ ] Exceptional importance [ ]Potentially eligible [x] Further research recommended [ ] Ineligible

Comments: Does not meet "exceptional importance" rule. See Section VIII.

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



BUILDING FOOTPRINT:
40′ x 83′



Date of completion: c1954

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 835 is a rectangular, one-story structure constructed using three sets of bent frames spanning the long direction and forming the gable ends. This building was completed c1954, according to Real Property Accountable Record/835. Two shed additions were built at the north elevation c1973. The floor plan is sectioned into three rooms by poured concrete blast-proof walls. There are two large folding doors at the north elevation. Other elevations exhibit a miscellaneous layout of doors with lights and awning windows. Neither the architect nor the builder is known. Building 835 appears to have been recently vacated.

III. HISTORIC AND CURRENT USE:

Source: Real Property Accountable Record/823. Note: Building 835 appears to have been recently vacated.

Current Function: Electroplating and heat treatment shop for Test Track.

Original Function: Engine test facility.

Interim Functions: General purpose workshop.

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

Source: c1954 CE File #835-1.

Foundation: Concrete wall footings. Isolated concrete footings under piers.

Exterior walls: Metal siding on steel bent frame construction.

Roof: Metal roof on steel bent frame.

Notable interior features, including machinery: Sheet metal oven, aluminum oven, salt bath, acid tanks, cadmium plating tanks, sand blaster, alodine tank, etc. See equipment list for "Convert Bldg. 835" Sheet 2 of 4. (CE File #835-4).

V. CURRENT FEATURES IF DIFFERENT FROM ORIGINAL:

Source: Field visit Fall 1995.

Foundation:

Exterior walls:

Roof:

Notable interior features, including machinery: Blast-proof walls, periscopes, observation windows, crane system, and some heat treatment equipment remain intact.

VI. BRIEF STATEMENT OF HISTORIC SIGNIFICANCE:

Although perhaps not meeting the "exceptional importance" criteria, this facility may be eligible under Criteria A and/or C once the fifty-year date of construction is reached in the year 2004. This facility warrants further photo-documentation due to its unique explosion-proof design features.

VII. ASSOCIATED BUILDINGS:

Appears to have been historically associated with the High Speed Test Track, Building 824, and the other Test Track buildings.

VIII. ADDITIONAL COMMENTS AND MAINTENANCE RECOMMENDATIONS:

Discrepancies exist between original, "As-built" drawings and field observations. An original foundation plan shows symbols for two sets of wide flange or S-shaped "I" columns (five columns along a north-south axis). Details show 3" diameter pipe columns, labeled as 5" diameter in some places. Details also depict columns as supporting rafters. Current structural system consists of two sets of three steel bent frames. The current system appears to be the original. Subsequent drawings do not indicate changes to the original. Although these original drawings are drawn "As-built", there is no associated date. Field research seems to indicate that Building 835 was not constructed as drawn. Existing elevations also do not match original drawings, although doors and windows do not appear to be replacements. Recommend that original "As-built" drawings be regarded with some skepticism. Some management consideration should be given to conserving, or at least documenting, this building as an intact example of an early engine test shop showing blast-proof walls. Its conversion in 1965 to an electroplating and heat treatment shop may also warrant further research. Recommend that photo-documentation and oral histories about work conducted here be provided prior to structural modifications. This building appears to have been neglected, and is in need of routine maintenance.

IX. ASSESSMENT OF HISTORIC INTEGRITY:

NOTE: DISCREPANCIES WERE NOTED BETWEEN THE "AS-BUILTS" AND FIELD OBSERVATIONS. FIELD RESEARCH SEEMS TO INDICATE THAT BUILDING 835 WAS NOT CONSTRUCTED AS DRAWN. ASSESSMENT BASED ON FIELDWORK:

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

Comments: Except for modifications to the south elevation, door and window openings, all structural, and all original architectural features remain intact. Interior blast walls added.

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: Further research required to determine original setting.

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

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

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

Comments: Clad in original steel siding and roof. Original bay doors intact. Original slab floor intact. Aside from modifications at south elevation, architectural features remain essentially as originally constructed.

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

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

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

Comments: Interior blast wall added prior to c1965 as a subsequent improvement (CE File #835-2). Floor, wall, and roof systems are 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 [ ] Some elements remain [x] Retains integrity

Comments: Retains elements of serving as a workshop, including exposed wall and roof systems, and concrete floors. Open work spaces remain.

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 [x] Some elements remain [ ] Retains integrity

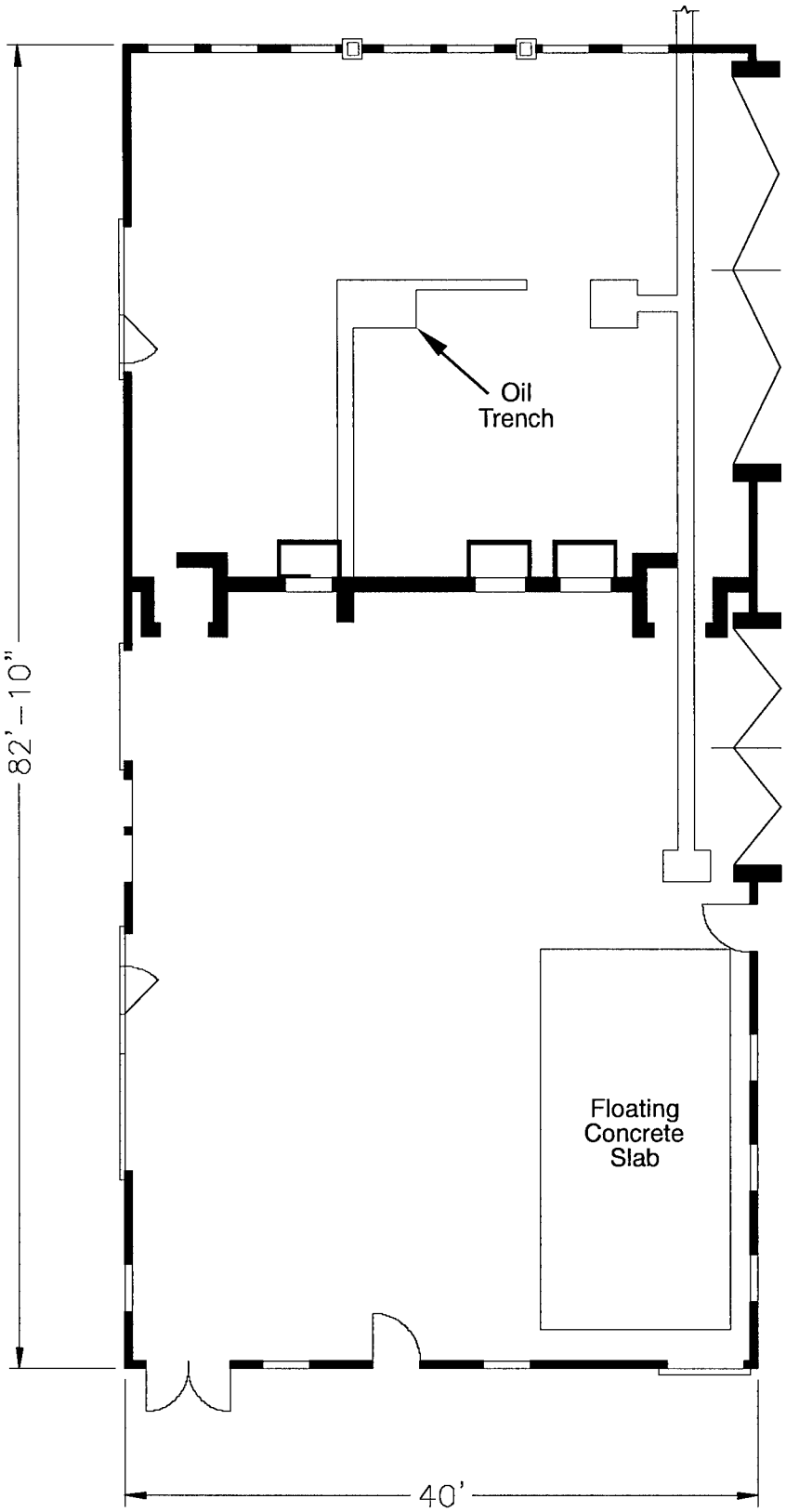
Comments: Building 835 was converted in 1965 from an engine test shop to an electroplating and heat treatment shop. This building continues to retain integrity of association as a High Speed Test Track support shop.

X. FURTHER INFORMATION:

Surveyed By:

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

HAFB Report Number: **CRM Publication #3**
Photograph Citation: **CD-ROM #2-Photo #79**
Negatives On File: **49 CES/CEV, 550 Tabosa Ave, HAFB**
Date of Field Visit: **FALL 1995**



Source: CE File #835-1 (c1953)

State of New Mexico Office of Cultural Affairs Historic Preservation Division	**BUILDING 835** Holloman Air Force Base Alamogordo, New Mexico	Project No. 35-95-HAFB-4	AutoCAD rendering by: *Mike Gardner* New Mexico State University **Sheet 1 of 1**	NEW MEXICO STATE UNIVERSITY

COLD WAR SURVEY: HOLLOMAN AIR FORCE BASE

NAME:
Current: Research Equipment Storage.
Historic: Horizontal Test Stand (Pump House).
Street Address: 2027 Tula Peak Road, HAFB, 88330.

Building Number: 1159

I. GENERAL INFORMATION:

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

Comments: Building 1159 is in need of routine maintenance.

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

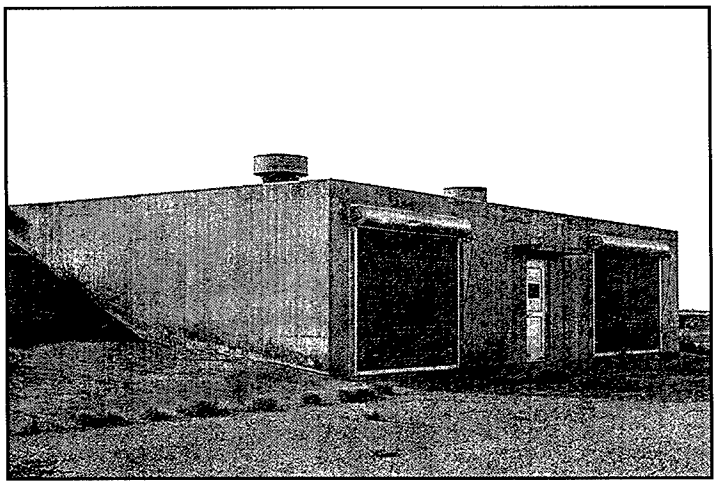
Comments: Building remains essentially as it was originally constructed.

Preliminary Determination of National or State Register Eligibility:

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

Comments: As an integral component of the Horizontal Test Stand Facility.

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



BUILDING FOOTPRINT:
32′ x 48′

Photo

Date of completion: c1956

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 1159 is a one-story, flat-roofed, reinforced concrete pump house built adjacent to the east elevation of the Horizontal Test Stand Facility revetment. The principal facade faces east, showing a centrally located metal personnel door and concrete canopy flanked by two roll-up metal equipment doors. There are no windows. Gordon Herkenhoff and Associates, Inc. (Albuquerque, NM) provided the c1956 architectural drawings to the Albuquerque District Corps of Engineers. This pump house remains essentially as it was originally constructed. The builder is unknown.

III. HISTORIC AND CURRENT USE:

Source: "Street Address Cross-Reference List" (06/28/95): HAFB Real Property Office; 1956 CE File #1160-1.

Current Function: Research Equipment Storage.

Original Function: Horizontal Test Stand Facility Pump House.

Interim Functions: N/A.

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

Source: CE File #1160-1 (c1956).

Foundation: Reinforced concrete wall footing, stepped at E & W for piping.

Exterior walls: 12" reinforced concrete.

Roof: 12" reinforced concrete slab.

Notable interior features, including machinery: None noted.

V. CURRENT FEATURES IF DIFFERENT FROM ORIGINAL:

Source: Site visit Fall 1996.

Foundation:

Exterior walls:

Roof:

Notable interior features, including machinery: A 270-gallon day storage tank and pump has been removed. A "14N66 Trade Ludlow Mark" centrifugal pump remains intact. A wall-mounted gauge shows "Recirculating," "Deluge," and "Flooding" settings.

VI. BRIEF STATEMENT OF HISTORIC SIGNIFICANCE:

Buildings 1159 and 1160 should be considered as integral components of the Horizontal Test Stand Facility. The entire facility meets National Register Criterion A at a national level for the important role it played as an early Cold War-era materiel test and development facility. The Horizontal Test Stand also meets National Register Criterion C for its highly distinctive design, materials, and workmanship. The entire facility retains all aspects of historic integrity.

VII. ASSOCIATED BUILDINGS:

This pump house continues its historic association with the Horizontal Test Stand Facility and Building 1160.

VIII. ADDITIONAL COMMENTS AND MAINTENANCE RECOMMENDATIONS:

Building 1159 is eligible for the National Register if it, the Horizontal Test Stand Facility, and Building 1160 are considered as a single property. The Horizontal Test Stand Facility was designed as a safe location to test-fire missile (and aircraft) engines. Building 1159 was constructed c1956 to provide water to both the test field, and to the overhead emergency sprayers (1956: CE File #1160-1; personal communication with Test Track personnel).

Recommend that further research document the tests conducted at this unique facility, and to possibly locate historic photographs of this facility in operation.

Suggested routine maintenance: Spalling at the interior (ceiling) of Building 1159 indicates that cracks at the slab roof may need to be patched. Remove vegetation at revetment to prevent further moisture penetration. The 2-1/2" gunite blanket sealing the Horizontal Test Track Facility revetment (retaining wall) may need to be replaced in sections, or entirely removed and re-sprayed.

IX. ASSESSMENT OF HISTORIC INTEGRITY:

Source: Site visit Fall 1996. Communication with current High Speed Test Track personnel.

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

Comments: Considered as a single test stand facility, Buildings 1159, 1160 and the test stand itself represent the most unique property at Holloman AFB.

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

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

Comments: The top of the roof slab is at the same elevation as the top of the test stand revetment. The back of the pump house abuts the revetment. Access is gained only at the principal facade, which faces a large, above-ground water storage tank.

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

Comments: Cast-in-place concrete pumphouse appears to retain all original materials including one pressed steel personnel door, and two chain-operated roll-up metal doors.

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

Comments: Aside from some original equipment being removed, this pump house remains essentially as it is shown on original c1956 drawings.

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 [ ] Some elements remain [x] Retains integrity

Comments: Although currently used for storage, there are tentative plans to re-open this facility.

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

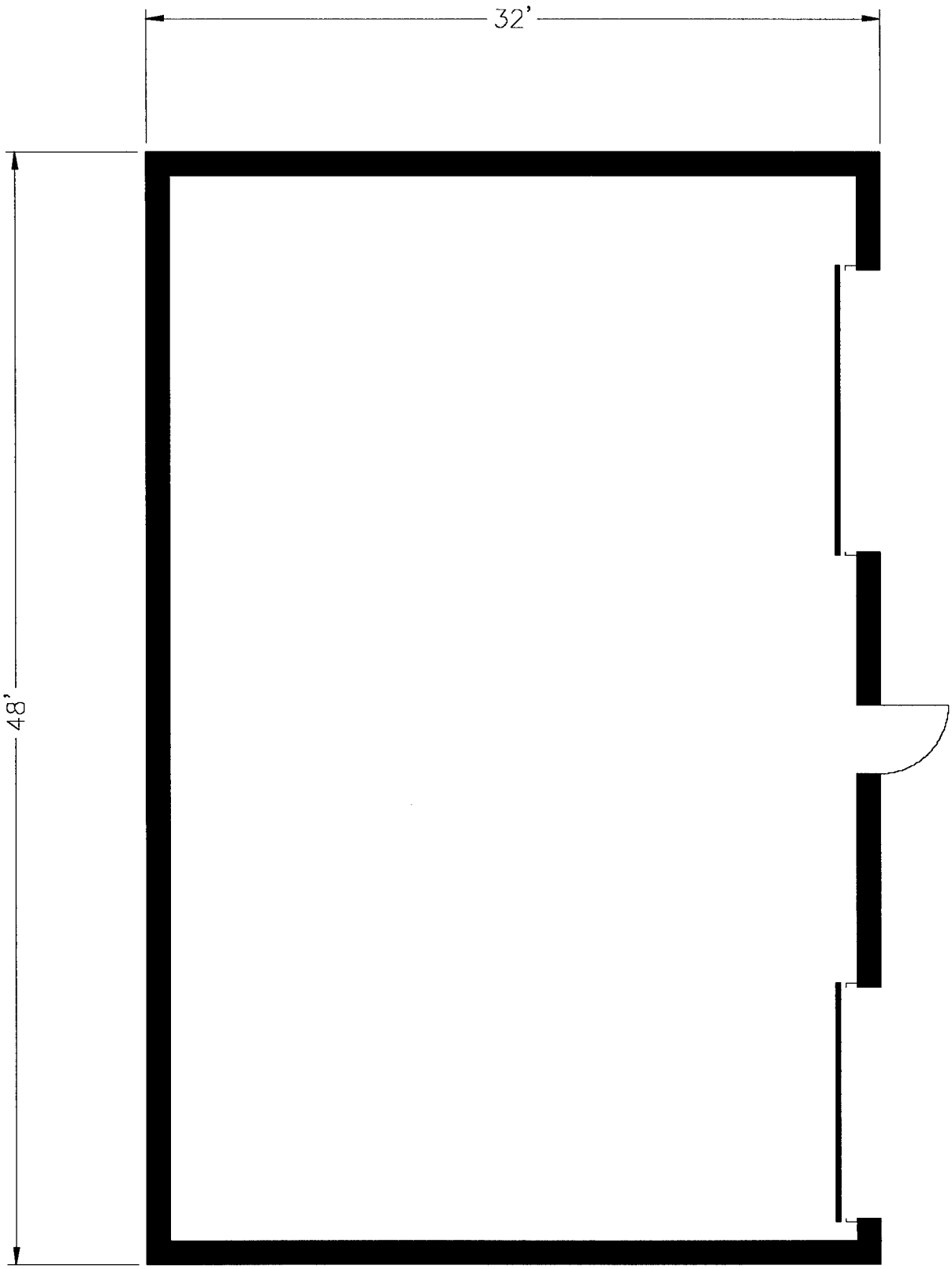
Comments:

X. FURTHER INFORMATION:

Surveyed By:

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

HAFB Report Number: **CRM Publication #3**
Photograph Citation: **CD-ROM #1-Photo #22**
Negatives On File: **49 CES/CEV, 550 Tabosa Ave, HAFB**
Date of Field Visit: **FALL 1996**



Source: CE File 1160-1 (c1959)

State of New Mexico Office of Cultural Affairs Historic Preservation Division	**BUILDING 1159** Holloman Air Force Base Alamogordo, New Mexico	Project No. 35-95-HAFB-4	AutoCAD rendering by: *Eugene N. Kilmer* *(505) 323-0641* Mag Drafting **Sheet 1 of 1**

COLD WAR SURVEY: HOLLOMAN AIR FORCE BASE

NAME:
Current: Missile/Space Research Test.
Historic: (Control Building) Horizontal Test Stand.
Street Address: 2023 Tula Peak Road, HAFB, 88330.

Building Number: 1160

I. GENERAL INFORMATION:

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

Comments: Building 1160 is in need of routine maintenance.

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

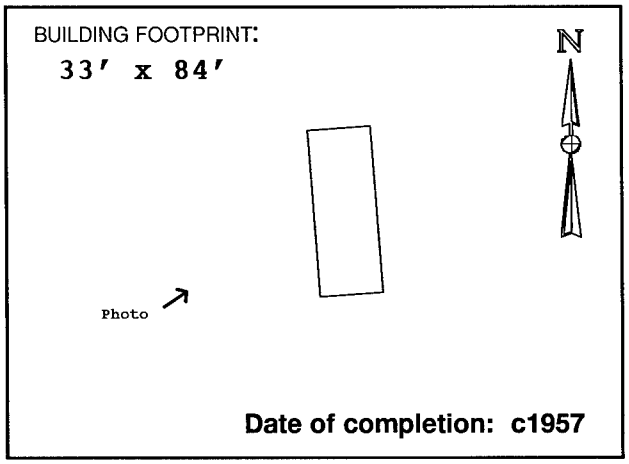
Comments: This facility remains essentially as it was originally built.

Preliminary Determination of National or State Register Eligibility:

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

Comments: Entire Horizontal Test Facility eligible under Criteria A and C.

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



Date of completion: c1957

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 1160 is a rectangular, flat-roofed, utilitarian concrete building completed c1957 for use as the Horizontal Test Stand facility control building. Building 1160 is located adjacent to the Horizontal Test Stand facility's west revetment. The principal elevation faces west.

The original floor plan has been retained, including an observation room, a work shop, a recorder room, a small rest room, and a mechanical room. The split-level observation room features two blast-proof observation ports at the east elevation facing the test stand. Each port is constructed using three 4"-thick Armor® glass blocks set in 1/4" steel jambs with 1/4" Neoprene® gaskets. An observation deck at the roof is accessed by a set of exterior metal stairs located south of the single personnel door. Although the builder is unknown, Gordon Herkenhoff and Associates, Inc. (Albuquerque, NM) provided the architectural drawings to the US Army Corps of Engineers, Albuquerque District (c1956: CE File #1160-1). Building 1160 retains all six aspects of historic integrity. No structural modifications were noted.

III. HISTORIC AND CURRENT USE:

Source: Real Property Accountable Record/1160; Site visit Fall 1996.

Current Function: Equipment storage.

Original Function: Horizontal Test Facility (Control Building).

Interim Functions: "Propul Res Lab" (n.d.); "Prpln Research Lab" (n.d.); "Msl/Space Rsch Tst" (c1970).

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

Source: CE File #1160-1 (c1956).

Foundation: 18" poured reinforced concrete footing.

Exterior walls: 12" reinforced concrete.

Roof: Built-up roof with plastic-type surfacing.

Notable interior features, including machinery: Original drawings show room use included a Work Shop (north), Recorder room (central), and a split-level Observation Room (south).

V. CURRENT FEATURES IF DIFFERENT FROM ORIGINAL:

Foundation:

Exterior walls:

Roof:

Notable interior features, including machinery: Several pieces of original equipment remain, including an Observation Room firing console.

VI. BRIEF STATEMENT OF HISTORIC SIGNIFICANCE:

Although constructed within the last 50 years, the Horizontal Test Facility, (including Buildings 1159 and 1160) exhibits exceptional importance. This property is eligible under Criterion A for its role in Cold War materiel development, and under Criterion C for its unique design and workmanship.

VII. ASSOCIATED BUILDINGS:

Building 1160 (Control Building) and Building 1159 (Pump House) should be considered as integral components of the Horizontal Test Facility.

VIII. ADDITIONAL COMMENTS AND MAINTENANCE RECOMMENDATIONS:

The Horizontal Test Facility was completed c1957 to provide a controlled environment for engine propulsion tests (Real Property Accountable Record/1160). Although originally constructed to test Atlas missile components, this facility was primarily used to test High Speed Test Track sled propulsion systems when the Atlas program was reassigned to Vandenburg, CA (Declassified Air Defense Command Missile Development Center documents on file, Civil Engineering, 550 Tabosa Avenue, HAFB. Contact: Martyn Tagg, Base Archaeologist).

The Horizontal Test Facility consists of a large water catch basin (~31' x 200') flanked on the east by the pump house (Building 1159), a Test Stand Apron and Fuels Storage Area to the south, and the Control Building (Building 1160) to the west. The surrounding embankment (revetment) area has been sprayed with a 2-1/2" thick fireproof gunite blanket. Considered as a single property, the Horizontal Test Facility represents the most architecturally unique property at Holloman AFB. This property demonstrates exceptional importance for its distinctive design and workmanship.

Suggested routine maintenance: Sections of the gunite revetment blanket need to be replaced. It may be more economical to remove and replace the entire gunite revetment. Install new built-up roof at Building 1160. Replace broken window glass at observation room.

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: Located adjacent to the west revetment of the Horizontal Test Stand.

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: Building 1160 was designed as the control and observation facility for propulsion tests conducted at the nearby Test Stand Apron. Sections of the surrounding gunite blanket have separated from subgrade.

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

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

Comments: Continues to be situated in an isolated setting north of the main Base. An effort is currently underway to re-open the facility.

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

Comments: All of the materials used to construct this control building reain essentially as they were originally constructed. Interior finishes, including acoustical tile, plywood wainscoting, and an unpainted concrete slab floor are shown on the original architectural drawings.

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

Comments: Structural and architectural features remain as originally constructed. The plywood wainscoting at the interior represents the sole decorative embellishment.

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 [ ] Some elements remain [x] Retains integrity

Comments: The entire Horizontal Test Stand Facility, including Building 1160 continues to convey its historic Cold War-era role in providing a controlled environment for conducting engine propulsion tests.

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

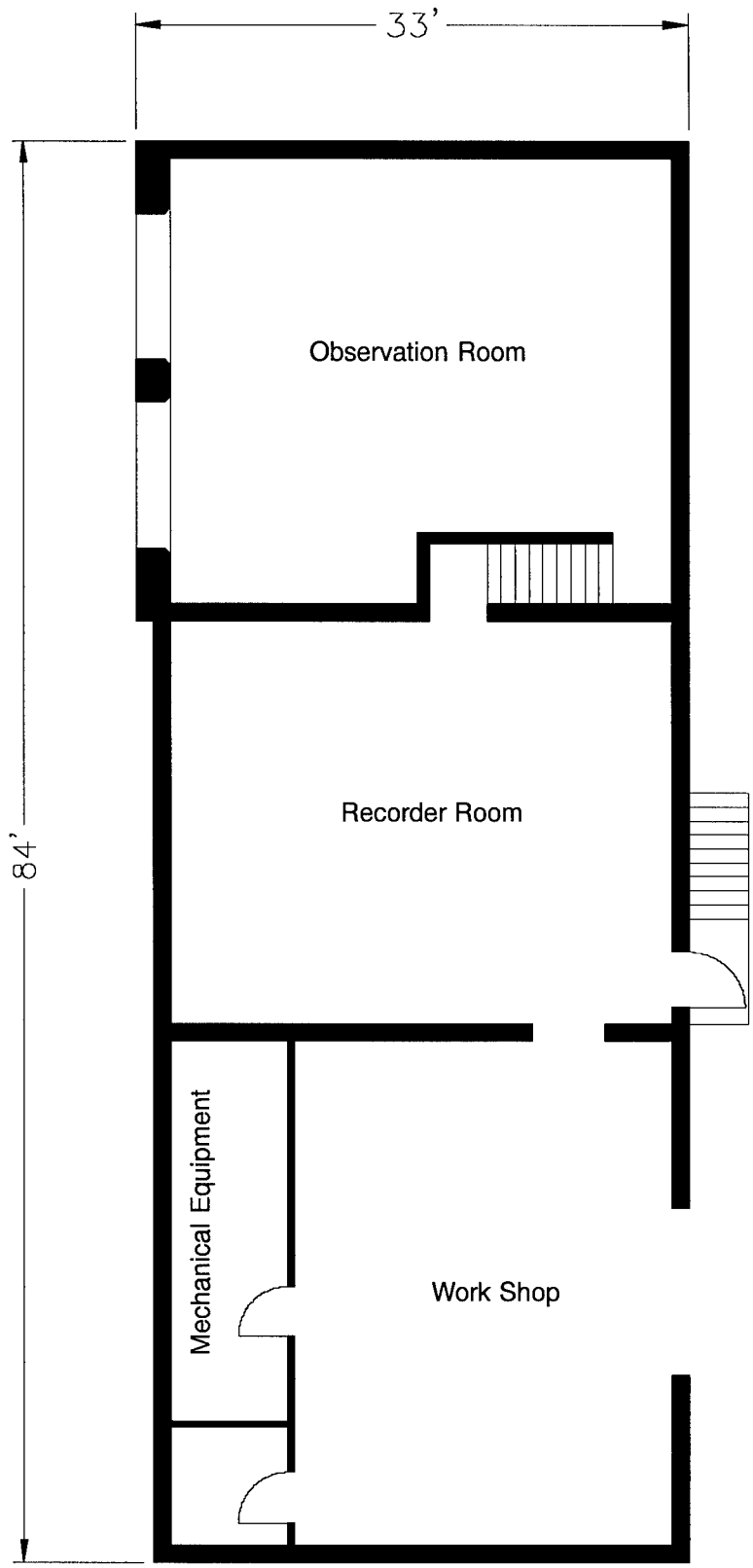
Comments:

X. FURTHER INFORMATION:

Surveyed By:

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

HAFB Report Number: **CRM Publication #3**
Photograph Citation: **CD-ROM #1-Photo #21**
Negatives On File: **49 CES/CEV, 550 Tabosa Ave, HAFB**
Date of Field Visit: **FALL 1996**



Source: CE File #1160-1 (c1956)

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State of New Mexico Office of Cultural Affairs Historic Preservation Division	**BUILDING 1160** Holloman Air Force Base Alamogordo, New Mexico	Project No. 35-95-HAFB-4	AutoCAD rendering by: *Eugene N. Kilmer* *(505) 323-0641* Mag Drafting **Sheet 1 of 1**

COLD WAR SURVEY: HOLLOMAN AIR FORCE BASE

NAME:
Current: (High Speed Test Track) Control.
Historic: Test Track Control--"Midway".
Street Address: 1910 Camera Pad Rd.,HAFB, 88330-7808.

Building Number: 1161

I. GENERAL INFORMATION:

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

Comments: Building 1161 is in need of routine maintenance.

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

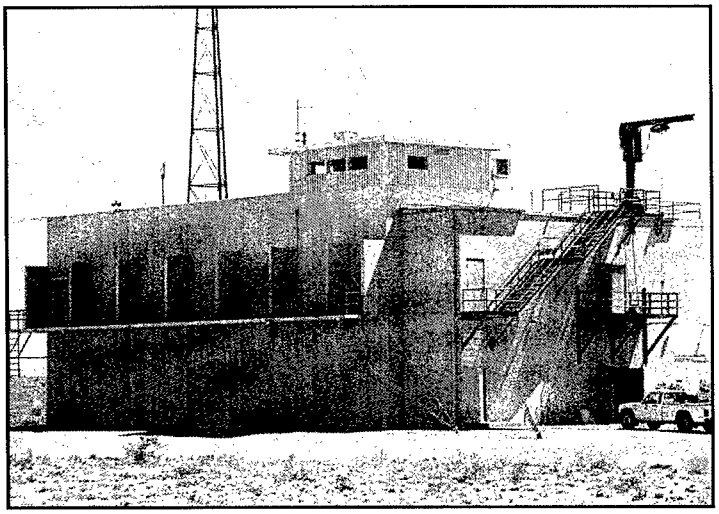
Comments: Renovations to the interior have occurred.

Preliminary Determination of National or State Register Eligibility:

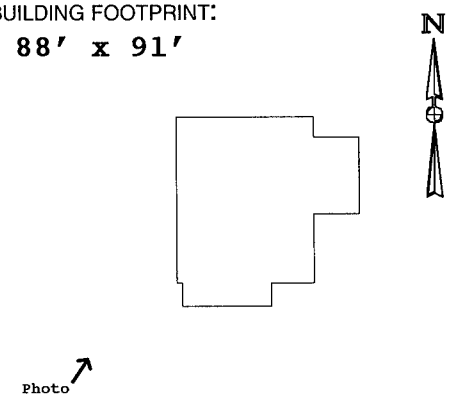
[x] Exceptional importance [ ] Potentially eligible [ ] Further research recommended [ ] Ineligible

Comments: Recommend nomination to Register as part of Multiple Property.

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



BUILDING FOOTPRINT:
88' x 91'



Date of completion: c1957

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 1161 is a two-story concrete structure with a nearly square footprint and a one-story offset at the east elevation. An observation balcony at the west elevation with concrete baffles spaced every 12' were constructed to protect sensitive camera and film equipment used during high speed track testing. The original floor plan exhibits an extensive system of conduit trenches to enclose massive cables required historically for the data collection equipment.

A battery room was constructed c1965 (CE File #1161-2). A mechanical room penthouse was added c1961, and a roof-mounted crane was installed (n.d.). Neuner and Cabaniss (Albuquerque, NM) provided the architectural work. The builder is unknown.

III. HISTORIC AND CURRENT USE:

Source: Real Property Accountable Record/1161.

Current Function: Test Track data collection.

Original Function: Test Track data collection.

Interim Functions:

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

Source: CE File #1266-1 (c1956); Real Property Accountable Record/1161.

Foundation: Concrete wall footings.

Exterior walls: Reinforced cast-in-place concrete.

Roof: Built-up roof over walking slab supported by structural two-way flat slab.

Notable interior features, including machinery:
Banks of tape recorders, radio links, telemetry systems, timers, programmers, data reduction readers, oscilloscopes.

V. CURRENT FEATURES IF DIFFERENT FROM ORIGINAL:

Source: Field visit Spring 1996.

Foundation:

Exterior walls:

Roof:

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Notable interior features, including machinery: None noted.

VI. BRIEF STATEMENT OF HISTORIC SIGNIFICANCE:

"Midway" Building 1161 has provided data acquisition and recording for tests conducted at Holloman's High Speed Test Track since its completion c1957. National early Cold War-era missions conducted at the Test Track varied widely, including research to test inertial guidance systems, pilot escape mechanisms, and studies on the effects of atmospheric re-entry on the human body. Recommend that the Test Track facilities, including Building 1161, be nominated to the National Register under Criteria A and C as part of a Multiple Property listing.

VII. ASSOCIATED BUILDINGS:

Building 1161 continues to be associated with other buildings which support the High Speed Test Track, including 1162, 1163, 1175 and the Horizontal Test Stand facility.

VIII. ADDITIONAL COMMENTS AND MAINTENANCE RECOMMENDATIONS:

Building 1161 has undergone moderate interior renovations to modernize the work space and to accommodate other functions. Modern digital equipment requires less space than original equipment. New finishes cover original materials and workmanship in most rooms. New finishes include Sheetrock® over concrete walls, and vinyl flooring over original asphalt tile and concrete floor. Original drawings show acoustical tile on gypsum board ceilings suspended to 9'-8" above finished first floor, and to 9'-10" above finished second floor. It appears that a dropped ceiling system obscures these materials in most areas. Building 1161 continues to retain historic integrity despite these modifications, and is eligible under Criteria A and C for the National Register.

Suggested routine maintenance: Scrape, prime, and paint exterior metal architectural elements. Scrape, prime, and paint exterior concrete, and concrete masonry unit walls.

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

Comments: Interior spaces partitioned off. Interior space rearranged, reflecting smaller space requirements for newer equipment.

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

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

Comments: Still situated in isolated setting east of the high speed test track.

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

Comments: Nearly all of the original materials used to construct this building have been retained.

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

Comments: Although many original finish materials remain, they have been covered up due to interior renovations, including suspended ceiling over acoustical tile, gypsum panels over original concrete walls, and vinyl tile over asphalt tile.

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 [ ] Some elements remain [x] Retains integrity

Comments:

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

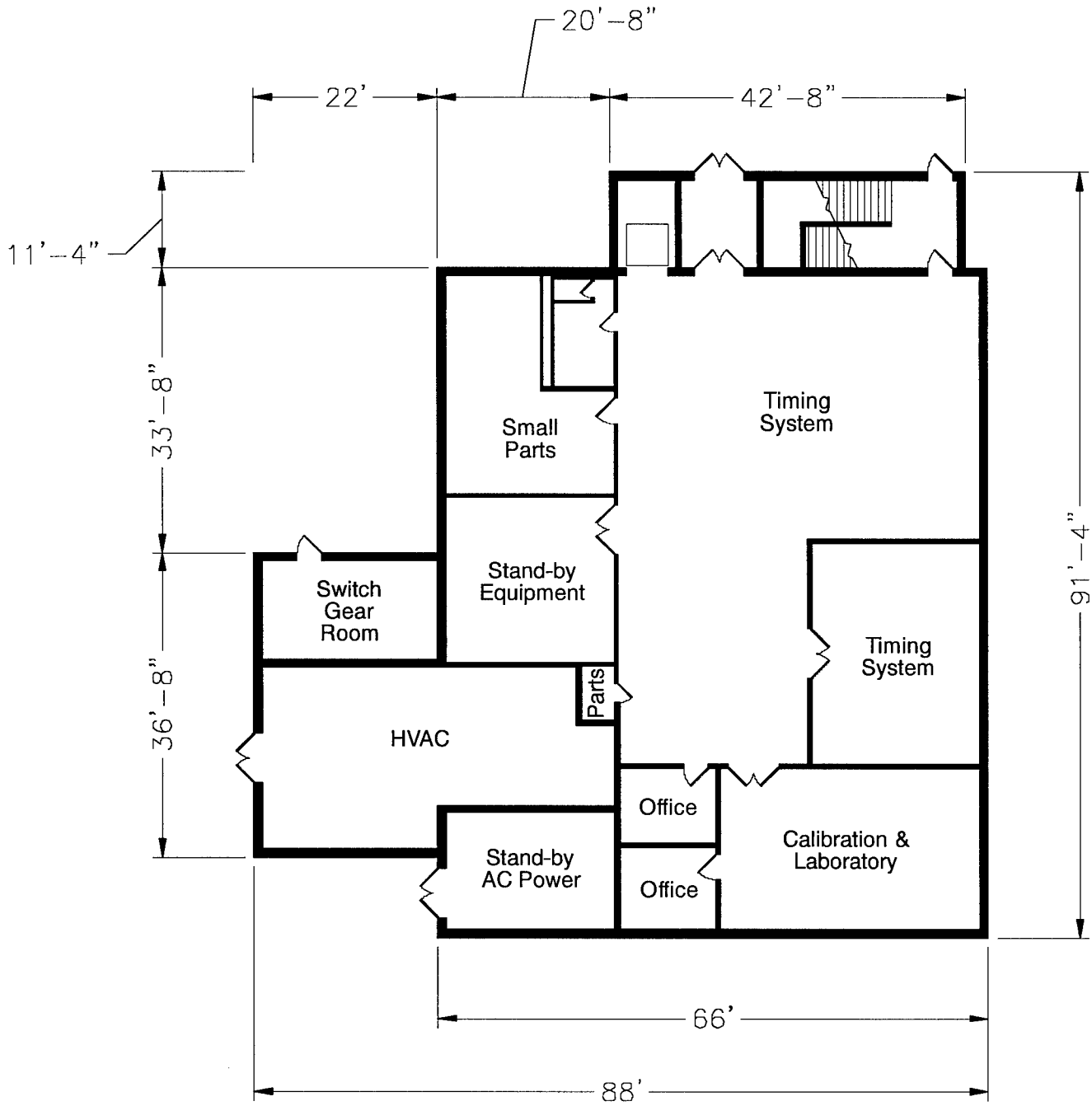
Comments: Building 1161 continues to play a vital data collection role in High Speed Test Track activities.

X. FURTHER INFORMATION:

Surveyed By:

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

HAFB Report Number: **CRM Publication #3**
Photograph Citation: **CD-ROM #2-Photo #43**
Negatives On File: **49 CES/CEV, 550 Tabosa Ave, HAFB**
Date of Field Visit: **SPRING 1996**



Source: CE File #1266-1 (c1956)

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State of New Mexico Office of Cultural Affairs Historic Preservation Division	**BUILDING 1161** Holloman Air Force Base Alamogordo, New Mexico	Project No. 35-95-HAFB-4	AutoCAD rendering by: *Eugene N. Kilmer* *(505) 323-0641* Mag Drafting **Sheet 1 of 1**

COLD WAR SURVEY: HOLLOMAN AIR FORCE BASE

NAME:
Current: Blockhouse--"Bravo".
Historic: Blockhouse--"Bravo".
Street Address: 1905 Camera Pad Road, HAFB, 88330-7809.

Building Number: 1162

I. GENERAL INFORMATION:

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

Comments: Building 1162 is in need of minor routine maintenance.

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

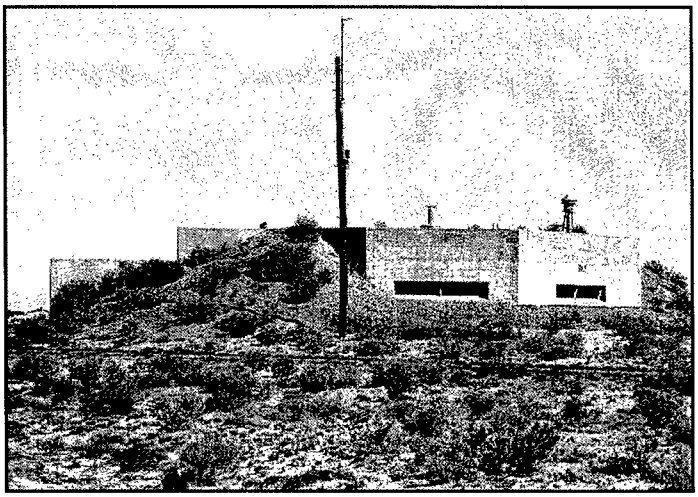
Comments: Small concrete masonry unit addition at the southwest elevation.

Preliminary Determination of National or State Register Eligibility:

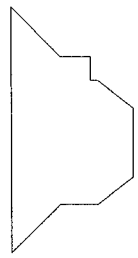
[x] Exceptional importance [ ] Potentially eligible [ ] Further research recommended [ ] Ineligible

Comments: Significant under Criteria A and C at a national level.

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



BUILDING FOOTPRINT:
53' x 106'



N

← Photo

Date of completion: c1957

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 1162 has a six-sided, irregularly-shaped footprint with an offset at the southwest corner and wingwalls that taper out from the main building. These walls retain earth that slopes up to the roof on the north and south elevations. The entrance is located at the west elevation.

The east elevation faces the high speed test track. Long, narrow, blast-proof windows are situated symmetrically at the east elevation, and sit just above grade. The roof is covered with earth. A small storage addition was constructed c1961 at the southwest corner. The main structure was completed c1957, according to Real Property Accountable Record/1162. Although construction drawings were not located for Building 1162, this blockhouse is nearly identical to Building 1163. Neither the architect nor the builder is known.

III. HISTORIC AND CURRENT USE:

Source: Real Property Accountable Record/1162.

Current Function: Test track control and instrumentation.

Original Function: Test track control and instrumentation.

Interim Functions:

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

Sources: Real Property Record/1162; (Technical Manual) *ISTRACON Report No. 60-1*.

Foundation: Concrete footing and slab.

Exterior walls: Two-foot thick poured concrete.

Roof: Concrete slab.

Notable interior features, including machinery:

Blast-proof windows. Periscopic mirror for viewing firing pads. Time interval counters. LEC carrier amplifier equipment. Esterline Angus recorders. Wianco camera systems. Time interval counters. Brown recorders.

V. CURRENT FEATURES IF DIFFERENT FROM ORIGINAL:

Source: Field visit Summer 1995.

Foundation:

Exterior walls:

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Roof:

Notable interior features, including machinery:

Although still in use, much of the original equipment has been removed.

VI. BRIEF STATEMENT OF HISTORIC SIGNIFICANCE:

Blockhouse Bravo (Building 1162) exhibits exceptional importance for its crucial role in early Cold War-era High Speed Test Track materiel tests. This facility is eligible for inclusion on the National Register under Criterion A and Criterion C, at a national level of significance.

VII. ASSOCIATED BUILDINGS:

Building 1162 was, and continues to be, associated with the High Speed Test Track and the other track buildings, including Buildings 1161, 1163, and 1175.

VIII. ADDITIONAL COMMENTS AND MAINTENANCE RECOMMENDATIONS:

Building 1162 remains essentially intact, with original interior and exterior materials and workmanship present and visible. The floor plan is simple due to its function, with 5'-high wood walls partitioning off the console platform area. This facility still operates as an accessory building to the High Speed Test Track launching activities, and is still in an isolated setting at the center of the track.

Due to its unique architectural design, and the important research conducted here, recommend that this property be nominated to the National Register of Historic Places as part of a basewide Cold War-era Multiple Property listing.

Suggested routine maintenance: Repair, prime, and paint spalling concrete at exterior.

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

Comments: Floor plan remains essentially as originally constructed. Unable to determine if interior partitioning is original or not.

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

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

Comments: Continues to be an isolated structure offset near the center of the High Speed Test Track.

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

Comments: Tile ceiling, asbestos tile floor, and painted concrete walls all represent original materials. According to Building 1162 personnel, the metal double doors were replaced in-kind, using original frame.

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

Comments:

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 [ ] Some elements remain [x] Retains integrity

Comments:

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

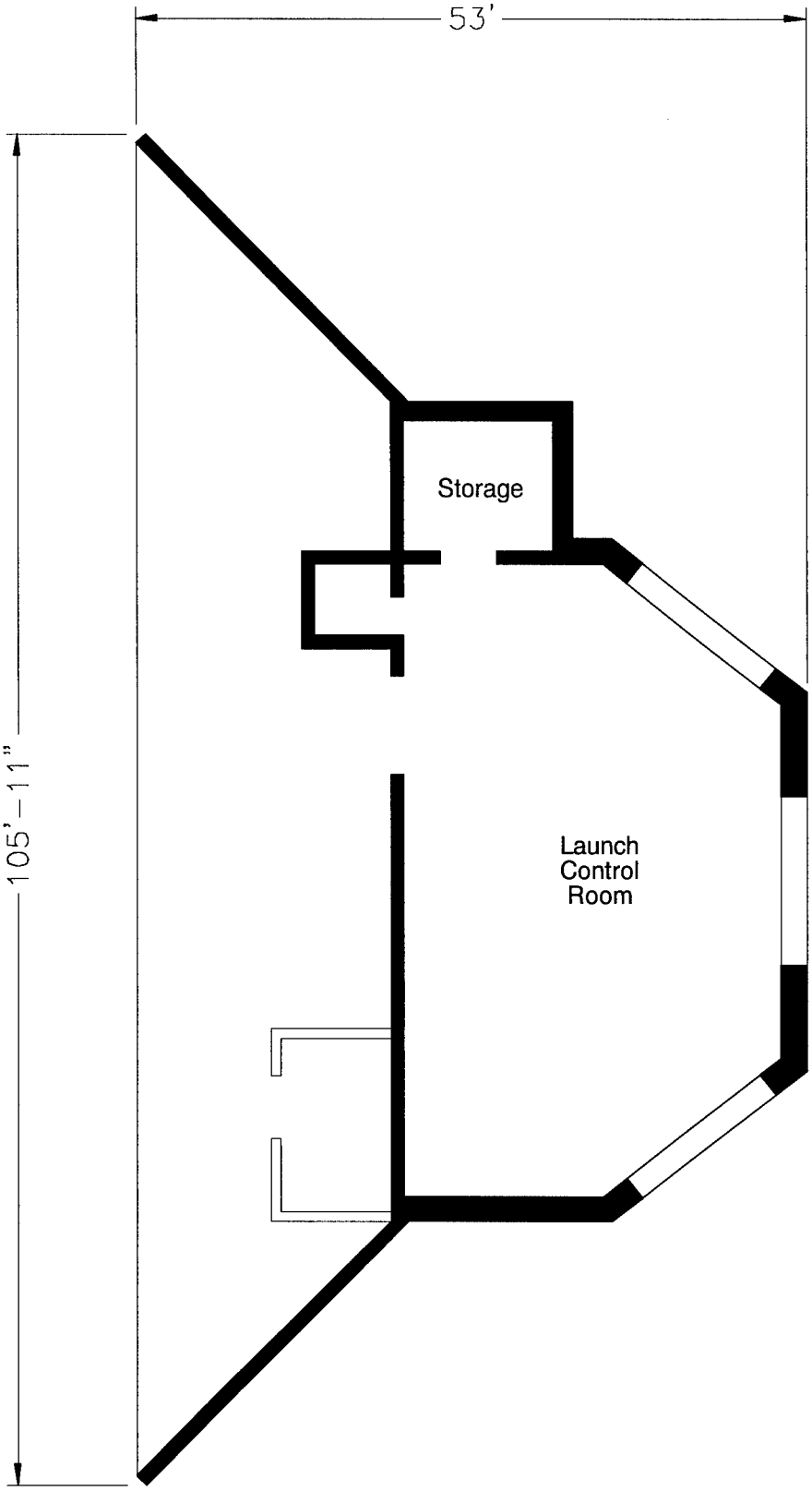
Comments:

X. FURTHER INFORMATION:

Surveyed By:

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

HAFB Report Number: **CRM Publication #3**
Photograph Citation: **CD-ROM #2-Photo #38**
Negatives On File: **49 CES/CEV, 550 Tabosa Ave, HAFB**
Date of Field Visit: **SUMMER 1995**



Source: CE File #1163-1 (c1961)

360

State of New Mexico Office of Cultural Affairs Historic Preservation Division	**BUILDING 1162** Holloman Air Force Base Alamogordo, New Mexico	Project No. 35-95-HAFB-4	AutoCAD rendering by: *Eugene N. Kilmer* *(505) 323-0641* Mag Drafting **Sheet 1 of 1**

COLD WAR SURVEY: HOLLOMAN AIR FORCE BASE

NAME:
Current: Blockhouse--"Coco".
Historic: Blockhouse--"Coco".
Street Address: 2252 Camera Pad Rd., HAFB, 88330-7814.

Building Number: 1163

I. GENERAL INFORMATION:

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

Comments: Building 1163 is in need of minor routine maintenance.

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

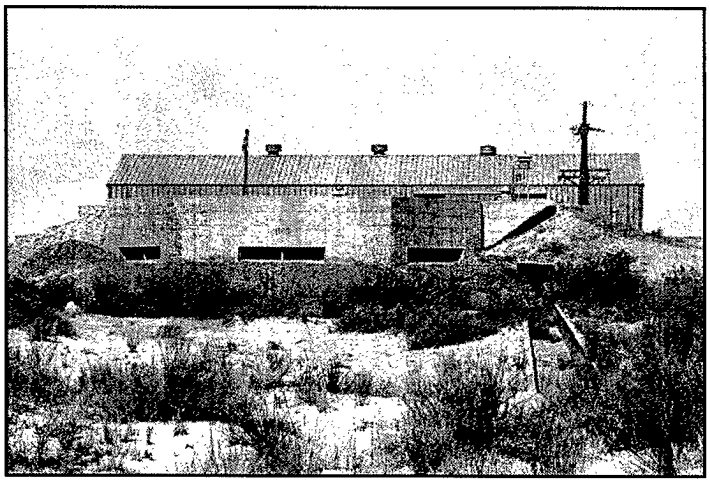
Comments: Small addition at the northwest corner (c1961: CE File #1163-1).

Preliminary Determination of National or State Register Eligibility:

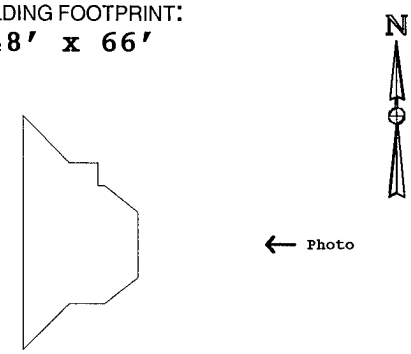
[x] Exceptional importance [ ] Potentially eligible [ ] Further research recommended [ ] Ineligible

Comments: Recommend a Multiple Property nomination to the National Register.

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



BUILDING FOOTPRINT:
48' x 66'



Date of completion: c1957

361

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 1163 has a six-sided, irregularly-shaped footprint with an offset at the northwest corner and wingwalls that taper out from the main building. These walls retain earth that slopes up to the roof on the north and south elevations. The entrance is located at the west elevation.

The east elevation faces the high speed test track. Long, narrow, blast-proof windows are situated symmetrically at the east elevation, and sit just above grade. The roof is covered with earth. A small storage addition was constructed c1961 at the northwest corner. The main structure was completed c1957, according to Real Property Accountable Record/1163. Neither the architect nor the builder is known.

III. HISTORIC AND CURRENT USE:

Source: Real Property Accountable Record/1161.

Current Function: High Speed Test Track control and instrumentation.

Original Function: High Speed Test Track control and instrumentation.

Interim Functions:

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

Sources: CE File #1163-1; (Technical Manual) *ISTRACON Report No. 60-1* HAFB Historian's Office.

Foundation: Concrete footing and slab.

Exterior walls: Two-foot thick poured concrete.

Roof: Concrete slab.

Notable interior features, including machinery:

Blast-proof windows. Periscopic mirror for viewing firing pads. Time interval counters. "L.E.C." carrier amplifier equipment. Esterline Angus recorders. Wianco camera systems. Time interval counters. Brown recorders.

V. CURRENT FEATURES IF DIFFERENT FROM ORIGINAL:

Source: Field visit Summer 1995.

Foundation:

Exterior walls:

362 Roof:

Notable interior features, including machinery: None noted.

VI. BRIEF STATEMENT OF HISTORIC SIGNIFICANCE:

"Coco" Block house Building 1163 is eligible for the National Register at a national level under Criteria A and C for its vital role in providing High Speed Test Track support, and for its distinctive design and workmanship.

VII. ASSOCIATED BUILDINGS:

Building 1163 was, and continues to be, associated with the High Speed Test Track and the other Track buildings, including Buildings 1161, 1162, 1175, and the Horizontal Test Stand facility (Buildings 1159 and 1160).

VIII. ADDITIONAL COMMENTS AND MAINTENANCE RECOMMENDATIONS:

Building 1163 remains essentially intact, with original interior and exterior materials present and visible. The floor plan is simple due to its function, with only 5'-high wood walls partitioning off a section of the console platform area. This facility still operates as a vital support building to the High Speed Test Track launching activities, and is still located in an isolated setting at the north end of the track.

Due to its unique architectural design, and the important research conducted here, recommend that this property be nominated to the National Register of Historic Places as part of a basewide early Cold War-era Multiple Property listing.

Suggested routine maintenance: Clean and patch concrete over the entrance door. Remove vegetation at embankments.

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

Comments: Floor plan remains essentially the same. Unable to determine if five-foot walls are original or not.

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

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

Comments: Continues to be an isolated structure situated at north end of the High Speed Test Track.

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

Comments: Tile ceiling, asbestos tile floor, and painted concrete walls all represent original materials.

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

Comments:

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 [ ] Some elements remain [x] Retains integrity

Comments:

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

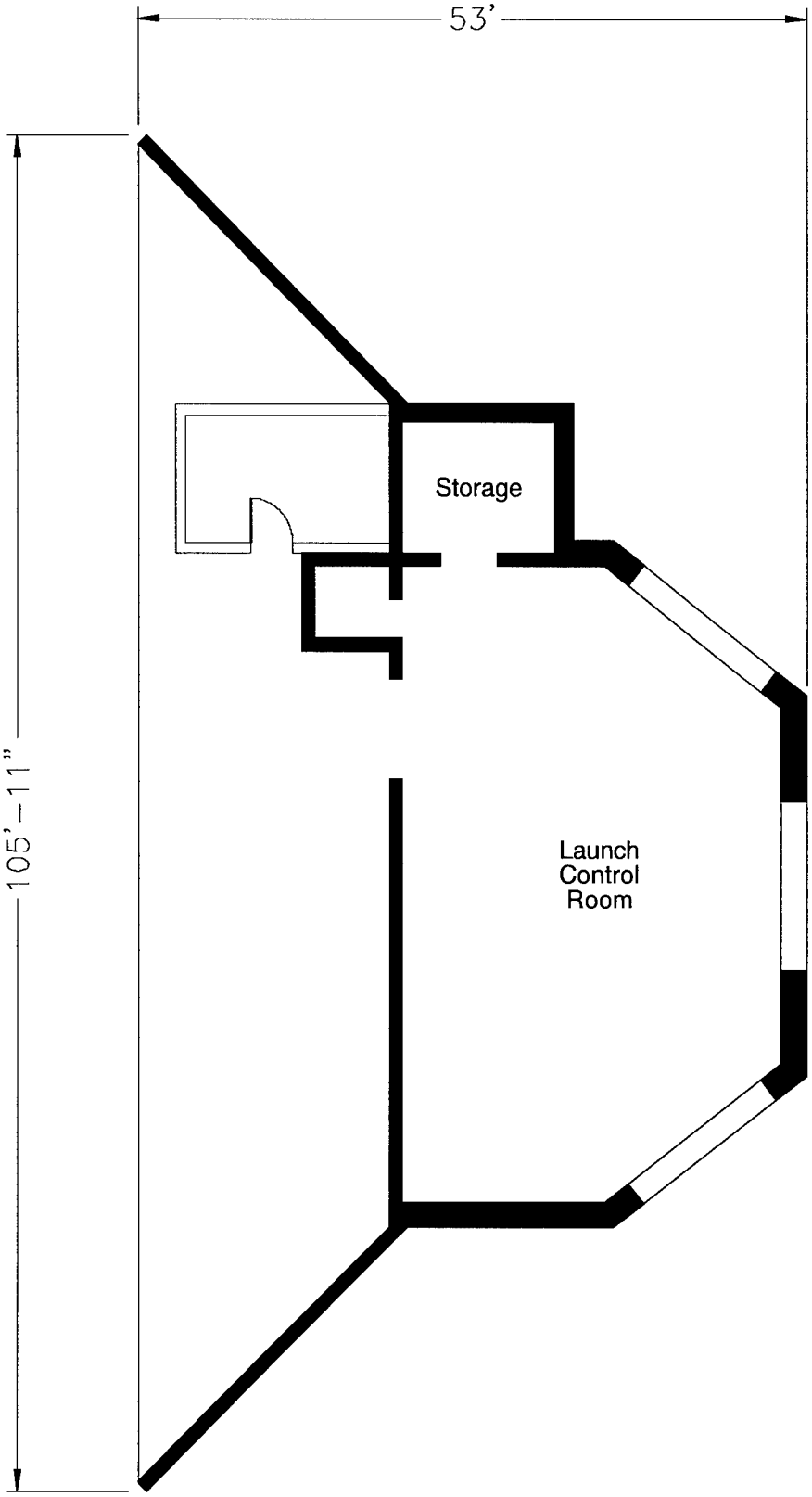
Comments: Although original equipment has been removed, this facility continues to retain historic integrity of feeling and association as a Test Track control block house.

X. FURTHER INFORMATION:

Surveyed By:

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

HAFB Report Number: **CRM Publication #3**
Photograph Citation: **CD-ROM #2-Photo #39**
Negatives On File: **49 CES/CEV, 550 Tabosa Ave, HAFB**
Date of Field Visit: **SUMMER 1995**



Source: CE File #1163-1 (c1961)

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State of New Mexico Office of Cultural Affairs Historic Preservation Division	**BUILDING 1163** Holloman Air Force Base Alamogordo, New Mexico	Project No. 35-95-HAFB-4	AutoCAD rendering by: *Eugene N. Kilmer* *(505) 323-0641* Mag Drafting **Sheet 1 of 1**

COLD WAR SURVEY: HOLLOMAN AIR FORCE BASE

NAME:
Current: Blockhouse--"Alpha".
Historic: Blockhouse--"Alpha".
Street Address: 1656 Test Track Rd., HAFB, 88330-7848.

Building Number: 1175

I. GENERAL INFORMATION:

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

Comments: Building 1175 is in need of minor routine maintenance.

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

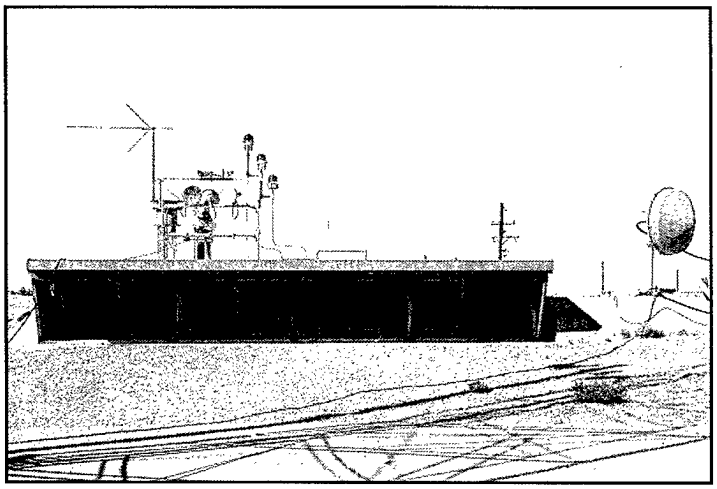
Comments: Modernization at interior to enable continued Test Track use.

Preliminary Determination of National or State Register Eligibility:

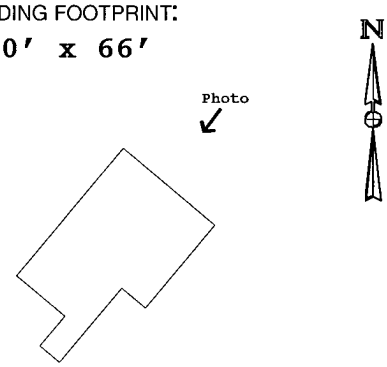
[x] Exceptional importance [ ] Potentially eligible [ ] Further research recommended [ ] Ineligible

Comments: Eligible for the National Register under Criteria A and/or C.

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



BUILDING FOOTPRINT:
40' x 66'



Date of completion: c1949

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 1175 is an irregularly shaped, one-story concrete structure, built mostly below grade. The building is accessed by a ramp leading down to double doors at the southwest elevation. These doors access the original launch control room constructed in c1949. This entrance, three entrances off of the ramp, and windows facing the track (northeast) are the only visible openings. A 15' x 32'-6" addition was constructed at the northwest elevation in 1960 (CE File #1175-2). Another addition, adjacent to northwest side of ramp was completed in 1981 (CE File #1175-3). The ramp extension was also constructed at this time. Neither the architect nor the builder is known.

III. HISTORIC AND CURRENT USE:

Source: Real Property Accountable Record/1175; CE File #1175-1 (c1949).

Current Function: Launch control facility, High Speed Test Track.

Original Function: Launch control facility, High Speed Test Track.

Interim Functions:

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

Source: CE File #1175-1 (c1949); CE File #1175 (c1980).

Foundation: Concrete footings.

Exterior walls: Reinforced concrete.

Roof: 3-foot thick reinforced concrete.

Notable interior features, including machinery:
A long row of thick blast-proof windows faces the track to the northeast.

V. CURRENT FEATURES IF DIFFERENT FROM ORIGINAL:

Source: Field visit Spring 1996.

Foundation:

Exterior walls:

Roof:

366 Notable interior features, including machinery: None noted.

VI. BRIEF STATEMENT OF HISTORIC SIGNIFICANCE:

"Alpha" Block house Building 1175 is one of the original High Speed Test Track support facilities, constructed c1949 to provide launch control. Recommend that Building 1175 be nominated under Criteria A and C as part of a basewide early Cold War Multiple Property listing.

VII. ASSOCIATED BUILDINGS:

Building 1175 operated, and continues to operate, in support of the high speed test track launching activities, along with Buildings 1162, 1163, 1161, 1645, and the Horizontal Test Stand facility (Buildings 1159 and 1160).

VIII. ADDITIONAL COMMENTS AND MAINTENANCE RECOMMENDATIONS:

Building 1175 retains historic integrity. Due to its national level of significance under Criteria A and C, recommend that Building 1175 be listed along with the other test track support buildings as part of a Multiple Property nomination to the National Register of Historic Places.

Subsequent improvements to the original Building 1175 augmented the original design and function as a launch control facility for important research conducted at the high speed test track. The interior was renovated in 1984 (CE File #1175-4). Although this renovation obscures original interior finishes, Building 1175 as a whole retains historic integrity of location, design, setting, workmanship, materials, feeling, and association. Of interest to future researchers may be the dramatic changes in computer technology which have occurred since the construction of Alpha Blockhouse: Computers which at that time required several rooms to house, now occupy considerably less space. Launch control operations continue at Alpha Blockhouse, although rooms designed to hold early equipment are virtually empty.

Suggested routine maintenance: Repair bond beam where steel is exposed. Remove vegetation at exterior embankments. Remove debris at front walkway.

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

Comments: Subsequent improvements to the original floor plan added to Building 1175's design and function as a launch control facility.

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

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

Comments: Except for the construction of smaller buildings in the vicinity, the original setting of Building 1175 near the test track launch pad has been retained.

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

Comments: The raised wood floor in the console room has been removed. The original light fixtures have been removed. One wood and glass partition has been removed. Sheetrock® walls, carpeting, wainscot, and linoleum have been added to the control room.

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

Comments: Original workmanship at the northeast elevation, and at the entrances at the ramp is still visible. Interior renovations hide the original architectural craftsmanship.

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 [ ] Some elements remain [x] Retains integrity

Comments: Building 1175 continues to function as a launch control facility for the High Speed Test Track.

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

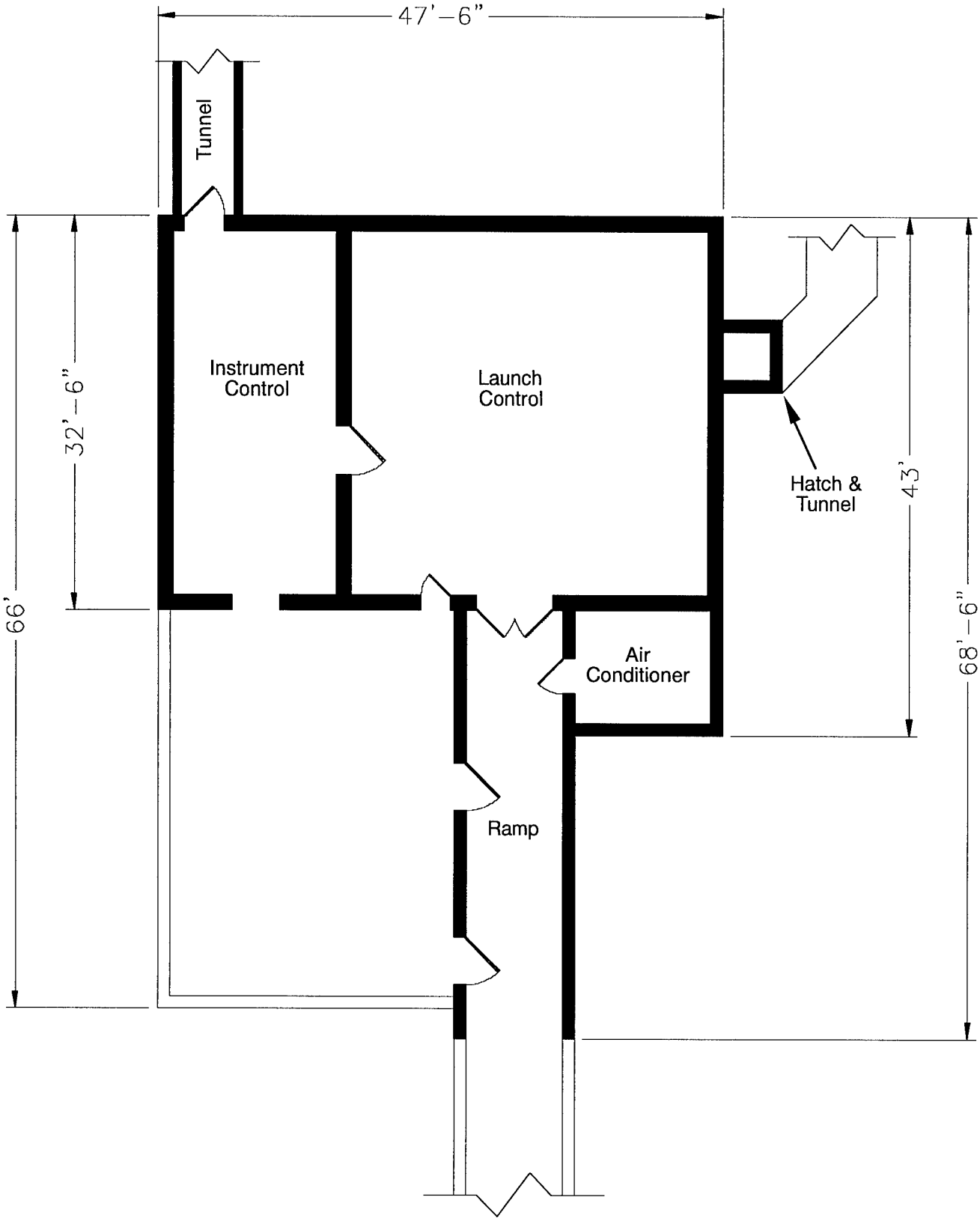
Comments:

X. FURTHER INFORMATION:

Surveyed By:

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

HAFB Report Number: **CRM Publication #3**
Photograph Citation: **CD-ROM #2-Photo #35**
Negatives On File: **49 CES/CEV, 550 Tabosa Ave, HAFB**
Date of Field Visit: **SPRING 1996**



Source: CE File #1175 (c1980)

State of New Mexico Office of Cultural Affairs Historic Preservation Division	**BUILDING 1175** Holloman Air Force Base Alamogordo, New Mexico	Project No. 35-95-HAFB-4	AutoCAD rendering by: *Eugene N. Kilmer* *(505) 323-0641* Mag Drafting **Sheet 1 of 1**

COLD WAR SURVEY: HOLLOMAN AIR FORCE BASE

NAME: **Building Number:**
Current: Test Track Building.
Historic: Sled Maintenance and Repair Shop.
Street Address: 1561 Test Track Rd., HAFB, 88330-7847. **1178**

I. GENERAL INFORMATION:

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

Comments: Building 1178 appears to be well-maintained.

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

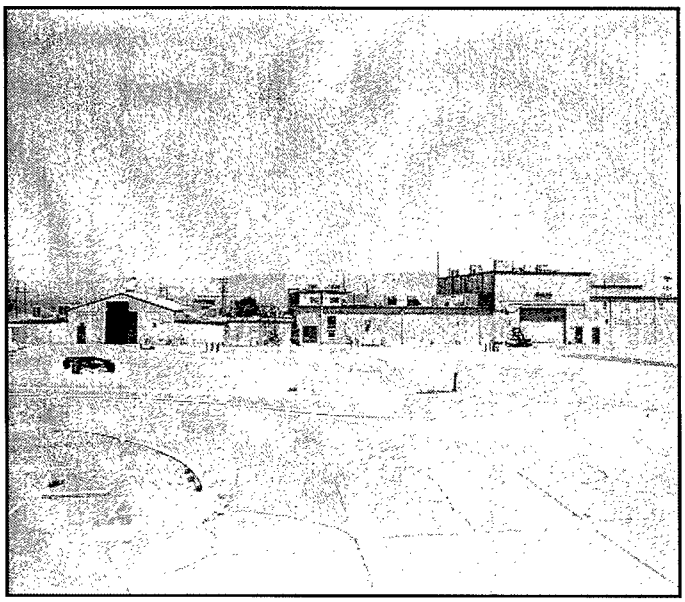
Comments: Minor architectural alterations only.

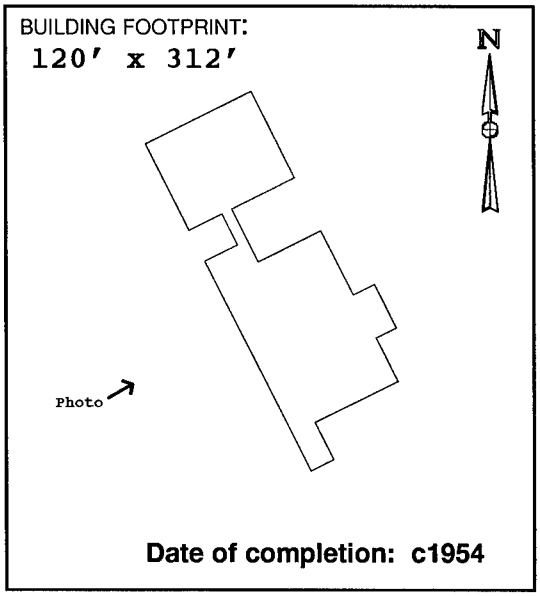
Preliminary Determination of National or State Register Eligibility:

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

Comments: Does not meet "exceptional importance" rule. See Section VIII.

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





Date of completion: c1954

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 1178 is an irregularly-shaped structure with a rectangular, 82′ x 100′ footprint of the original building at the north end. This section is a steel bent frame forming a gable roof open at the interior. Rooms off either side of the open bay are enclosed by one-story block wings. The irregular section is a steel frame, block infill structure with a series of high and low roofs, and large metal roll-up doors. According to Real Property Accountable Record/1178, the original structure was completed in c1954, and the steel shop was built as a subsequent improvement in c1957. There have been no major structural modifications to the original building. A metal addition was constructed at the south elevation (n.d.). Building 1178 was designed by Neuner and Cabaniss Architects (Albuquerque, NM). The builder is unknown.

III. HISTORIC AND CURRENT USE:

Source: Real Property Accountable Record/1178; CE File #1266-1 (c1956); Field visit Spring 1996.

Current Function: Test Track support. Paint and fabrication shop.

Original Function: Test Track sled maintenance and repair shop.

Interim Functions: Special Projects Laboratory--Test Track support.

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

Source: CE File #1266-1 (c1956).

Foundation: Concrete wall and column footings. Reinforced concrete slab.

Exterior walls: Metal siding on bent frame (1954); CMU infill, steel frame (1957).

Roof: Metal roof on bent frame (1954); B/U on gypsum deck using steel joists and trusses (1957).

Notable interior features, including machinery:
Monorail support system. Truss and crane rail support system.

V. CURRENT FEATURES IF DIFFERENT FROM ORIGINAL:

Source: Field visit Spring 1996.

Foundation:

Exterior walls:

Roof:

Notable interior features, including machinery: None noted.

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VI. BRIEF STATEMENT OF HISTORIC SIGNIFICANCE:

As an ancillary facility, Building 1178 does not meet the "exceptional importance" standard imposed on structures built within the last fifty years. Its unique role as the High Speed Test Track sled maintenance shop, however, warrants further research. This facility may be eligible under Criteria A and/ or C once the fifty-year construction date is met in the year 2004.

VII. ASSOCIATED BUILDINGS:

Building 1178 continues to be associated with the Test Track and support buildings, particularly Building 1173 (Machine Shop), and Building 1183 (Surveying). Associated with Building 835 (Electroplating and Heat Treatment Shop) c1965-96.

VIII. ADDITIONAL COMMENTS AND MAINTENANCE RECOMMENDATIONS:

Except for the few changes noted under design, materials, and workmanship, Building 1178 still retains historic integrity in all aspects as a Test Track sled maintenance shop. Three original 4-light hollow metal exterior doors have been replaced with similar 1-light hollow metal doors. Original roll-up metal doors have been replaced in-kind. Nearly all of the architectural replacements retain the character of the original element or component. The paint chamber and metal enclosure at the southeast elevation are modular structures that are removable. The layout and design remains essentially unchanged. Although functions in some rooms have changed, Building 1178 continues to serve in support of the High Speed Test Track. Special management consideration is warranted. This facility may be eligible at a regional or a national level under Criteria A and/or C once the fifty-year construction date is met in the year 2004 due to its unique role as the High Speed Test Track sled maintenance shop. Recommend that future alterations take into account this building's distinctive function and design features. Recommend further research to determine historic association with Building 824 (Sled Maintenance Shop). This building appears to be well-maintained. No routine maintenance items noted.

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

Comments: A large paint chamber has been installed in an open bay of the original c1954 structure. A metal enclosure was added to the southeast elevation of the sled shop. The original floor plan remains essentially intact.

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

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

Comments:

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

Comments: Interiors have been painted. New lighting at ceiling. Interior CMU walls removed between liquid engine repair shop and small parts tool crib. Two exterior doors have been removed and the openings blocked in at SW elevation.

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

Comments: Stud partition added to northwest corner of machine shop. Insulation added to interior of original metal building at ceiling.

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 [ ] Some elements remain [x] Retains integrity

Comments:

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

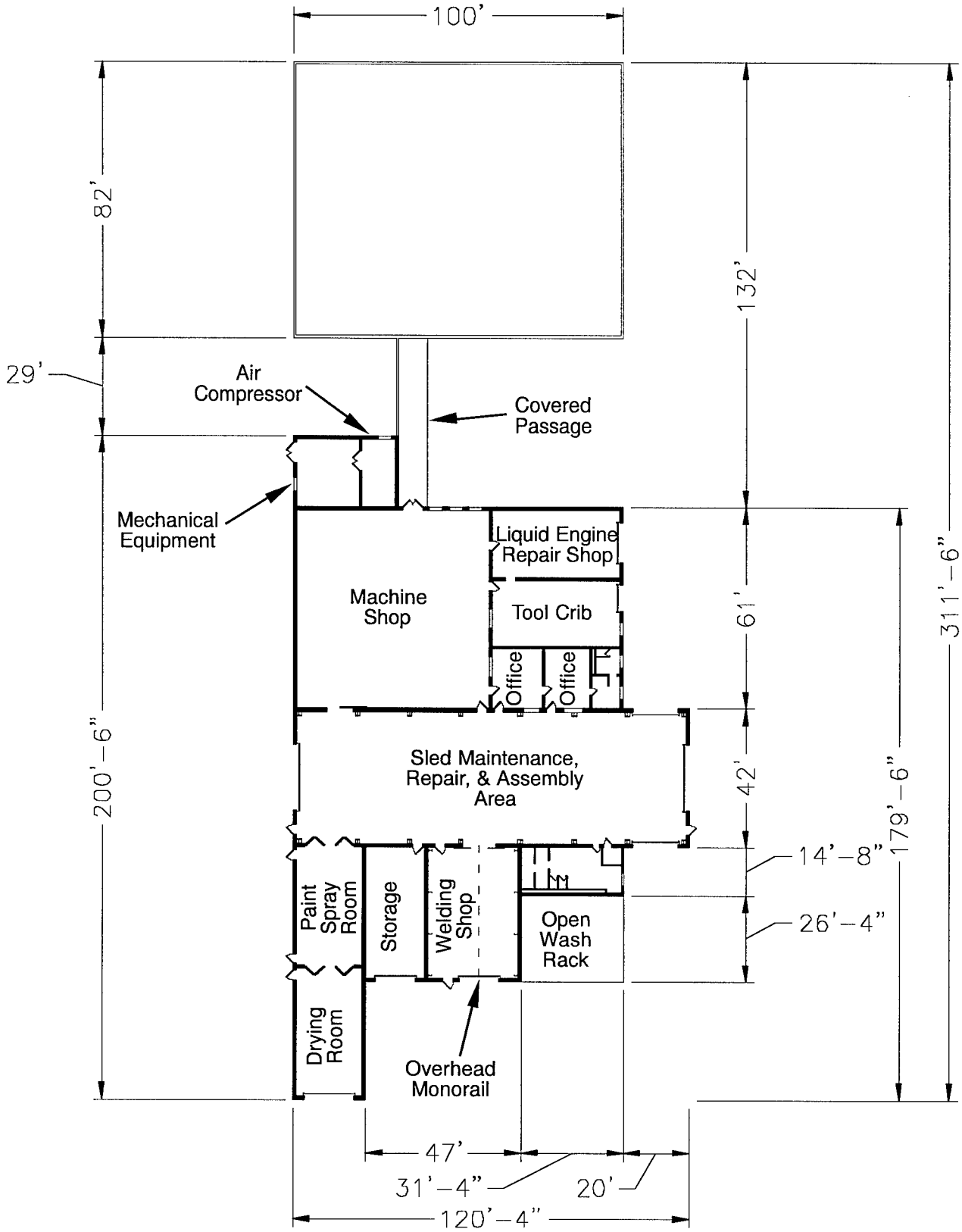
Comments:

X. FURTHER INFORMATION:

Surveyed By:

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

HAFB Report Number: **CRM Publication #3**
Photograph Citation: **CD-ROM #2-Photo #67**
Negatives On File: **49 CES/CEV, 550 Tabosa Ave, HAFB**
Date of Field Visit: **SPRING 1996.**



Source: CE File #1266-1 (c1956)

State of New Mexico Office of Cultural Affairs Historic Preservation Division	**BUILDING 1178** Holloman Air Force Base Alamogordo, New Mexico	Project No. 35-95-HAFB-4	AutoCAD rendering by: *Eugene N. Kilmer* *(505) 323-0641* Mag Drafting **Sheet 1 of 1**

COLD WAR SURVEY: HOLLOMAN AIR FORCE BASE

NAME:
Current: Missile Instrumentation Station.
Historic: Missile Instrumentation Station.
Reference: HAFB Map Sheet 4 of 12 (D-24).

Building Number:
1645

I. GENERAL INFORMATION:

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

Comments: Building 1645 is in need of minor routine maintenance.

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

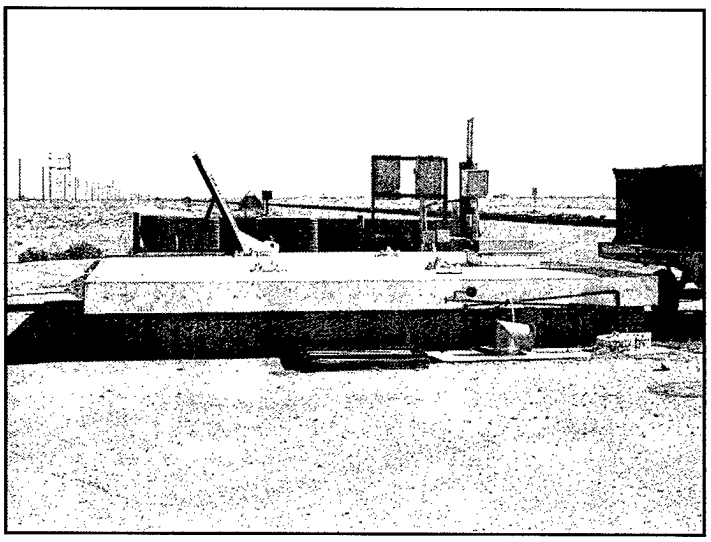
Comments: No structural modifications have occurred.

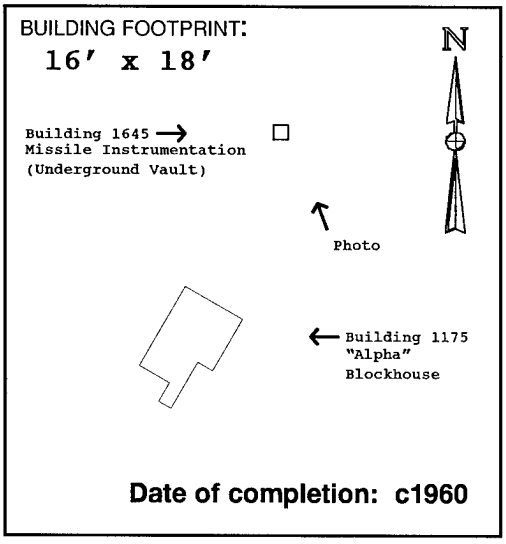
Preliminary Determination of National or State Register Eligibility:

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

Comments: Ineligible as an individual property. See Section VIII.

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 1645 is a small (16′ x 18′) underground cable vault and missile instrumentation facility located between the High Speed Test Track and Building 1175. The concrete masonry unit walls and poured concrete floor are situated on a reinforced concrete foundation. Floor to ceiling height is approximately eight feet. The 16-gauge galvanized steel (flat) roof is situated at grade. Access to this facility is gained through a 2′-7″ x 4′-0″ roof hatch at the northwest corner.

No blueprints were located for this facility, although a measured drawing (n.d.) was furnished by Test Track personnel (Contact: Richard Fry, Test Track Building 1174). With the exception of the apparent removal of a door at the west interior (underground), no structural or architectural modifications to the original construction materials or design were apparent. Real Property Accountable Record/1645 indicates that this facility was completed c1960 and subsequently improved c1961 at a total cost of $6,684.00. Neither the builder nor the architect is known.

III. HISTORIC AND CURRENT USE:

Source: Real Property Accountable Record/1645.

Current Function: Missile Instrumentation Station (Test Track).

Original Function: Missile Instrumentation Station (Test Track).

Interim Functions:

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

Source: Real Property Accountable Record/1645.

Foundation: Poured reinforced concrete.

Exterior walls: Concrete masonry units (CMU).

Roof: 16-Gauge galvanized steel.

Notable interior features, including machinery: None noted.

V. CURRENT FEATURES IF DIFFERENT FROM ORIGINAL:

Source: Field visit Summer 1996.

Foundation:

Exterior walls:

Roof:

374 Notable interior features, including machinery: Although it appears that original equipment has been removed, this facility still functions as an instrumentation station and underground cable vault.

VI. BRIEF STATEMENT OF HISTORIC SIGNIFICANCE:

Building 1645 does not meet the "exceptional importance" criteria imposed on structures built within the last fifty years, but should be considered as an integral component of the High Speed Test Track materiel development facilities. Recommend that Building 1645 be considered a Test Track contributing feature if a Multiple Property nomination is prepared for the Base.

VII. ASSOCIATED BUILDINGS:

Building 1645 is associated with the High Speed Test Track facilities, including the blockhouses, instrumentation facilities, and the Horizontal Test Stand. Building 1645 is located between the High Speed Test Track and Building 1175.

VIII. ADDITIONAL COMMENTS AND MAINTENANCE RECOMMENDATIONS:

Building 1645 was constructed c1960 to serve as an underground cable vault and instrumentation support facility for the High Speed Test Track. Although this building does not meet National Register of Historic Places criteria for significance as an individual property, recommend that Building 1645 be considered a contributing feature to the overall High Speed Test Track materiel development site.

It should be noted that very little documentation was located for this building. Recommend that persons familiar with activities conducted at this facility during the 1960s be identified and consulted for more information.

IX. ASSESSMENT OF HISTORIC INTEGRITY:

Note: Original blueprints not located . Assessment based on Real Property Record/1645 & Building 1173 personnel.

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

Comments:

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

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

Comments:

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:

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:

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 [ ] Some elements remain [x] Retains integrity

Comments:

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

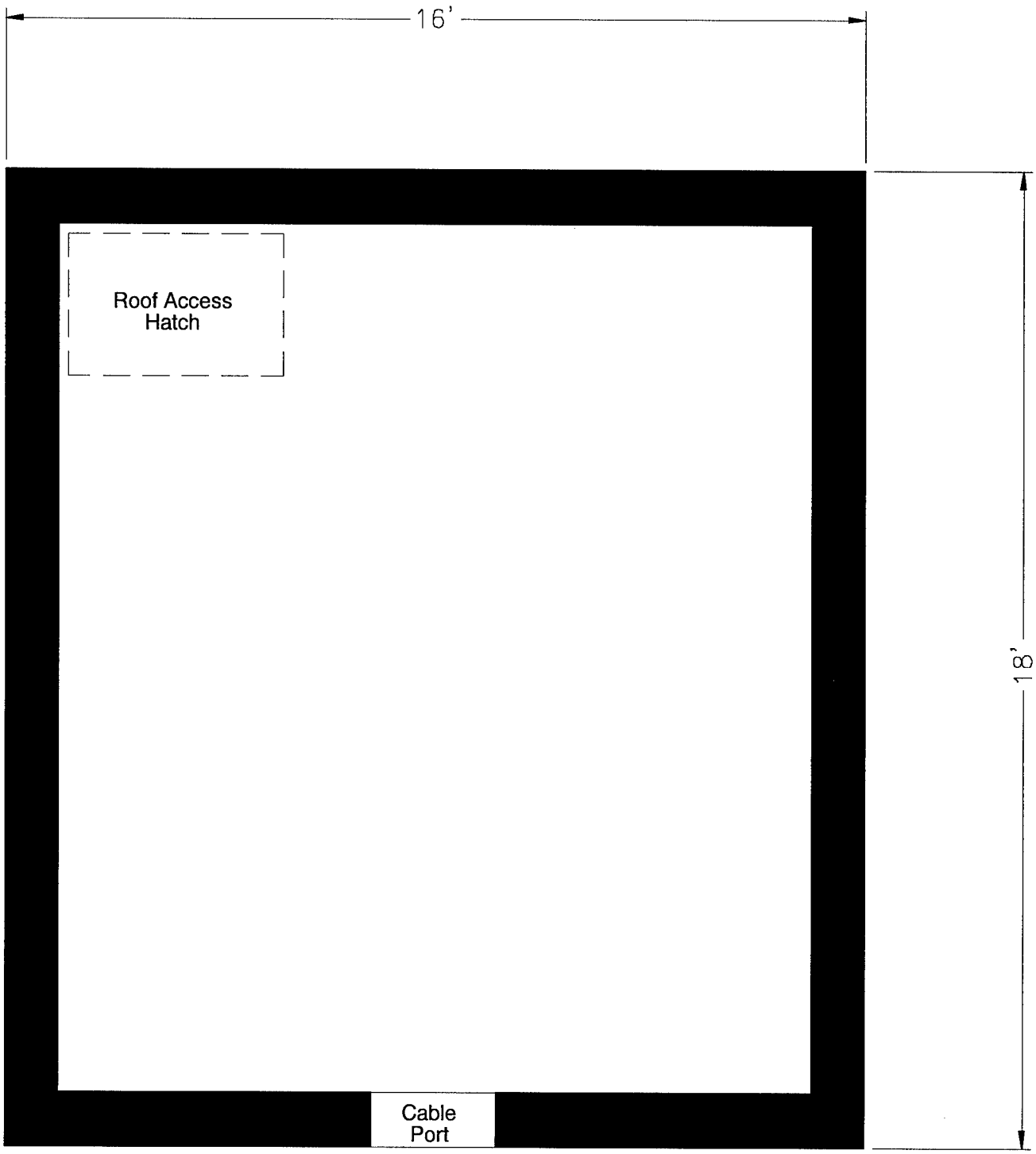
Comments: Building 1645 continues to support High Speed Test Track operations as an underground cable vault.

X. FURTHER INFORMATION:

Surveyed By:

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

HAFB Report Number: **CRM Publication #3**
Photograph Citation: **CD-ROM #1-Photo #34**
Negatives On File: **49 CES/CEV, 550 Tabosa Ave, HAFB**
Date of Field Visit: **SUMMER 1996**



Source: Measured drawing (n.d.) on file (Building 1174)

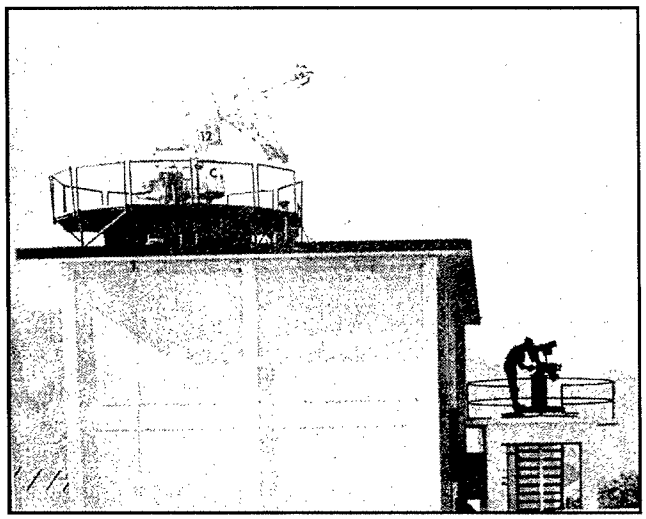
State of New Mexico Office of Cultural Affairs Historic Preservation Division	**BUILDING 1645** Holloman Air Force Base Alamogordo, New Mexico	Project No. 35-95-HAFB-4	AutoCAD rendering by: *Eugene N. Kilmer* *(505) 323-0641* Mag Drafting **Sheet 1 of 1**

Field Survey: Materiel Development

IV. Materiel Development Facilities

- **Research Laboratories**
  - -Building 839
  - Daisy Test Track:
    - -Building 1200
    - -Building 1201
    - -Building 1202
    - -Building 1203
    - -Building 1204
    - -Building 1205
    - -Building 1206
    - -PRL Facility
  - Balloon/Parachute Operations:
    - -Building 524
    - -Building 849
    - -Building 850
    - -Building 855
- Manufacturing Sites
- Test Sites
  - -Building 640
  - High Speed Test Track:
    - -Building 835
    - -Building 1159
    - -Building 1160
    - -Building 1161
    - -Building 1162
    - -Building 1163
    - -Building 1175
    - -Building 1178
    - -Building 1645
- Proving Grounds
- **Communications**
  - **-Building 1102**
  - **-Building 1103**
  - **-Building 1121**
- Documentation
  - -Building 841
  - -Building 848
  - -Building 1182

Communications Bldgs 1102, 1103, 1121



(*White Sands Missile Range* 1965: 34).

FPS-16 radar with an optical tracker.

COLD WAR SURVEY: HOLLOMAN AIR FORCE BASE

NAME:
Current: Missile Radar Station.
Historic: Radar Triangulation: King I.
Reference: HAFB Map Sheet 4 of 12 (H-23.5).

Building Number: 1102

I. GENERAL INFORMATION:

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

Comments: In need of routine maintenance.

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

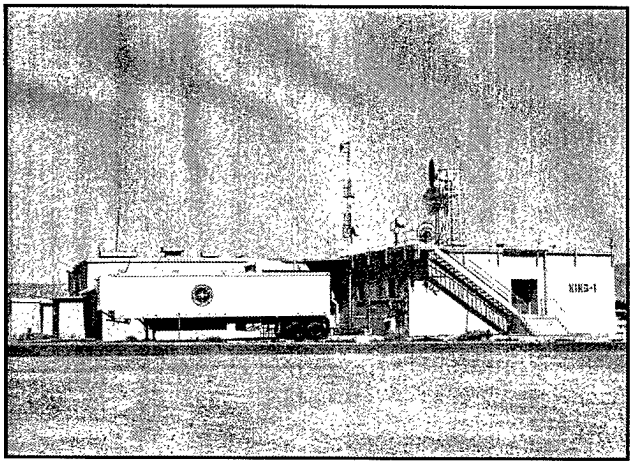
Comments: Essential structural and architectural features remain intact.

Preliminary Determination of National or State Register Eligibility:

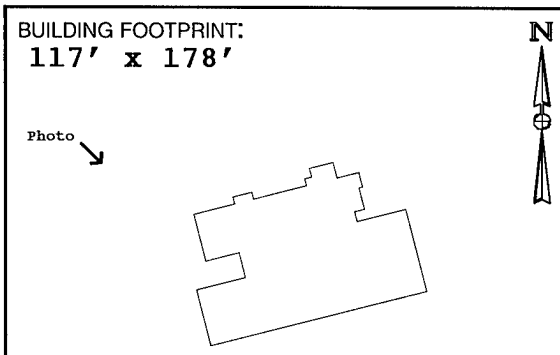
[x] Exceptional importance [ ] Potentially eligible [ ] Further research recommended [ ] Ineligible

Comments: Recommend listing as part of a Cold War Multiple Property.

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



BUILDING FOOTPRINT:
117′ x 178′



Date of completion: 1952

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 1102 is a one-story concrete masonry unit, multi-shaped building with a central corridor running east-west the entire length and single rooms flanking both sides of the corridor. Original footprint shows primarily rectangular shape with a central projecting core. This core is a large open room with an upper balcony around its perimeter. Construction of the original building was completed in 1952, according to "As-built" drawings in CE File #1102-1. Surveillance display room added in 1969 (CE File #1102-1). It is unclear when north elevation additions constructed, although information in Real Property Accountable Record/1102 date the additions as being post-1970. The architect for this project was W. C. Kruger (Santa Fe, NM). The builder is unknown.

III. HISTORIC AND CURRENT USE:

Source: Real Property Accountable Record/1102.

Current Function: Telemetry and Optics. Altitude measurements.

Original Function: Missile Instrumentation Station; Mission Control.

Interim Functions: Missile Radar Station.

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

Source: CE File #1102-1 (c1952).

Foundation: Concrete footing and foundation wall. Column spread footing.

Exterior walls: Concrete masonry units (CMU).

Roof: Bituminous concrete over built-up roof, ltweight concrete, supported by one-way concrete slab using concrete beams and steel beams encased in concrete.

Notable interior features, including machinery: None noted.

V. CURRENT FEATURES IF DIFFERENT FROM ORIGINAL:

Source: Field visit Spring 1996.

Foundation:

Exterior walls:

Roof:

Notable interior features, including machinery: None noted.

VI. BRIEF STATEMENT OF HISTORIC SIGNIFICANCE:

Eligible under Criteria A and/or C at a national level of significance for important role in early Cold War-era missile and High Speed Test Track mission control and tracking. Further research recommended.

VII. ASSOCIATED BUILDINGS:

Building 1102 supported all missions at White Sands Missile Range and at Holloman Air Force Base until Building 300 and possibly 1527 at White Sands were constructed.

VIII. ADDITIONAL COMMENTS AND MAINTENANCE RECOMMENDATIONS:

Building 1102 continues to operate as a mission control building, with mostly optics and telemetry functions. The Flight and Instrument Control Room, and the Surveillance Radar rooms are vacant. Originally, missiles were fired using an analog boards (mechanical) system. When operations changed to a digital system in c1978, support moved from the central instrument control room to the north addition off of this room. Nearly all of the original interior finishes remain unchanged.

Suggested routine maintenance: Scrape, prime, and paint all block and concrete surfaces. Remove vegetation and rusted pipes by gas meter. Fill depressions at foundation, and regrade using gravel to promote positive drainage. Fill holes at concrete stoops. Replace wood bumper at dock using similar-sized lumber. Secure panel covers on abandoned electrical panels. Enclose live connections in junction boxes. Scrape, prime, and paint metal stairs. Reattach stair nose treads. Remove miscellaneous debris from building perimeter.

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: Still situated at the northeast corner of the intersection of Tula Peak Road, and Douglas Road.

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: The original floor plan remains intact.

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

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

Comments: Continues to be situated at the intersection of two roads in an isolated setting with few nearby buildings.

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

Comments: Most all original materials have been retained at both the exterior and the interior.

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

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

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

Comments: All original exterior and interior room finishes remain visible. At the south elevation, one window is blocked, one window has been replaced with a door, and the door at the loading dock has been replaced. Most of the north elevation is obscured by the addition of an operations room.

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 [ ] Some elements remain [x] Retains integrity

Comments: Building 1102 continues to support limited mission control operations.

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

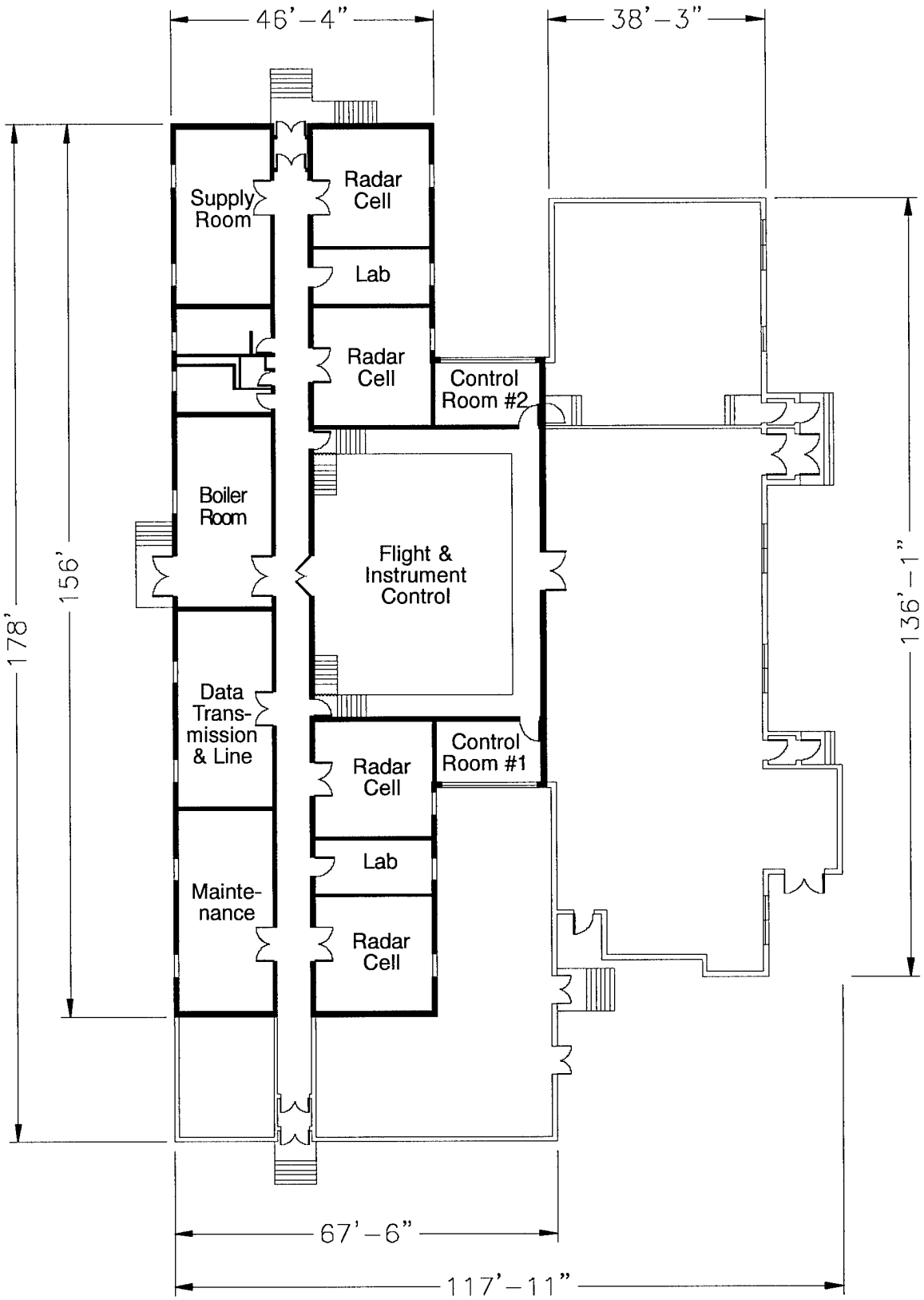
Comments: Building 1102 retains an evident link with its aesthetic and functional historic character.

X. FURTHER INFORMATION:

Surveyed By:

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

HAFB Report Number: **CRM Publication #3**
Photograph Citation: **CD-ROM #2-Photo #49**
Negatives On File: **49 CES/CEV, 550 Tabosa Ave, HAFB**
Date of Field Visit: **SPRING 1996**



Source: CE File #1102-1 (c1952)

State of New Mexico Office of Cultural Affairs Historic Preservation Division	**BUILDING 1102** Holloman Air Force Base Alamogordo, New Mexico	Project No. 35-95-HAFB-4	AutoCAD rendering by: *Eugene N. Kilmer* *(505) 323-6401* Mag Drafting **Sheet 1 of 1**

COLD WAR SURVEY: HOLLOMAN AIR FORCE BASE

NAME:
Current: Timing.
Historic: Telemetering Building.
Reference: HAFB Map Sheet 4 of 12 (H-23.5).

Building Number: 1103

I. GENERAL INFORMATION:

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

Comments: In need of routine maintenance only.

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

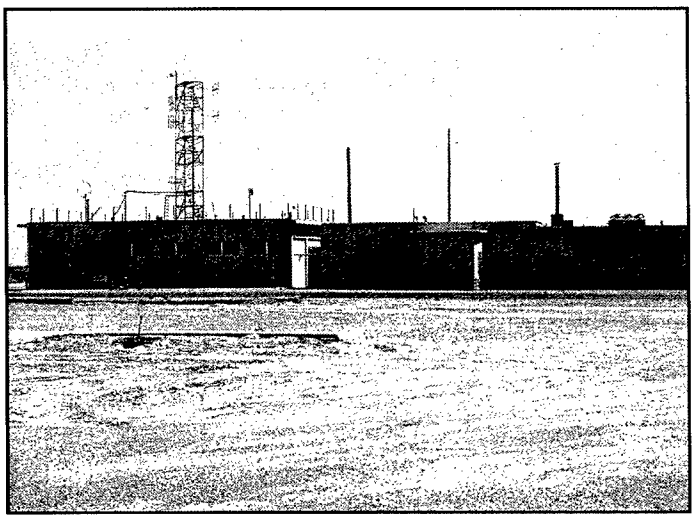
Comments: Few alterations since early improvements.

Preliminary Determination of National or State Register Eligibility:

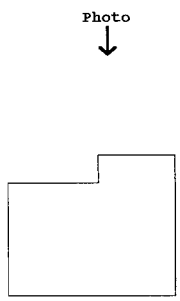
[ ] Exceptional importance [ ] Potentially eligible [x] Further research recommended [ ] Ineligible

Comments: Research recommended to determine historic use. See Section VIII.

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



BUILDING FOOTPRINT:
36′ x 42′



Date of completion: 1949

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 1103 is a one-story rectangular building with concrete masonry unit walls, and a flat roof. The original building was completed in 1949, according to "As-built" drawings located in CE File #1103-1. This original construction is centrally located, flanked to the east and west by subsequent additions. Real Property Accountable Record/1103 documents the addition of 2,930 square feet to the original building with the notation "Subsequent Improvements thru May 57." One or both additions to the original building may therefore be considered to be subsequent improvements, rather than additions that compromise historic integrity. Neither the architect nor the builder is known.

III. HISTORIC AND CURRENT USE: (Personal communication with Building 1103 personnel)

Current Function: (East end) Leased by WSMR to transmit mission timings.

Current Function: (West end) Unknown.

Original Function: Telemetering station for data collection of Range missions.

Interim Functions: Real Property Accountable Record/1103: "Communications CTR" (c1962); "Telecom Cen" (c1971); "Comm Fclty" (c1980); "Elec Rsch Rdr" (c1988).

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

Source: CE File #1103-2 (1967); CE File #1103-1 (1949).

Foundation: Concrete wall footing.

Exterior walls: Painted concrete masonry units (CMU).

Roof: Built-up roof on wood sheathing and 2 x 8 wood joists.

Notable interior features, including machinery: None noted.

V. CURRENT FEATURES IF DIFFERENT FROM ORIGINAL:

Source: Field visit Spring 1996.

Foundation:

Exterior walls:

Roof:

Notable interior features, including machinery: None noted.

VI. BRIEF STATEMENT OF HISTORIC SIGNIFICANCE:

Although perhaps not meeting the "exceptional importance" stipulation imposed on buildings constructed within the last fifty years, Building 1103 may be eligbile for the National Register under Criterion A at a regional or national level in the year 1999. If further research determines that Building 1103 is not eligible as an individual property, consideration should be given to its eligibility as a contributing feature in a Cold War Multiple Property submission for its support of early Cold War-era test launches.

VII. ASSOCIATED BUILDINGS:

Building 1103 was associated during its historic period of significance with Building 1102, mobile data collection vans, and Building 300 at White Sands Missile Range.

VIII. ADDITIONAL COMMENTS AND MAINTENANCE RECOMMENDATIONS:

Building 1103 appears very different today from depictions on "As-built" drawings dated 1949. It is unclear whether additions to the east and west ends of the original building represent early improvements to the original building, or whether these additions represent later construction that has compromised the historic integrity of the original building. Information obtained from Real Property Record/1103 and field visits seems to indicate that the additions represent early improvements to the original building. If so, Building 1103 retains historic integrity. Further research is needed to verify the construction sequence, and to verify what early Cold War-era research activities were supported by Building 1103. Currently, Building 1103 is leased by the White Sands Missile Range. Aside from minor partitioning at the telemetering room, the original floor plan of the original building shows no alterations. Wood posts (6 x 6) that appear on original drawings to support the roof girders have been removed.

Suggested routine maintenance: Repair, or replace in kind, the exterior wood architectural features, including the soffit, fascia, wood doors, and louvers. Patch spalling concrete at foundation. Remove vegetation at roof.

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

Comments: Original telemetering room is now used as spare equipment storage.

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: Earlier location plans indicate three utility buildings situated in a row next to Building 1103 to the east. These buildings have been removed. Continues to be set in a somewhat isolated setting, in the vicinity of King-I.

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

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

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

Comments: Unable to access some rooms. Those rooms that were accessed, however, appear to have most of the original materials intact. A brick chimney and a metal stack have been removed.

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

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

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

Comments: Original windows at north elevation have been covered up at the interior. The telemetering room has been partitioned (reversible).

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: Building 1103 personnel are actively engaged in serving as a timing link for White Sands Missile Range tests.

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

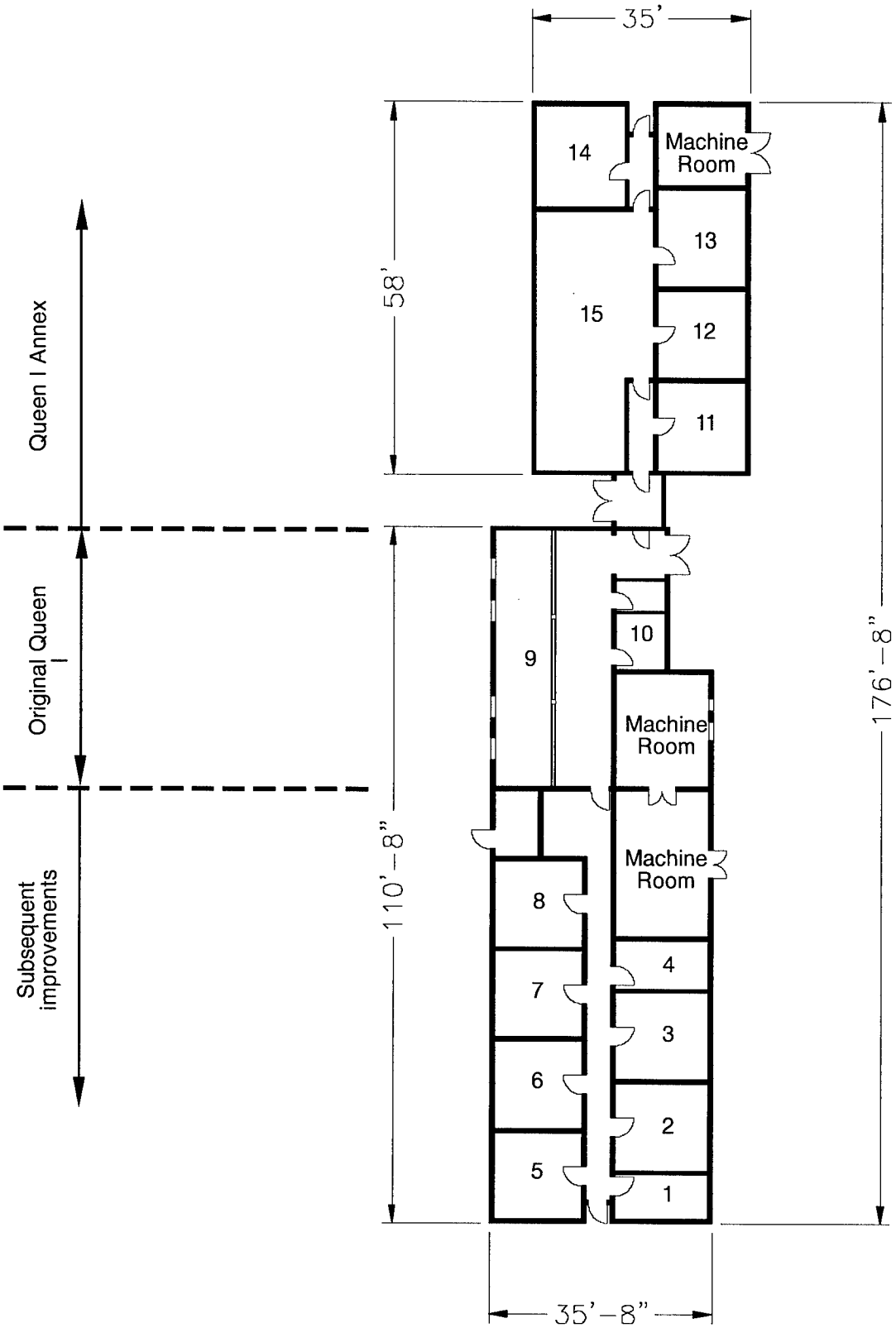
Comments: Building 1103 continues to provide support to the White Sands Missile Range.

X. FURTHER INFORMATION:

Surveyed By:

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

HAFB Report Number: **CRM Publication #3**
Photograph Citation: **CD-ROM #2-Photo #47**
Negatives On File: **49 CES/CEV, 550 Tabosa Ave, HAFB**
Date of Field Visit: **SPRING 1996**



Source: Dynalectron *Facilities Handbook*, c1964.

State of New Mexico Office of Cultural Affairs Historic Preservation Division	**BUILDING 1103** Holloman Air Force Base Alamogordo, New Mexico	Project No. 35-95-HAFB-4	AutoCAD rendering by: *Eugene N. Kilmer* *(505) 323-0641* Mag Drafting **Sheet 1 of 1**

COLD WAR SURVEY: HOLLOMAN AIR FORCE BASE

NAME:
Current: Communications, Transmitter.
Historic: Transmitter Building.
Street Address: 1381 Douglas Road, HAFB, 88330-7833.

Building Number: 1121

I. GENERAL INFORMATION:

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

Comments:

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

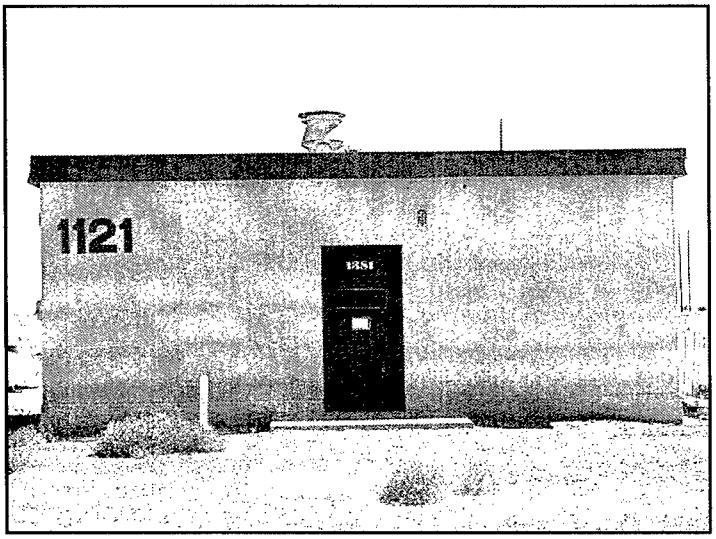
Comments: Interior finishes do not appear to be original.

Preliminary Determination of National or State Register Eligibility:

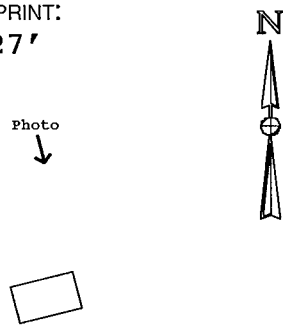
[ ] Exceptional importance [ ] Potentially eligible [ ] Further research recommended [x] Ineligible

Comments: Does not meet Nat'l Register criteria as an individual property.

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



BUILDING FOOTPRINT:
13' x 27'



Date of completion: c1953

387

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 1121 has a rectangular footprint (13'-4" x 27'-4") and a one-room floorplan. This flat-roofed block wall structure has no architectural embellishments. The concrete masonry unit walls are exposed at the exterior and interior. The roof appears to be a concrete slab or reinforced concrete masonry unit planks. Gypsum board has been applied to the underside of the roof (date unknown). Asphalt tile has been installed over the concrete slab floor (date unknown). Access is gained through a single personnel door at the principal (north) elevation. There are no windows. Construction was completed c1953 according to Real Property Accountable Record/1121. Neither the architect nor the builder is known. It should be noted that no construction drawings for this transmitter building were located. This architectural assessment is based on brief information found in a c1962 Dynalectron *Facilities Manual* furnished by the Land-Air Division of DynCorp (Contact: Marvin Bunker, Building 841), and information provided by Real Property Accountable Record/1121.

III. HISTORIC AND CURRENT USE:

Source: Real Property Accountable Record/1121.

Current Function: Communications/Transmitter; Storage.

Original Function: Communications/Transmitter.

Interim Functions: Communications/Transmitter.

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

Source: Real Property Accountable Record/1121.

Foundation: Concrete floor slab and wall footings.

Exterior walls: Concrete masonry units (CMU).

Roof: "B/U Plank" (Real Property Accountable Record/1121).

Notable interior features, including machinery: None noted.

V. CURRENT FEATURES IF DIFFERENT FROM ORIGINAL:

Source: Field visit Fall 1996.

Foundation:

Exterior walls:

Roof:

Notable interior features, including machinery: None noted.

VI. BRIEF STATEMENT OF HISTORIC SIGNIFICANCE:

Although Building 1121 appears to retain historic integrity, this facility does not meet National Register criteria for significance as an individual property. Recommend consideration as a Multiple Property contributing feature.

VII. ASSOCIATED BUILDINGS:

Building 1121 provided communications/transmitter support to Telemetry Building 1103 during its early Cold War period of historic significance.

VIII. ADDITIONAL COMMENTS AND MAINTENANCE RECOMMENDATIONS:

Building 1121 is currently used for storage, although the *Street Address Cross-Reference List* furnished by the 49 CES/CERR Real Property Office refers to it as a communications/transmitter facility. Transmitter equipment has been removed. The fact that this building at one time housed transmitter equipment is evidenced by the cable trench that runs the entire length of the building. According to Building 1103 personnel, Building 1121 was constructed c1953 to assist with telemetry functions primarily housed in Building 1103 (Contact: Joe Small, 679-2488). A Dynalectron *Facilities Manual* also refers to Building 1121 as a transmitter building. Although currently unoccupied, the fact that it had heating and air conditioning suggests that this building was occupied at one time (Real Property Accountable Record/1121).

Although retaining integrity, Building 1121 does not exhibit distinctive design, materials, or workmanship. Its ancillary role renders it ineligible for inclusion on the National Register of Historic Places as an individual property. Recommend that Building 1121 be considered a contributing feature in a Multiple Property nomination for its communications support role. This building appears to be well-maintained. No routine maintenance items were noted.

IX. ASSESSMENT OF HISTORIC INTEGRITY:

NOTE: CONSTRUCTION DRAWINGS FOR THIS FACILITY WERE NOT LOCATED (SEE SECTION II).

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

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

Comments: Building 1121 appears to be located at its original location, but this could not be verified by through construction drawings or early Base maps.

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

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

Comments: Real Property Accountable Record/1121 suggests that this retains historic integrity of design, although this could not be verified through construction drawings.

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

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

Comments: Dynalectron *Facilities Manual* verifies that integrity of setting since c1962 has been maintained.

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: Real Property Accountable Record/1121 suggests that nearly all exterior materials and workmanship has been retained.

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: Gypsum board at roof underside and asphalt floor tile appear to be later additions to original finishes.

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 [ ] Some elements remain [x] Retains integrity

Comments:

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

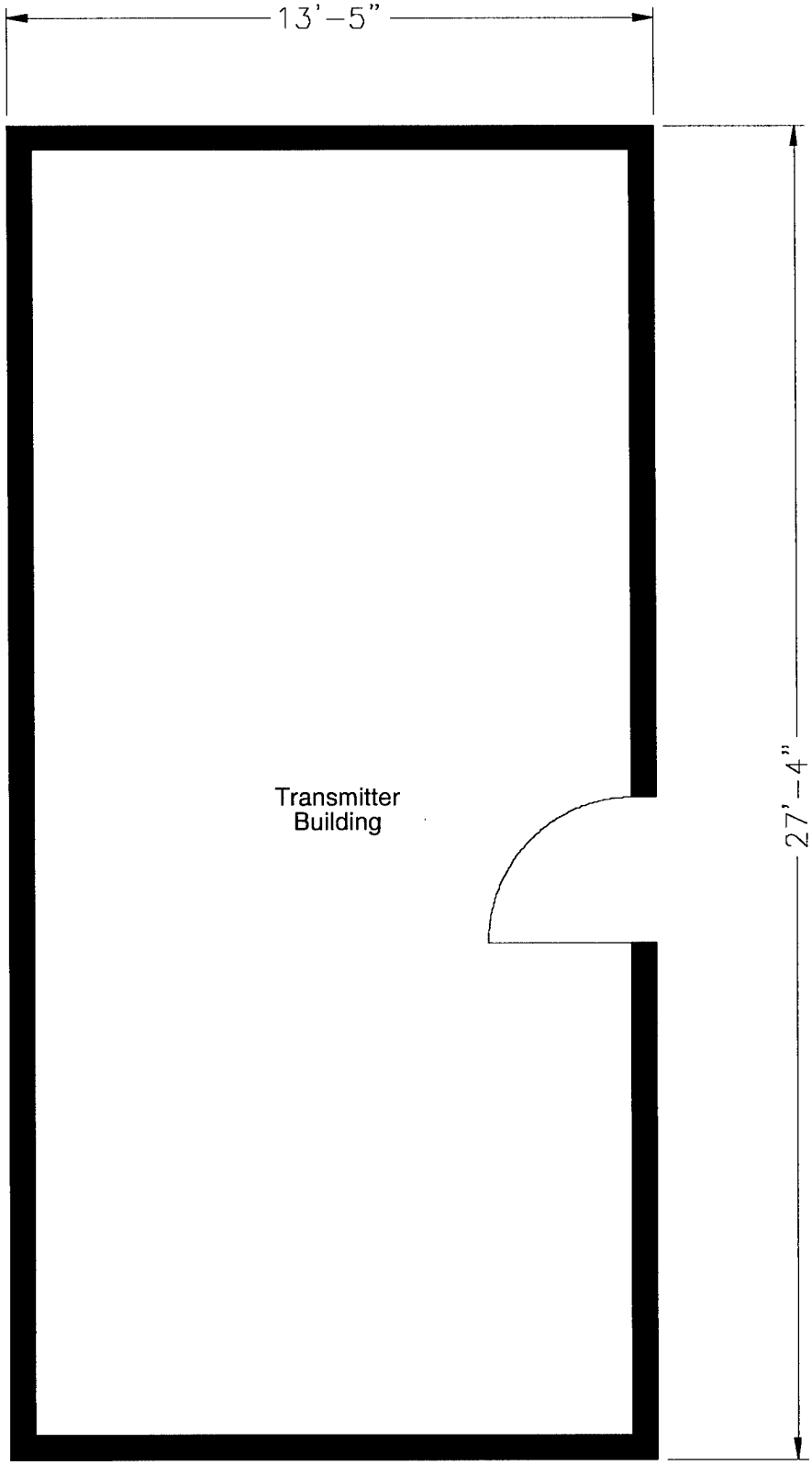
Comments: This transmitter facility is currently used for storage.

X. FURTHER INFORMATION:

Surveyed By:

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

HAFB Report Number: **CRM Publication #3**
Photograph Citation: **CD-ROM #2-Photo #48**
Negatives On File: **49 CES/CEV, 550 Tabosa Ave, HAFB**
Date of Field Visit: **FALL 1996**



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Source: Dynalectron *Facilities Manual* (c1964)

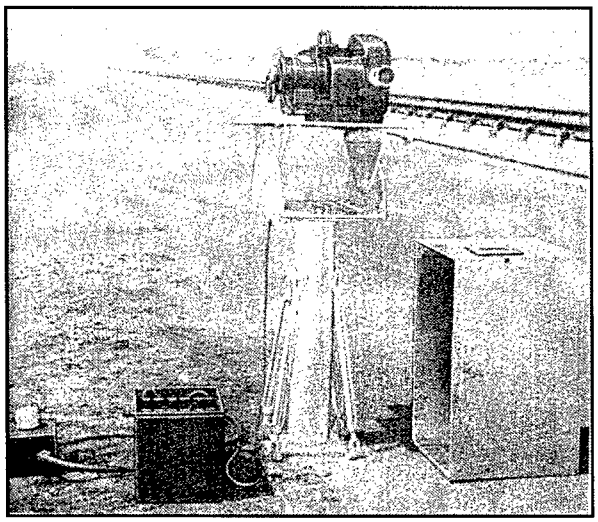
State of New Mexico Office of Cultural Affairs Historic Preservation Division	**BUILDING 1121** Holloman Air Force Base Alamogordo, New Mexico	Project No. 35-95-HAFB-4	AutoCAD rendering by: *Eugene N. Kilmer* *(505) 323-0641* Mag Drafting **Sheet 1 of 1**

Field Survey: Materiel Development

IV. Materiel Development Facilities

- **Research Laboratories**
  - -Building 839
  - Daisy Test Track:
    - -Building 1200
    - -Building 1201
    - -Building 1202
    - -Building 1203
    - -Building 1204
    - -Building 1205
    - -Building 1206
    - -PRL Facility
  - Balloon/Parachute Operations:
    - -Building 524
    - -Building 849
    - -Building 850
    - -Building 855
- Manufacturing Sites
- Test Sites
  - -Building 640
  - High Speed Test Track:
    - -Building 835
    - -Building 1159
    - -Building 1160
    - -Building 1161
    - -Building 1162
    - -Building 1163
    - -Building 1175
    - -Building 1178
    - -Building 1645
- Proving Grounds
- Communications
  - -Building 1102
  - -Building 1103
  - -Building 1121
- **Documentation**
  - **-Building 841**
  - **-Building 848**
  - **-Building 1182**

Documentation Bldgs 841, 848, 1182



(*Istracon 1961: 3.17*).

Land-Air Division film equipment at High Speed Test Track.

Documentation

Data collection for the research conducted at Holloman AFB has been the domain of the Land-Air Division of the Dynalectron Corporation. Land-Air arrived in January 1948 to document the Ground-to-Air Pilotless Aircraft (GAPA), and has been providing data collection services for the Base and the White Sands Missile Range ever since.

Brief History of Land-Air Division

Land-Air was formed in early 1946 when a retired Air Force Colonel, Ted Holliday, established a company in Chicago to refurbish aircraft components. Holliday also intended to "...develop and market a hybrid automobile-aircraft..." (Land-Air 1979: 2) and named the company in anticipation of the success of that craft. The idea failed to attract the necessary capital, but the name "Land-Air" stuck.

North American Aviation

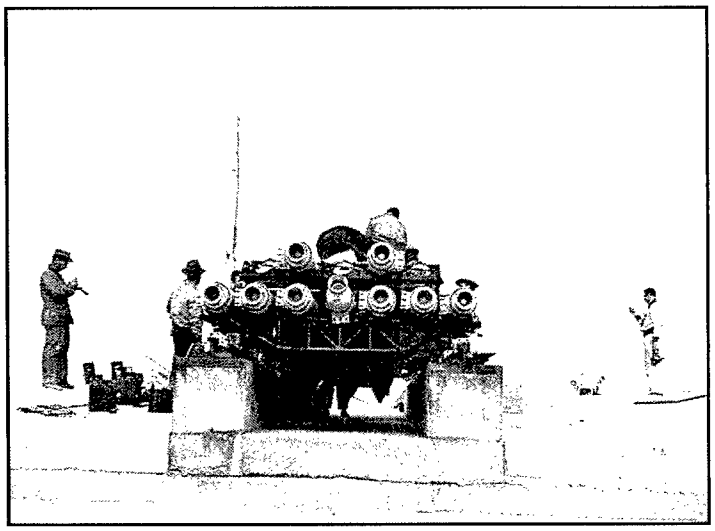
At about the same time that the North American Aviation company arrived at Holloman to test its North American Test Instrumentation Vehicle (NATIV), the Boeing Company was gearing up to test its Ground-to-Air Pilotless Aircraft (GAPA). At that time, camera-equipped telescopes were used to track the missiles as they "...flashed across the skies over the Tularosa Basin (Land-Air 1979: 2).

Data Collection Contractor

Realizing a promising opportunity was at hand, Holliday approached the Air Force with an offer to provide instrumentation and data collection services for the missile tests. Land-Air became the "...first missile range data collection contractor," with the first contract signed on 19 January 1949 to collect data for the remainder of Boeing's GAPA tests (Land-Air 1979: 2).

"While technicians work at strapping Lt. Col. John P. Stapp securely into the high speed test sled at Holloman Air Development Center, the nine rocket units are poised for firing. These units gave a total thrust of 40,000 pounds for five seconds which propelled the sled from a standing start to 632 miles per hour in 2800 feet. The subject underwent acceleration forces of 8 times gravity and in the deceleration phase withstood a force 35 times gravity."

(Photograph by Land-Air, Inc. c1954)



RG 342. Vol. I. 04-149. Archives II.

Dynalectron Corporation

In 1951, Land-Air, Inc. was acquired by California Eastern Airways, Inc. This company changed its name in 1961 to the Dynalectron Corporation. The merger of Land-Air, Inc. into Dynalectron Corporation occurred in 1962, although the Land-Air name was retained to identify the division (Land-Air 1979: 3).

Optical Data Collection

Optical instrumentation operated and maintained by Land-Air includes cinetheodolites, telescopes, ballistic and fixed cameras, and a closed circuit television system. "Approximately 300 cinetheodolite, telescope, and ballistic camera sites, plus several hundred fixed camera sites, are within Land-Air's scope of responsibility" (Dynalectron n.d.: 1). Land-Air has the distinction of successfully operating and maintaining every generation and model of optical insturment and telemetry equipment that has ever been assigned to the missile range, and has operated and maintained the timing signal system for every generation of testing as well (Land-Air 1979: 6).

Telemetry

Land-Air is responsible for providing data, using one of the "...most sophisticated data collection systems in existence"(Land-Air 1979: 4). This system includes "...fixed and mobile auto-track acquisition stations, microwave data transmission links, relay stations and display facilities" (Land-Air 1979: 4).

Photography

Land-Air also furnishes stop-action photography at the High Speed Test Track, and provided all of the documentation for the Daisy Decelerator when it was in operation. Photo-optical experience at the Track includes "...metric, trackside, sledborne, tracking, documentary, and special effects photography" (Land-Air 1979: 7).

Photographers with Land-Air have also provided motion picture recordings of innumerable test phases. During three contracts in the 1970s alone, over 100 million feet of motion picture film, over one million still negatives, and nearly four million still prints were processed (Land-Air 1979: 6).

Summary

The Land-Air Division of Dynalectron, headquartered in Building 841 at Holloman AFB, has been the contractor responsible for all phases of data collection services at the Base and at the White Sands Missile Range since GAPA missile testing was initiated in 1948.

COLD WAR SURVEY: HOLLOMAN AIR FORCE BASE

NAME:
Current: Non-AF Admin Office (DynCorp).
Historic: Instrumentation Building.
Street Address: 1342 Tularosa Road, HAFB, 88330-7928.

Building Number: 841

I. GENERAL INFORMATION:

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

Comments: Building 841 is in need of routine maintenance.

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

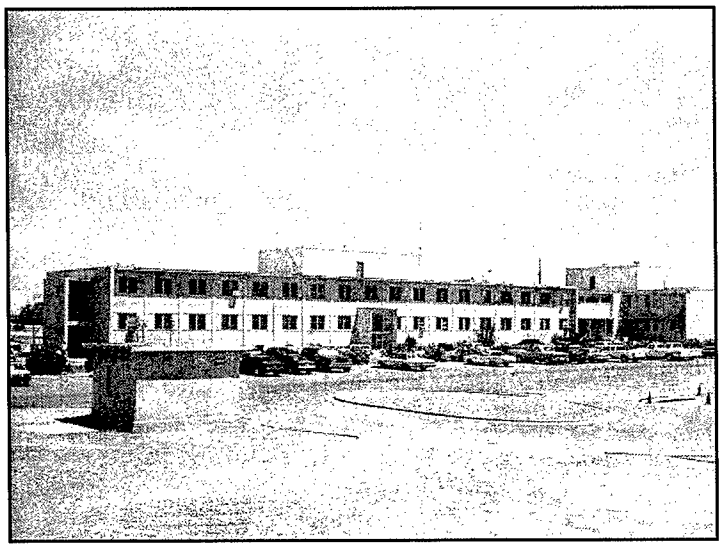
Comments: Addition of Building 841-A, west elevation.

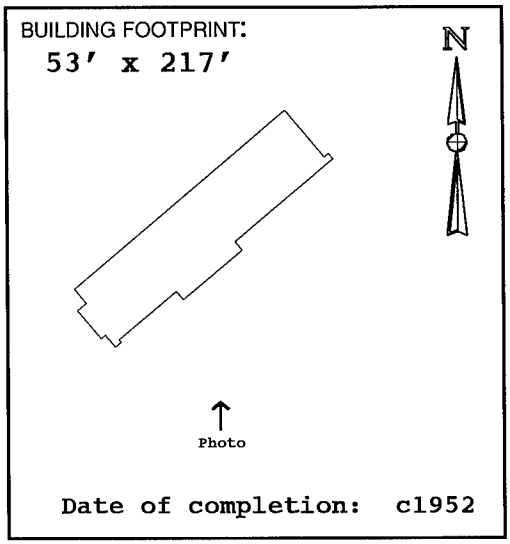
Preliminary Determination of National or State Register Eligibility:

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

Comments: Does not meet "exceptional importance" rule. See Section VI.

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 841 is a two-story, flat-roofed concrete and concrete masonry unit office facility over a full basement. The principal elevation faces south. Fenestration is symmetrical. An addition at the west elevation is considered to be a separate building. A small addition was constructed at the south elevation. It should be noted that information that Building 841 was originally constructed for use as a hospital was not verified by a review of the construction drawings (CE File #841). This facility has continuously served the Base and White Sands Missile Range personnel since its completion c1952 (Real Property Accountable Record/841). Neither the builder nor the architect is known.

According to Building 841 personnel, possible sources for oral histories include the following individuals associated with the Land-Air Division of DynCorp: John Montoya (505) 679-1914, Ed Soulon (505) 437-6428, and Bob Halferty (505) 437-2724.

III. HISTORIC AND CURRENT USE:

Source: Real Property Accountable Record/841.

Current Function: Land-Air/DynCorp Instrumentation and Documentation.

Original Function: Instrumentation support for guided missile research.

Interim Functions: "Missile Lab Test" (c1980); "Msl/Space Rsch Tst" (c1970); "Admin Ofc,Non-AF" (c1983).

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

Source: CE File #841-1 (1953).

Foundation: Concrete wall footings; Concrete column footings.

Exterior walls: Poured concrete, and concrete masonry units (CMU).

Roof: Built-up (BUR) on rigid insulation and concrete slab.

Notable interior features, including machinery: Machine shops, optical equipment, laboratories, camera ready rooms, 20+ rooms devoted to film, negative, and print processing. Dumbwaiter. Vault.

V. CURRENT FEATURES IF DIFFERENT FROM ORIGINAL:

Source: Field visit Spring 1996.

Foundation:

Exterior walls:

Roof:

Notable interior features, including machinery: Some optical and photo-documentation equipment still intact. Dumbwaiter intact. Vault manufactured by Herring Hall Marvin Safe Company, Hamilton, Ohio.

VI. BRIEF STATEMENT OF HISTORIC SIGNIFICANCE:

Building 841 does not meet the "exceptional importance" criteria imposed on buildings constructed within the last fifty years. This building does, however, maintain all seven aspects of historic integrity, and may be eligible for the National Register at a local level of significance in the year 2002.

VII. ASSOCIATED BUILDINGS:

Building 841 continues to provide support for both White Sands Missile Range and Holloman AFB research activities/tests. Qualifies as a contributine feature to the High Speed Test Track due to extensive documentation activities.

VIII. ADDITIONAL COMMENTS AND MAINTENANCE RECOMMENDATIONS:

Building 841 exhibits continuity in terms of architectural design and features, and in terms of facility use. Original concrete floors, exposed concrete masonry unit (CMU) walls, and door and window placement remain as originally constructed. The first floor was originally constructed using interior moveable partition walls. Several of these walls have been re-positioned, and some have been made permanent. CMU walls and plaster walls remain intact, as do the original acoustical ceilings. The second floor originally housed an extensive photo/film documentation mission. Original equipment is still in place in some cases. Floors are of asphalt tile, walls are either CMU or plaster, and ceiling is still of laid-in 12' x 12" acoutical tile. Exterior materials, door, and window placement remain essentially as originally constructed. Two additions, one at the west elevation, and one at the south, obscure a small percentage of the original materials.

Suggested routine maintenance: Inspect and repair roof as needed at penthouse. Repair basement floors, door jambs, & walls as needed. An exterior stairwell at the east elevation poses a safety hazard and should be repaired as soon as possible.

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: This facility continues to provide documentation support for both White Sands Missile Range and Holloman AFB research/tests.

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

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

Comments: Estimate that 75% of original structural and architectural features remain as originally constructed. Owned and operated by original subcontractor.

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

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

Comments:

Materials: To what extent have the original materials used to construct this structure been retained?

Exterior: [ ] Unable to determine [ ] <25% [ ] 25% to 50% [x] 50% to 75% [ ] >75%

Interior: [ ] Unable to determine [ ] <25% [ ] 25% to 50% [x] 50% to 75% [ ] >75%

Comments: Estimate that 75% of all original materials remain visible. Although currently in need of minor routine maintenance, this building appears to have been very well-maintained over the years.

Workmanship: To what degree does the original structural and decorative craftsmanship remain visible?

Exterior: [ ] Unable to determine [ ] <25% [ ] 25% to 50% [x] 50% to 75% [ ] >75%

Interior: [ ] Unable to determine [ ] <25% [ ] 25% to 50% [x] 50% to 75% [ ] >75%

Comments: Most of the original structural and decorative elements remain evident. The principal facade in particular shows only minor modifications.

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 [ ] Some elements remain [x] Retains integrity

Comments: Land-Air Division of DynCorp continues to provide instrumentation and documentation support for White Sands Missile Range and Holloman AFB.

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

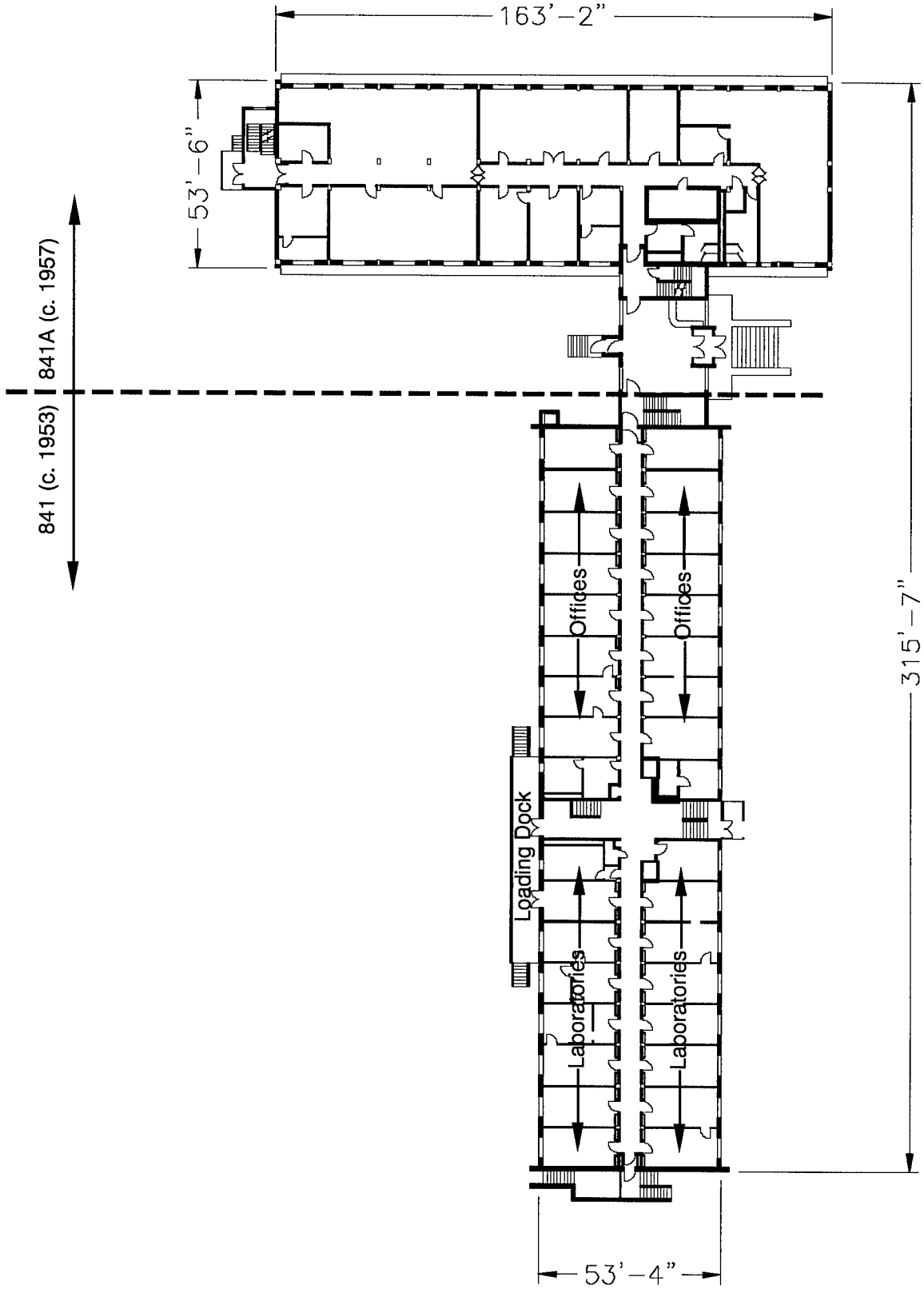
Comments:

X. FURTHER INFORMATION:

Surveyed By:

Jean Fulton
Sonya Cooper
2500 Jordan Road
Las Cruces, NM 88001

HAFB Report Number: **CRM Publication #3**
Photograph Citation: **CD-ROM #2-Photo #108**
Negatives On File: **49 CES/CEV, 550 Tabosa Ave, HAFB**
Date of Field Visit: **SPRING 1996**



Source: CE File #841-1 (1953)

State of New Mexico Office of Cultural Affairs Historic Preservation Division	**BUILDING 841** Holloman Air Force Base Alamogordo, New Mexico	Project No. 35-95-HAFB-4	AutoCAD rendering by: *Mike Gardner* New Mexico State University **Sheet 1 of 1**	NEW MEXICO STATE UNIVERSITY

COLD WAR SURVEY: HOLLOMAN AIR FORCE BASE

NAME:
Current: SC Laboratory.
Historic: Shop; Aircraft Maintenance.
Street Address: 1341 Kelly Road, HAFB, 88330-7923.

Building Number: 848

I. GENERAL INFORMATION:

Current Condition: [ ] Intact [x] Needs maintenance [ ] Deteriorated [ ] Archaeological

Comments: Building 848 is in need of minor routine maintenance.

Degree of Alteration: [ ] None [x] Minor [ ] Moderate [ ] Major

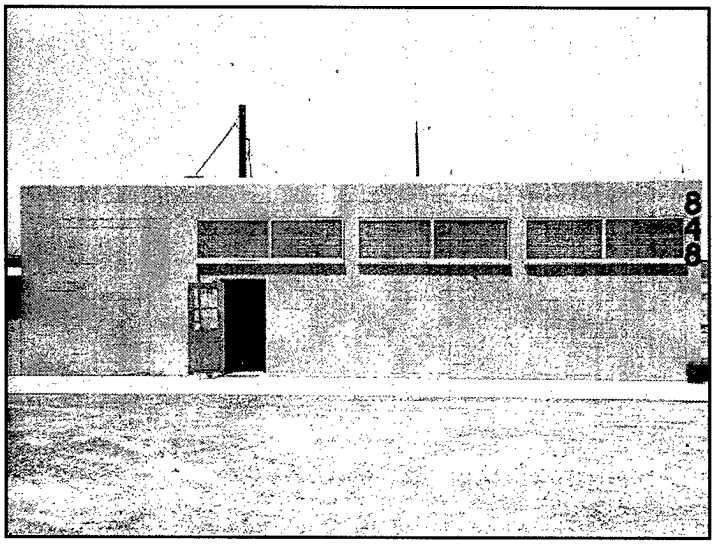
Comments:

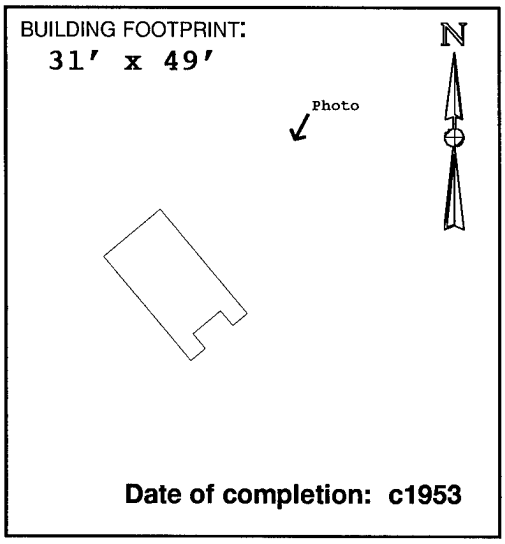
Preliminary Determination of National or State Register Eligibility:

[ ] Exceptional importance [ ] Potentially eligible [ ] Further research recommended [x] Ineligible

Comments: Does not meet criteria for significance as an individual property.

Contact: Martyn Tagg, Archaeologist, 49 CES/CEV, 550 Tabosa Avenue, HAFB, NM 88330-8458.





Date of completion: c1953

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 848 is a rectangular, concrete frame, concrete block infill, one-story structure with two small offsets at the south elevation. These offsets are shed additions constructed after the original building (dates unknown). A large metal, roll-up door is located at the north elevation. Original double doors exist at the west elevation. Metal louvres (screened over) are situated high between the concrete pilasters in three of the four bays at the east elevation. Real Property Accountable Record/848 indicates that this building was completed c1953. Neither the architect nor the builder is known.

III. HISTORIC AND CURRENT USE:

Source: Real Property Accountable Record/848.

Current Function: Radio Maintenance/Circuit Boards.

Original Function: Aircraft Maintenance; Paint Shop.

Interim Functions: Warehouse Supply and Equipment (c1982).

IV. ORIGINAL ARCHITECTURAL AND STRUCTURAL FEATURES (IF KNOWN):

Source: CE File #848-1 (c1952).

Foundation: Concrete column footings; grade beams; Reinforced conc. slab.

Exterior walls: Concrete masonry unit (CMU) infill.

Roof: B/U roof on rigid insulation on 3" slab sup. by metal lath & steel joists.

Notable interior features, including machinery: Paint spray booth. Large metal roll-up door at north elevation (1952: CE File #848-1).

V. CURRENT FEATURES IF DIFFERENT FROM ORIGINAL:

Source: Field visit Fall 1995.

Foundation:

Exterior walls:

Roof:

Notable interior features, including machinery: Paint spray booth removed. Large metal roll-up door remains at north elevation. Three small interior rooms now house printed circuit lab and equipment. Large room used for electronics repair.

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VI. BRIEF STATEMENT OF HISTORIC SIGNIFICANCE:

Building 848 does not meet National Register criteria for significance as an individual property.

VII. ASSOCIATED BUILDINGS:

Building 848 provides support for DynCorp operations headquartered in Building 841.

VIII. ADDITIONAL COMMENTS AND MAINTENANCE RECOMMENDATIONS:

Building 848 retains integrity of materials and setting, however, the function has changed. According to Building 848 personnel and original drawings located in CE File drawer #848, the original function of this building was as a paint shop. Currently Building 848 serves as a printed circuit board lab to manufacture circuit board prototypes. This facility also serves as an electronics repair and maintenance shop. Two exterior elevations have been altered by the addition of storage sheds at the south elevation, and the removal of a 6' roll-up door at the east elevation. The sheds are removable.

Suggested routine maintenance: Repair concrete apron at exterior roll-up door, north elevation. Inspect air conditioning support at west elevation for structural integrity and repair as necessary. Scrape, prime, and paint exterior concrete masonry unit (CMU) wall.

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 [ ] <25% intact [ ] 25% to 50% intact [x] 50% to 75% intact [ ] >75% intact

Comments: An interior spray booth has been removed. A small roll-up door at the east elevation has been removed. Interior partitioning of large room.

Setting: To what extent has the natural setting (i.e., topography, viewshed, and vegetation) been maintained?

[ ] Unable to determine [ ] Retains very little [ ] Retains most [x] 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 [ ] Retains most [x] Retains all or nearly all of its cultural setting

Comments: Retains nearly all elements depicted on an early site plan (1952: CE File #848-1).

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: [ ] Unable to determine [ ] <25% [ ] 25% to 50% [ ] 50% to 75% [x] >75%

Comments:

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Workmanship: To what degree does the original structural and decorative craftsmanship remain visible?

Exterior: [ ] Unable to determine [ ] <25% [ ] 25% to 50% [x] 50% to 75% [ ] >75%

Interior: [ ] Unable to determine [ ] <25% [ ] 25% to 50% [ ] 50% to 75% [x] >75%

Comments: South elevation altered by addition of wood shed and metal shed. Small roll-up door blocked in at east elevation. Original metal louvres screened over.

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:

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 [x] Some elements remain [ ] Retains integrity

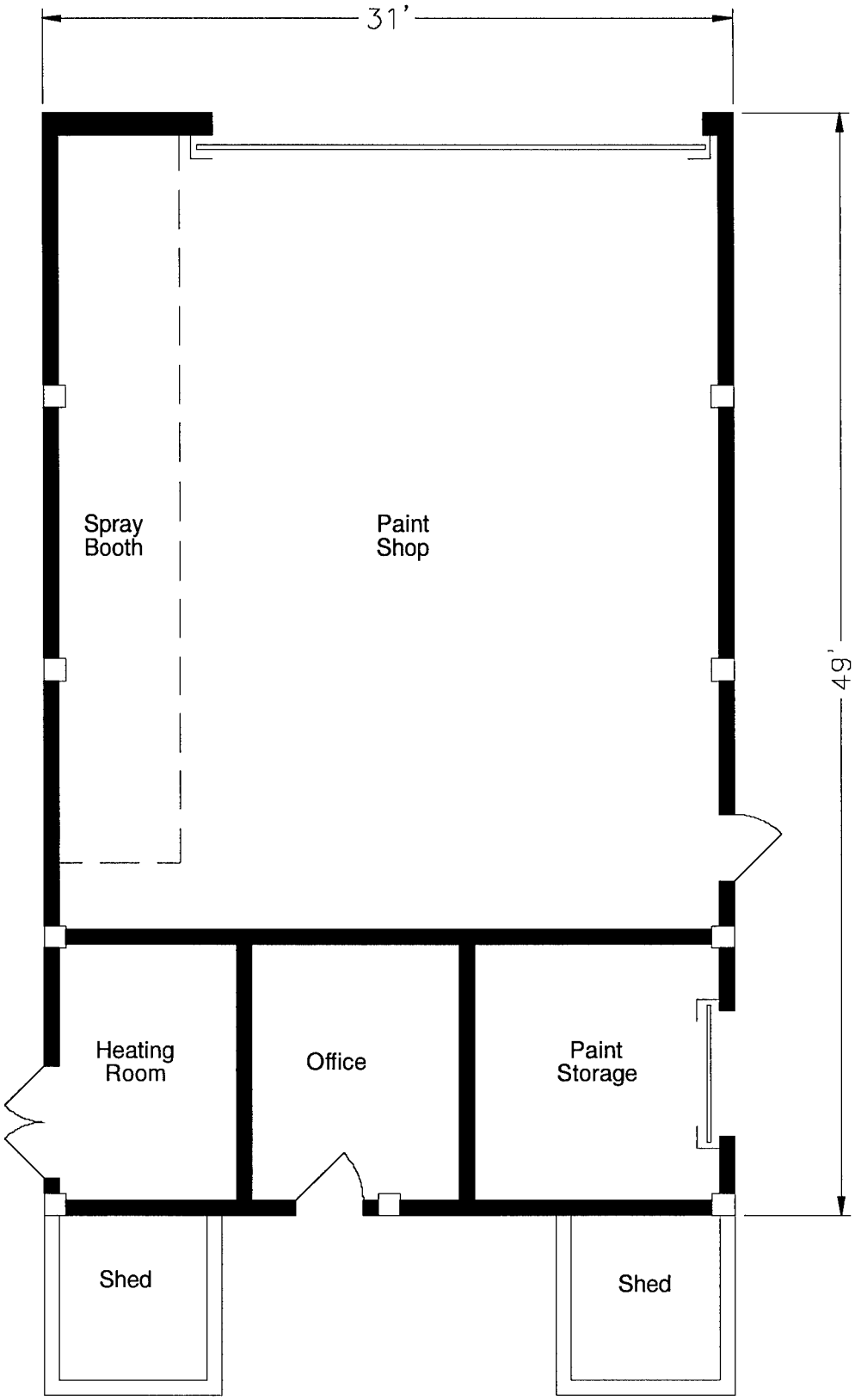
Comments:

X. FURTHER INFORMATION:

Surveyed By:

Jean Fulton
Sonya Cooper
2500 Jordan Road
Las Cruces, NM 88001

HAFB Report Number: **CRM Publication #3**
Photograph Citation: **CD-ROM #2-Photo #64**
Negatives On File: **49 CES/CEV, 550 Tabosa Ave, HAFB**
Date of Field Visit: **FALL 1995**



Source: CE File #848-1 (c1952)

State of New Mexico Office of Cultural Affairs Historic Preservation Division	**BUILDING 848** Holloman Air Force Base Alamogordo, New Mexico	Project No. 35-95-HAFB-4	AutoCAD rendering by: *Steve Merrill* New Mexico State University **Sheet 1 of 1**	NEW MEXICO STATE UNIVERSITY

COLD WAR SURVEY: HOLLOMAN AIR FORCE BASE

NAME:
Current: Test Track Building.
Historic: Test Track Building.
Street Address: 1513 Test Track Road, HAFB, 88330.

Building Number: 1182

I. GENERAL INFORMATION:

Current Condition: [x] Intact [ ] Needs maintenance [ ] Deteriorated [ ] Archaeological

Comments: Building 1182 appears to be well-maintained.

Degree of Alteration: [ ] None [ ] Minor [ ] Moderate [ ] Major

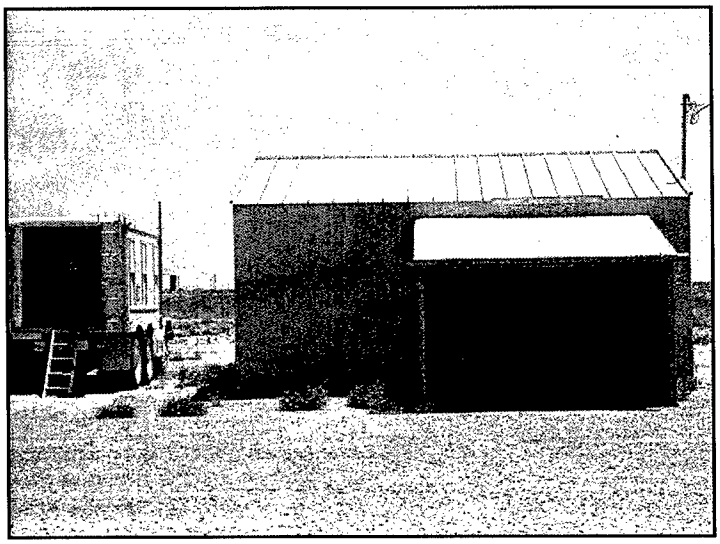
Comments: Unable to determine.

Preliminary Determination of National or State Register Eligibility:

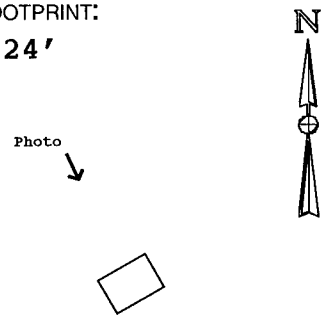
[ ] Exceptional importance [ ] Potentially eligible [ ] Further research recommended [x] Ineligible

Comments: Does not meet criteria for significance as an individual property.

Contact: Martyn Tagg, Archaeologist, 49 CES/CEV, 550 Tabosa Avenue, HAFB, NM 88330-8458.



BUILDING FOOTPRINT:
20′ x 24′



Date of completion: c1955

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 1182 is a small (20′ x 24′), gable roofed, metal storage facility with a shed roof at the sole entrance. The principal elevation faces northwest. Real Property Accountable Record/1182 indicates that this storage unit was constructed c1955 at a total cost of $7,700. Construction drawings were not located for this building. Although not verifiable through blueprints, all materials and design features appear to be original. Neither the architect nor the builder is known.

III. HISTORIC AND CURRENT USE:

Source: Real Property Accountable Record/1182; Field visit Summer 1996.

Current Function: Land-Air (DynCorp) Photo and Film Equipment Storage.

Original Function: High Speed Test Track support facility.

Interim Functions:

IV. ORIGINAL ARCHITECTURAL AND STRUCTURAL FEATURES (IF KNOWN):

Source: Real Property Accountable Record/1182.

Foundation: Concrete.

Exterior walls: Metal.

Roof: Metal.

Notable interior features, including machinery: None noted.

V. CURRENT FEATURES IF DIFFERENT FROM ORIGINAL:

Source: Field visit Summer 1996.

Foundation:

Exterior walls:

Roof:

Notable interior features, including machinery: None noted.

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VI. BRIEF STATEMENT OF HISTORIC SIGNIFICANCE:

Building 1182 does not meet National Register of Historic Places criteria for significance as an individual property, although it potentially could be considered as a contributing feature in a Multiple Property listing of the High Speed Test Track facilities.

VII. ASSOCIATED BUILDINGS:

Building 1182 has been associated with the High Speed Test Track facilities since its construction c1955. This facility also appears to have been associated with Building 841 (Land-Air Division of DynCorp), and continues to be managed and used by Land-Air personnel.

VIII. ADDITIONAL COMMENTS AND MAINTENANCE RECOMMENDATIONS:

Building 1182 is an ancillary, utilitarian structure which appears to retain all aspects of historic integrity, but does not meet National Register criteria for significance as an individual property. Currently, Land-Air Division of DynCorp personnel use the facility to store photographic and film equipment used in Track test documentation. Although construction drawings were not located for this storage facility, Building 1182 currently matches a description of square footage and materials in a Real Property Accountable Record/1182 assessment. According to this record, Building 1182 has operated (and continues to operate) as a High Speed Test Track storage facility since its completion c1955. Building 1182 could conceivably be considered as a contributing feature once the fifty-year date for its construction is met if a Cold War Multiple Property nomination is prepared for the Test Track facilities. Although up to the discretion of the Base Archaeologist, photo-documentation is recommended prior to the removal of or structural modifications to Building 1182 in the interim. No routine maintenance items were noted.

IX. ASSESSMENT OF HISTORIC INTEGRITY:

Note: No construction drawings for Building 1182 located. Assessment based on Real Property Record/1182.

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: Building 1182 is described as a "permanent" type of construction on Real Property Accountable Record/1182.

Design: What percentage of the elements (structural, technological, architectural and decorative) remain intact?

[x] Unable to determine [ ] <25% intact [ ] 25% to 50% intact [ ] 50% to 75% intact [ ] >75% intact

Comments: Current facility corresponds with Real Property Accountable Record/1182 description. Unable to confirm with construction drawings.

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: Continues to be surrounded by other High Speed Test Track support facilities.

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: Does not appear to have been modified architecturally or structurally. Walls match description itemized in Real Property Record/1182.

Workmanship: To what degree does the original structural and decorative craftsmanship remain visible?

Exterior: [x] Unable to determine [ ] <25% [ ] 25% to 50% [ ] 50% to 75% [ ] >75%

Interior: [x] Unable to determine [ ] <25% [ ] 25% to 50% [ ] 50% to 75% [ ] >75%

Comments: Building 1182 does not appear to have been modified since its original construction, but this observation will need to be verified through original blueprints, oral histories, and/or early photographs.

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 [ ] Some elements remain [x] Retains integrity

Comments:

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: This storage facility continues to function as it was originally designed.

X. FURTHER INFORMATION:

Surveyed By:

Jean Fulton
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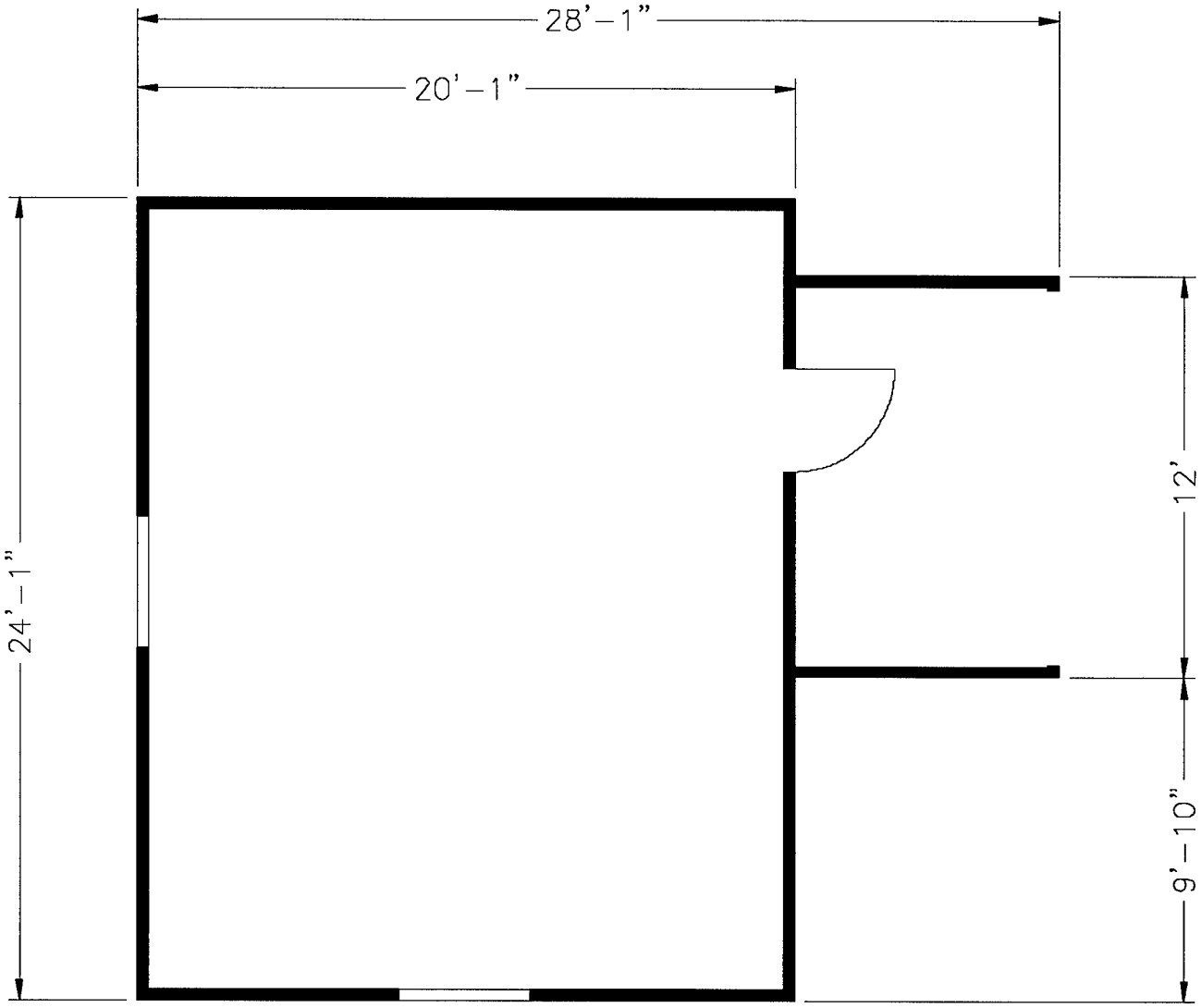
2500 Jordan Road
Las Cruces, NM 88001

HAFB Report Number: **CRM Publication #3**
Photograph Citation: **CD-ROM #1-Photo #66**
Negatives On File: **49 CES/CEV, 550 Tabosa Ave, HAFB**
Date of Field Visit: **SUMMER 1996**



Source: Real Property Accountable Record/1182;
Field visit Summer 1996.

State of New Mexico Office of Cultural Affairs Historic Preservation Division	**BUILDING 1182** Holloman Air Force Base Alamogordo, New Mexico	Project No. 35-95-HAFB-4	AutoCAD rendering by: *Eugene N. Kilmer* *(505) 323-0641* Mag Drafting **Sheet 1 of 1**

Construction Methods

The buildings surveyed for this report may be grouped into six primary structural systems: (1) Concrete Masonry Unit (CMU) walls with bond beams supporting steel joists, wood joists, or pre-cast concrete roof (2) Concrete filled CMU pilasters or concrete columns with CMU infill walls supporting concrete or CMU bond beams and steel or wood joists (3) Concrete frame with CMU infill supporting reinforced concrete floor and roof slabs (4) Steel bent unit frame (5) Steel column and truss frame and (6) Reinforced concrete walls and roof slab.

The buildings, their associated construction type, and construction date are tabulated in Appendix III.

An examination of the construction methods reveals the following patterns:

- Operational and Support Installations were not constructed using steel frames.
- Nearly all of the two-story steel frame structures were built for the Combat Weapons and Support Systems facilities.
- Every 2-3 story concrete frame building with CMU infill walls was built between 1952 and 1953.
- Most single story, high bay structures were built using concrete columns or CMU pilasters and CMU infill walls.
- Two storage buildings were built in 1955 using Steelox®, an integral stud/siding wall and roof system. Also, two steel frame hangar buildings completed in 1955 used Steelox ® as the siding and roof system.
- Most reinforced concrete wall and roof buildings were constructed as Materiel Development Facilities.

Function Dictates Design

The construction of most of the buildings included in the present survey was administered by the Army Corps of Engineers, Albuquerque District. Usually, all decisions governing design layout originate from the Base commander and/ or the user-group's manager, using guidance from the Corps, and the selected design contractor (particularly for materials and workmanship). The Air Materiel Command also had design responsibility, along with the Corps, for implementing many of the design decisions for these buildings.

With the exception of some Morale, Welfare, and Recreation (MWR) facilities, function dictates design in the early phases of nearly all military construction. Nowhere is this more evident at Holloman AFB than in the construction of a 90-foot tall, windowless, parachute-drying tower as part of Building 524.

Design Decisions

There are some obvious materials and methods chosen to best satisfy the requirements of the intended use for facilities documented in this report. Aircraft hangars and missile assembly buildings required large, uninterrupted, interior space. The roof system was required to span long distances, and needed to be strong enough to support heavy, concentrated loads such as hoisted aircraft or missile engines.

Structures subjected to blast forces had to be analyzed and designed to withstand these forces, requiring massive monolithic reinforced concrete pours and partial underground construction.

Archival Research

For many buildings that were not built for a specific function, it is not always obvious why designs and materials were selected without documentation of planning meetings and design review comments.

Research conducted at the National Archives (Southwest Region, Dallas-Ft.Worth, TX) revealed that decisions affecting the design, materials, and location of facilities at Holloman AFB were based upon a variety of factors. The following memorandums are included in Record Group 341, Row 26E 506, Boxes 4, 31-32, and 65 at the National Archives, Southwest Region:

29 June 1951 Memo
Decisions to use the Steelox® panel type buildings verses wood frame structures for storage facilities were based on fewer maintenance costs over the years, and a lesser initial cost per square foot. Judging from the memo, there also appeared to be some concern over the wearing surface of the wood flooring over wood joists as compared to the asphalt tile over the concrete slab in the Steelox® construction. It was felt that the latter would stand up better to the abrasive sand on the floors brought in by foot traffic. Buildings 60 and 701 are typical examples of Steelox® panel construction.

18 December 1953 Memo
"The board decided to locate this building south of Missile Assembly Building Number 1 (Building 822) in order to use the only area large enough to accommodate it adjacent to the parking ramp on the West side."

24 February 1953 Memo
"It is assumed therefore, that by future estimates of construction...it will be the Corps of Engineers procedure at this Base to prepare estimates for both types of construction from preliminary plans or definitives only, and if masonry is estimated to be in excess of 10% of the cost of frame, then designs will be prepared and bids solicited on frame construction only."

27 January 1953 Memo
A memo from the Missile Safety Committee was read at the meeting. The DF stated that an isolated building was necessary to house the Lockheed Missile Booster.

27 January 1953 Memo
Considerable random discussion was devoted to the possibility of erecting a pre-fabricated metal building to be used as a fighter hangar on the present hard stand between Missile Assembly Buildings #1 and #2. A brochure on pre-fabricated buildings was shown to the committee, and an informal proposal from Macomber Steel Company was quoted to the effect that an adequate fighter hangar could be constructed for approximately $40,000. It was decided that this hangar was needed for the protection of plane, personnel, and missiles during loading operations. Colonel Ostrander stated that it might be better to put the hangar on the other side of the ramp. It was finally agreed that the hard stand first considered would be the more desirable location. This item was included in the AIO Fiscal Year 1954 Budget. Colonel Ostrander considered the project with the idea of eventually dismantling and relocating the prefabricated portion, which he was informed could be done for between $5,000.00 and $10,000.00.

At times the decision to use a certain material or method was possibly based on availability alone. This would be the case with Operational and Support Facilities where function did not necessarily dictate a specific design. Steel

delivery was unpredictable, and correct shop fabrication was a gamble when the steel finally arrived. Contractors bid the steel high due to these unknowns (Personal communication, Frank Tatsch, Frank Tatsch General Contractor Summer 1996). The Corps of Engineers most likely recognized this and recommended the use of other materials such as concrete masonry construction.

Materials and Methods

None of the materials used for the construction of the facilities in this survey are unique to their construction dates. There are methods, however that may be unique. For example, some built-up roof sections contain gypsum, a material that is not normally used in this application. Also, prefabricated metal panels and entire prefabricated buildings became popular during World War II for their temporary service and quick erection. Possibly the most interesting construction methods noticed in this survey include the many types of steel roof trusses built for the Combat Weapons & Support Installations, and the excessive monolithic concrete structures built for the Materiel Development Facilities.

Trusses

Buildings 198, 375, 800, 816, 817, 820, 822, 823, 824, 825, and 1264 all have steel roof trusses. The truss designs are different in most cases, and are classified as types with respect to form, method of support, and the arrangement of the web-bracing system.

The form or outline is often determined by architectural considerations. The subdivision of a truss into triangular elements is accomplished by various arrangements of the web members (members that are framed between, and join, the upper and lower chord flange members). Some frequently used systems are named after the men who introduced them, such as Howe, Fink, Pratt, and Warren.

All trusses used in the buildings listed above are constructed using standard structural steel shapes. Steel angles usually make up the web and chord members, although long-span trusses may use rolled beam shapes, or built-up sections. "Long-span" is defined differently in textbooks and steel manufacturer's design tables, however, the term usually refers to those spans greater than 120 feet. The most common long-span trusses are either arched trusses or rigid unit bent frames, where the truss and its supporting column are designed as a rigid unit frame. Two frames form the bent. Building 500, for example, uses a rigid bent truss frame spanning 166 feet.

Blast Forces

Buildings subjected to planned blast or impact forces are, naturally, designed to withstand these effects. Reinforced concrete construction is the common method used for these structures. Buildings 640, 1161, 1162, 1163, 1175, and 1193, all fall into this category. Building 640 was designed to test jet engines, using 18-inch walls and roof, and two open sides. Building 1193 was designed to hoist missile and equipment components in order to test the effects of mock nuclear blasts. The roof is 18 inches thick. The walls taper from seven feet thick at the bottom, to two feet thick at the top.

Buildings 1161, 1162, 1163, and 1175 are all situated near the High Speed Test Track, with Building 1161 being the most remote from the track (approximately 2000 feet). These buildings are subjected to many different types of blast and impact forces, depending on the test being

performed. Buildings 1162 and 1163 are blockhouses within 500 feet of the track and exhibit two-foot thick walls and roof. Earthen fill has been placed against the walls and on the roof slab to help dampen the blast effects. Building 1175 is approximately 100 feet from the track and is mostly below grade, with a three-foot thick roof and 15-inch (foundation) walls. Building 1161 has a less conservative design, with 12-inch walls due to its distance from the track.

Summary

The process of designing and constructing buildings in the 1950s for the Department of Defense (DoD) was similar to the process that occurs today and parallels the design-bid construction process used in the civilian sector.

The Base Commander and the using agency continue to be the major influences for layout and design specifications. The US Army Corps of Engineers operated as a construction manager for the user, and was responsible for soliciting the design contract, overseeing the design phase, soliciting and awarding the construction contract, and overseeing construction.

As is the process today, the Corps selected a few design companies every specified number of years and distributed the approved projects for those fiscal years to the designated architects. Costs and square footage for the buildings included in this survey may be obtained from the Real Property Accountable Records (AF Form 1430) and DD form 2125.

Design contractors noted on many of the original blueprints for this project included W.C. Kruger, Kenneth Clark, and Gordon Herkenhoff. These design contractors, together with the Base commander, the using agency, and the Corps determined the design, materials, and specifications for each of the facilities.

The US Army Corps of Engineers is also responsible for including any design directives originating from Headquarters DoD or Headquarters US Army Corps of Engineers in Washington, DC into the design process. These directives may specify the use of specific construction materials for specific facilities, or may give generic floorplans to be used at any number of military installations.

Some design criteria are found in design manuals. For example, design criteria was adopted for the 6540th Missile Test Wing from the *Fiscal Year 1953 Public Works Program (Partial Listing Number 2)* manual. Design manuals were referred to by the design contractor for adherence to the design of specific materials.

Deviation from the above process occurred when certain agencies provided their own design. This is the case for Building 882, where original drawings were prepared by the Atomic Energy Commission.

Suggested future research would identify and interview the actual builders of these facilities, using the Army Corps of Engineers District Office in Albuquerque, NM as an initial contact for further information.

Recommendations

The Cold War-era properties surveyed for this report were assessed individually to determine whether or not each property is eligible for inclusion on the National Register of Historic Places.

National Register of Historic Places

The National Register of Historic Places is the official federal list of over 52,000 districts, sites, buildings, structures, and objects significant in American architecture, archaeology, engineering and culture. The National Register is maintained in Washington D.C. by the National Park Service for the Department of the Interior.

Eligibility

A property need not be actually *listed* on the National Register to warrant special consideration in the face of an adverse impact. A property need only be deemed *eligible* for the National Register to warrant special consideration. Properties potentially eligible for the National Register must (1) retain historic integrity and (2) exhibit historic significance.

Historic Integrity

Historic integrity is defined as the "authenticity of a property's historic identity, evidenced by the survival of physical characteristics that existed during the property's historic or prehistoric period" (USDI *Bulletin 16A* 1991: IV-2).

Historic Significance

Historic significance refers to the importance of the property within a local, State, or national context. Researchers must determine the nature of any contributions the property has made to the pattern of American history within a certain geographical area, and within a certain time period. A property constructed within the last 50 years will not be considered for inclusion on the National Register unless the property demonstrates "exceptional importance" (USDI *Bulletin 16A* 1991: 37).

Results

The results of the survey for this report indicate that 41 buildings do not meet National Register criteria for historic significance and/or historic integrity as individual properties, although 13 of these should be considered as contributing features if a HAFB Cold War-era Multiple Property nomination is prepared.

Another 21 properties do retain historic integrity, yet do not meet the "exceptional importance" standard required of properties constructed within the last 50 years. These properties are also not eligible for the National Register as individual properties. These buildings may, however, be eligible within the next decade or so once the fifty year construction designation has been met.

The remaining 11 buildings retain historic integrity, and have achieved "exceptional importance" by virtue of their distinctive design characteristices and/or the important research conducted at the facilities to achieve national Cold War initiatives. These buildings are therefore deemed eligible for the National Register of Historic Places.

These results are summarized in the following pages:

Properties Deemed Ineligible for the National Register of Historic Places

The following buildings either do not meet National Register of Historic Places criteria for historic significance, or do not meet National Register criteria for historic integrity. These properties are therefore ineligible for inclusion on the National Register. Although not eligible as individual properties, **buildings highlighted in bold should be considered as contributing features** if a Cold War-era Multiple Property nomination is prepared for the Base. Individual field forms should be consulted for a detailed assessment of National Register eligibility.

Number	Air Force Group	Historic Name	50-Years
22	**Operational & Support Installations**	**Water Pump Station**	**2003**
57	Operational & Support Installations	Veterinary Facility	2004
60	Operational & Support Installations	Covered Storage Facility	2005
113	Operational & Support Installations	Storage Shed	2004
115	Operational & Support Installations	Wrkshp/Classification Shed	2004
197	Operational & Support Installation	Garage, Ambulance	2005
198	**Operational & Support Installations**	**Ground Equip Repair Shop**	**2003**
221	Operational & Support Installations	Base Communications	2003
330	Operational & Support Installations	Airmens Dormitory	2003
331	Operational & Support Installations	Airmens Dormitory	2003
332	Operational & Support Installations	Airmens Dining Hall	2003
333	Operational & Support Installations	Airmens Dormitory	2003
375	**Operational & Support Installations**	**Warehouse**	**2002**
571	Operational & Support Installation	Base Operations	2005
701	Operational & Support Installations	Grease Storage Building	2005
702	Operational & Support Installations	Auto Shop,Base	2006
837	Operational & Support Installations	Aerospace Fuels Lab	2004
840	Operational & Support Installations	Sewage Pump Station	2002
880	Operational & Support Installations	Transmitter Building	2005
1097	Operational & Support Installations	Transmitter/Receiver	2003
1098	Operational & Support Installations	Transmitter Building	2003
1275	Operational & Support Installations	Water Supply Building	2002
820	Combat Weapons & Support Installations	Missile Vehicle Check-Out	2004
823	Combat Weapons & Support Installations	Missile Assembly Building	2002
824	Combat Weapons & Support Installations	Missile Assembly # 3	2003
825	Combat Weapons & Support Installations	Nose Hangar	2004
1197	**Combat Weapons & Support Installations**	**Armament Disposal Ready**	**2005**
1198	**Combat Weapons & Support Installations**	**Armament Disposal Ready**	**2005**
821	Training Facilities	Missile ProjectsTraining	2004
1074	Training Facilities	Target Drone OST Building	2005
839	Materiel Development Facility	Special Projects Lab	2002
848	Materiel Development Facility	Paint Shop	2003
855	Materiel Development Facility	Electronic Countermeasure	2005
1121	**Materiel Development Facility**	**Transmitter Telemetering**	**2003**
1182	**Materiel Development Facility**	**Test Track Building**	**2005**
1200	**Materiel Development Facility**	**Space Biology Lab**	**2004**
1203	**Materiel Development Facility**	**SC Lab Medical**	**2017**
1204	**Materiel Development Facility**	**Daisy Test Track/Vivarium**	**2011**
1205	**Materiel Development Facility**	**SC Lab Storage Components**	**2009**
PRL	**Materiel Development Facility**	**Primate Research Lab Facility**	**n.d.**
1645	**Materiel Development Facility**	**Instrumentation Station**	**2010**

Properties Retaining Historic Integrity, Yet Currently Ineligible

The following buildings have achieved at least a local level of significance, and retain most or all aspects of historic integrity. These buildings do not, however, meet the "exceptional importance" standard imposed on properties constructed within the last fifty years and are therefore currently not eligible for listing on the National Register of Historic Places. The buildings on this list may be eligible for the National Register once the fifty-year construction date has been met. For this reason, each of these properties has been designated as "Further research recommended" on the individual field forms. Management of these facilities should ensure that the essential features comprising historic integrity are retained, or that adequate documentation is obtained prior to irreversible alterations.

500	Combat Weapons & Support Installations	Aircraft Maintenance Hangar	2004
800	Combat Weapons & Support Installations	Missile Assembly Building #5	2007
816	Combat Weapons & Support Installations	Fighter Hangar	2005
817	Combat Weapons & Support Installations	Guidance Check Building	2005
822	Combat Weapons & Support Installations	Missile Assembly Building	2002
882	Combat Weapons & Support Installations	Shop & Test Bldg A.E.C.	2005
885	Combat Weapons & Support Installations	Missile Lab/Check-Out	2003
886	Combat Weapons & Support Installations	Check-Out Ready Room	2003
887	Combat Weapons & Support Installations	Missile Lab Check-Out	2003
1190	Combat Weapons & Support Installations	Change House/UFS	2002
1193	Combat Weapons & Support Installations	Continuity Check Stand/UFS	2002
1194	Combat Weapons & Support Installations	Booster Instpection/UFS	2002
1195	Combat Weapons & Support Installations	Solid Fuel Conditioning	2002
524	Materiel Development Facility	Parachute and Dinghy Shop	2005
640	Materiel Development Facility	Jet Test Cell	2010
835	Materiel Development Facility	(Track) Engine Test Shop	2004
841	Materiel Development Facility	Instrumentation Building	2002
849	Materiel Development Facility	Electron. & Atmos. Storage	2003
1103	Materiel Development Facility	Telemetering Building	1999
1178	Materiel Development Facility	Sled Maintenance & Repair	2004
1206	Materiel Development Facility	(Daisy Track) Sled Shed	2016

Properties Deemed Eligible for the National Register of Historic Places

The following buildings retain historic integrity, and have achieved a national level of significance. Although constructed within the last 50 years, unique design features and/or vital research conducted in support of national Cold War initiatives confers "exceptional importance" upon these properties. The following buildings are deemed eligible for inclusion on the National Register of Historic Places. Each of these properties has been designated as exhibiting "Exceptional importance" on the field forms.

It is the recommendation of this report that the following properties be nominated to the National Register as part of a Holloman AFB Cold War-era Multiple Property nomination:

Number	Air Force Group	Historic Name	50-Year
850	Materiel Development Facility	Electronics & Atmospheric	2003
1102	Materiel Development Facility	Radar Triangulation Building	2002
1159	Materiel Development Facility	Horizontal Test Stand	2006
1160	Materiel Development Facility	Horizontal Test Stand	2007
1161	Materiel Development Facility	Track Control - Midway	2007
1162	Materiel Development Facility	Blockhouse - Bravo	2007
1163	Materiel Development Facility	Blockhouse - Coco	2007
1175	Materiel Development Facility	Blockhouse - Alpha	1999
1201	Materiel Development Facility	Aero Med Field Lab	2001
1202	Materiel Development Facility	SC Lab Medical/Aero Med	2003
1264	Materiel Development Facility	Missile Assembly Building	2007

Note: Buildings 22, 198, 375, 1121, 1182, 1197, 1198, 1200, 1203, 1204, 1205, 1645, and the Primate Research Lab Facility (PRL) do not meet National Register criteria as individual properties, but should be considered as contributing features in a Cold War-era Multiple Property nomination. These properties are highlighted in bold on the "Properties Deemed Ineligible for the National Register of Historic Places" list.

Summary

Each building must be managed according to its eligibility status. Section 106 of the 1966 National Historic Preservation Act, as amended, mandates that Federal agencies must provide the Advisory Council on Historic Preservation an opportunity to comment on the effect of Federal, federally assisted, or federally licensed undertakings on properties included or eligible for inclusion on the National Register of Historic Places (Advisory Council 1995: III-3).

This consultation process or an appropriate programmatic agreement ensures that properties are not needlessly altered or demolished. New Mexico has a programmatic agreement with the Advisory Council which gives the State Historic Preservation Officer authority over undertakings affecting eligible properties.

Section 110 of the 1966 National Historic Preservation Act mandates that historic properties eligible for the National Register are documented prior to any substantial alterations, and that the records are then deposited in the Library of Congress or other appropriate repository (NHPA Section 110b).

Ineligible Properties

The properties in the first group have, in most cases, lost historic integrity in terms of design, materials, feeling, association, and workmanship. These properties are therefore not eligible for inclusion on the National Register. No special management consideration is warranted and no further documentation is necessary. Management of the properties culled as possible "contributing features" is not mandated. Suggested management techniques include photo-documentation prior to major alterations.

Currently Ineligible Properties

The properties in the second group have retained historic integrity. These properties do not meet the "exceptional importance" standard required of properties built within the last 50 years. These properties may, however, be eligible for the National Register once the 50-year date of their construction has been reached.

Since most of these buildings will reach the 50-year designation within the next decade, further research is warranted to determine the contribution of these buildings within a local, State, or national context.

It is not necessary that every example of every property type be preserved. Research should be conducted on a regional basis, though, to determine which buildings in this category are the most distinctive representatives of certain property types.

In the meantime, management of the buildings retaining historic integrity should ensure that historic integrity is maintained and/or documentation is provided prior to undertakings which alter the essential design features of each building.

Eligible Properties

The properties in the third group retain historic integrity, and have achieved significance at a national level. Management of these buildings should ensure that the buildings continue to maintain historic integrity.

If adverse impacts to these properties are deemed unavoidable after a thoughtful consultation process, it is recommended that these structures be fully documented using Level I or Level II HABS/HAER criteria.

Those properties already recorded through original and subsequent construction drawings may need only to be photographed and further documented using Level II criteria. Those properties not adequately documented through construction

drawings may need to be documented using measured drawings, photographs, and written research using Level I HABS/HAER criteria.

Multiple Property Listing

All of the buildings in the third group are thematically related. Personnel at each facility provided vital research in support of dual national Cold War initiatives to increase the nation's weapons arsenal and to land a human being on the moon.

The National Register of Historic Places Multiple Property Documentation Form (NPS-10-900-b) may be used to nominate groups of thematically related significant properties.

The Multiple Property Documentation Form is a cover document and is "...not a nomination in its own right, but serves as a basis for evaluating the National Register eligibility of related properties"(USDI *Bulletin 16B* 1991: 2).

The nomination of individual properties is accomplished using National Register Registration Forms (NPS-10-900). A nomination to the National Register that includes a Multiple Property Documentation Form, and is accompanied by individual registration forms, is known as a "multiple property submission."

It is the recommendation of this report that the properties in the third group be nominated to the National Register as part of a Holloman AFB Cold War-era Multiple Property submission, and that the properties highlighted in bold on the first list be considered as contributing features. Stewardship of the contributing features, although up to the discretion of the HAFB Cultural Resource Manager, would ideally include documentation through the use of photogoraphs and/or measured drawings prior to alterations.

Suggestions for Further Research

In addition to nominating the eligible Cold War properties and contributing features as part of a Multiple Property submission, several new avenues for further research revealed themselves during the course of the present study.

An assessment of the HAFB housing units using National Register criteria would identify those properties eligible for the Register and would provide insight into Congressional mandates and other influences regarding housing designs. A parallel inquiry could explore the continuing impact of the influx of military personnel on the economy and culture of surrounding communities including Alamogordo.

Oral histories with personnel involved in HAFB Cold War missions already underway in cooperation with the International Space Hall of Fame should be continued. The names and phone numbers of prospective interviewees have been included as part of the field forms whenever possible.

Documentary films of early missile launches and Test Track runs conducted at HAFB are archived at Maxwell AFB, the National Archives, and elsewhere. Making these films and a 1955 *"Threshold to Space"* Twentieth Century Fox film featuring Col. John Paul Stapp available to the public would provide an invaluable opportunity for educating current Holloman employees and the general public about the vital Cold War research conducted at Holloman AFB.

Damage due to vandalism at one theodolite shelter, the Aerobee launch site, and the Able 51 launch site demonstrates the immediate need for a concerted public education campaign.

A failed attempt in the early 1960s to create a breeding primate colony at HAFB through the construction of a chimpanzee consortium warrants further research. Early construction photos of the concrete moat are archived in the 49 FW/HO vault. An equally unique facility, the Horizontal Test Stand, also warrants further study.

Conclusion

Buildings, structures, and objects constructed in response to Cold War initiatives have only recently become the focus of a nationwide preservation effort. The present survey identifies eleven properties at Holloman AFB that are eligible for the National Register for Historic Places by virtue of their distinctive design characteristics and as a result of the vital research conducted at the facilities.

Each of the eligible HAFB facilities is associated with the High Speed Test Track, the Daisy Track and the Aeromedical Research facilities, or with early missile and balloon research. Each eligible property retains all or nearly all aspects of historic integrity, and has achieved a national level of historic significance. Although perhaps easy to take for granted now, these buildings serve as visible reminders that research conducted by qualified Holloman AFB personnel using a menagerie of animals and courageous human volunteers helped to ensure that the world's superpowers did not engage in nuclear warfare, and enabled the exploration into outer space.

It is noteworthy that Federal preservation law does not mandate that every historic property be preserved. Preservation legislation simply ensures that Federal undertakings are conducted with regard for safeguarding our nation's heritage as much as is reasonably possible. If significant cultural properties are to be irrevocably altered or destroyed, preservation law stipulates that properties eligible for the National Register be fully documented through measured drawings, photographs, and historical research prior to any adverse effect.

Managers of cultural resources constructed during the Cold War need now more than ever to coordinate with preservationists familiar with preservation laws, regulations, and recommendations. Preservationists in turn must rely upon the expertise of those familiar with the activities which occurred within scientific and military installations to help determine how these unique resources should be managed and cared for.

A delicate balance must be maintained. Users of historic Cold War buildings must be able to upgrade and reuse facilities constructed for purposes that are no longer adequate or even necessary. At the same time, future generations must be allowed to understand why the resources were constructed in the first place, how they were utilized, and what they mean. The buildings, structures, objects, and Cold War documents conserved today will provide the grist tomorrow for research into a unique and often perilous phase of world history.

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Appendix I: National Register Criteria

The quality of *significance* in American history, architecture, archeology, engineering, and culture is present in districts, sites, buildings, structures, and objects that possess *integrity* of location, design, setting, materials, workmanship, feeling, and association, *and*:

A. That are associated with events that have made a significant contribution to the broad patterns of our history; or

B. That are associated with the lives of persons significant in our past; or

C. That embody the distinctive characteristics of a type, period, or method of construction or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or

D. That have yielded, or may be likely to yield, information important in prehistory or history.

Criteria Considerations: Ordinarily cemeteries, birthplaces, or graves of historical figures, properties owned by religious institutions or used for religious purposes, structures that have been moved from their original locations, reconstructed historic buildings, properties primarily commemorative in nature, *and properties that have achieved significance within the past 50 years shall not be considered eligible for the National Register.* However, such properties will qualify if they are integral parts of districts that do meet the criteria *or* if they fall within the following categories:

A. A religious property deriving primary significance from architectural or artistic distinction or historical importance; or

B. A building or structure removed from its original location but which is significant primarily for architectural value, or which is the surviving structure most importantly associated with a historic person or even; or

C. A birthplace or grave of a historical figure of outstanding importance if there is no other appropriate site or building directly associated with his or her productive life; or

D. A cemetery which derives its primary significance from graves of persons of transcendent importance, from age, from distinctive design features, or from association with historic events; or

E. A reconstructed building when accurately executed in a suitable environment and presented in a dignified manner as part of a restoration master plan, and when no other building or structure with the same association has survived; or

F. A property primarily commemorative in intent if design, age, tradition, or symbolic value has invested it with its own historical significance; or

G. A property achieving significance within the past 50 years if it is of exceptional importance.

(Source: *National Park Service Bulletin 16A* 1991: 37. Emphasis added).

Appendix II: Legacy Resource Management Program

The following is a verbatim transcript of the statute creating the Legacy Resource Management Program:

PUBLIC LAW 101-511—NOVEMBER 5, 1990. 104 STATUTE 1905 SECTION 8120:

(a) The Secretary of Defense shall establish a "Legacy Resource Management Program".
(b) The purposes of the program are as follows:

(1) to establish a strategy, plan and priority list for identifying and managing all significant biological, geophysical, cultural and historical resources existing on, or involving, all Department of Defense lands, facilities and property;
(2) to provide for the stewardship of all Department of Defense controlled or managed air, land and water resources;
(3) to protect significant biological systems and species, including but not limited to, those contained on the Federal endangered list and those which are candidates for that list;
(4) to establish a standard Department of Defense methodology for the collection, storage and retrieval of all biological, geophysical, cultural and historical resource information which, in the case of biological information, should be compatible with that used by State Natural Heritage Programs;
(5) to establish programs to protect, inventory and conserve the artifacts of Native American civilization, settler communities and others deemed to have historical, cultural or spiritual significance;
(6) to establish inventories of all scientifically significant biological, geophysical, cultural and historical assets on Department of Defense lands. In addition to the specific attributes of the asset, these inventories are to catalog their scientific and/or cultural significance, as well as their inter-relationship to the surrounding environment, including the military mission carried out on the land upon which they reside;
(7) to establish programs for the restoration and rehabilitation of altered or degraded habitats;
(8) to establish educational, public access and recreation programs designed to increase public appreciation, awareness and support for these national environmental initiatives; and
(9) to establish and coordinate by fiscal year 1993 with other Federal departments, agencies and entities a project to inventory, protect and conserve the physical and literary property and relics of the Department of Defense, in the United States and overseas, connected with the origins and development of the Cold War, which are not already being carried out by other capable institutions or programs.
(c) The "Legacy Resource Management Program" shall be established under the Office of the Deputy Assistant Secretary of Defense for Environment.
(d) The Deputy Assistant Secretary of Defense for Environment shall seek the participation of Department of Defense components in the implementation of the Legacy Resource Management Program.
(e) $10,000,000 appropriated for "Operation and Maintenance, Defense Agencies" shall be available only for the establishment and support of the Legacy Resource Management Program.

Source: Public Law 101-511. "Defense Appropriations Act of 1991." Approved November 5, 1990.

Appendix III: Construction Types

I. One-Story Concrete Masonry Unit (CMU) Walls and Bond Beams

BUILDING	ROOF SYSTEM	PROPERTY TYPE	DATE
840	Concrete slab	Operational & Support	1952
880	Precast	Operational & Support	c1955
1097	Steel joists	Operational & Support	c1953
1098	Steel joists	Operational & Support	c1953
702	Wood joists	Operational & Support	1956
886	Wood joists	Combat Weapons & Support	c1953
1190	Steel joists	Combat Weapons & Support	c1952
1197	Precast	Combat Weapons & Support	c1955
1198	Precast	Combat Weapons & Support	c1955
821	Steel joists	Training Facilities	c1954
1074	Steel joists	Training Facilities	c1955
839	Steel joists	Materiel Development Facilities	c1952
855	Steel joists	Materiel Development Facilities	c1955
1103	Wood joists	Materiel Development Facilities	1949
1121	Precast	Materiel Development Facilities	c1953
1200	Steel joists	Materiel Development Facilities	c1954
1201	Wood joists	Materiel Development Facilities	c1951
1202*	Steel joists	Materiel Development Facilities	c1953
1203**	Steel joists	Materiel Development Facilities	c1967

* Clay tile walls
** Existing Building 1203

II. Concrete Columns or CMU Pilasters with CMU Infill Walls

BUILDING	ROOF SYSTEM	PROPERTY TYPE	DATE
57	Steel joists	Operational & Support	c1954
571*	Wood joists	Operational & Support	1955
198**	Steel trusses	Operational & Support	1953
837	Steel joists	Operational & Support	c1954
882	Steel joists	Combat Weapons & Support	1955
885	Steel joists	Combat Weapons & Support	c1953
887	Steel joists	Combat Weapons & Support	c1953
1194	Steel joists	Combat Weapons & Support	1952
1195	Steel joists	Combat Weapons & Support	1952
524	Steel joists	Materiel Development Facilities	c1955
848	Steel joists	Materiel Development Facilities	c1953
1204	Steel purlins	Materiel Development Facilities	c1961

III. Concrete Frame with CMU Infill Walls Supporting Reinforced Concrete Floor and Roof Slabs

BUILDING	ROOF SYSTEM	PROPERTY TYPE	DATE
22	1-story	Operational & Support	c1953
221		Operational & Support	c1953
330	2-story	Operational & Support	c1953
331	2-story	Operational & Support	c1953
332	1-story	Operational & Support	c1953
333	3-story	Operational & Support	c1953
841	3-story	Materiel Development Facilities	c1952
849	1-story	Materiel Development Facilities	c1953
850	3-story	Materiel Development Facilities	c1953
1102	1-story	Materiel Development Facilities	1952

* Building 571 is the only two-story building in this group. The rest are one-story.
** Building 198 is the only high-bay building in this group.

IV. Steel Bent Unit Frame

BUILDING	PROPERTY TYPE	DATE
113	Operational & Support	c1954
115	Operational & Support	c1954
835	Materiel Development Facilities	c1954
1178*	Materiel Development Facilities	c1954
1205	Materiel Development Facilities	c1959
1206	Materiel Development Facilities	c1966

V. Steel Column and Truss Frame

BUILDING	PROPERTY TYPE	DATE
375	Combat Weapons & Support	c1952
500	Combat Weapons & Support	1954
800	Combat Weapons & Support	c1957
816***	Combat Weapons & Support	c1955
817***	Combat Weapons & Support	c1955
820	Combat Weapons & Support	c1954
822	Combat Weapons & Support	c1952
823	Combat Weapons & Support	1952
824	Combat Weapons & Support	1953
825	Combat Weapons & Support	c1954
1264	Combat Weapons & Support	1956
1178**	Materiel Development Facilities	c1957

* Original Building 1178
** Subsequent Improvements to Building 1178
*** Real Property Records/816 and 817 indicate Steelox® integral stud and siding system

VI. Reinforced Concrete Walls and Roof

BUILDING	PROPERTY TYPE	DATE
1275	Operational & Support	c1952
1193	Combat Weapons & Support	c1952
640	Materiel Development Facilities	c1960
1159	Materiel Development Facilities	c1956
1160	Materiel Development Facilities	c1957
1161	Materiel Development Facilities	c1957
1162	Materiel Development Facilities	c1957
1163	Materiel Development Facilities	c1957
1175	Materiel Development Facilities	c1949
1645	Materiel Development Facilities	c1960

VII. Steelox®

BUILDING	PROPERTY TYPE	DATE
60	Operational & Support	c1955
701	Operational & Support	c1955

VIII. Wood Frame

BUILDING	PROPERTY TYPE	DATE
1203*	Materiel Development Facilities	n.d.
PRL Facility	Materiel Development Facilities	n.d.

IX. Metal Shed

BUILDING	PROPERTY TYPE	DATE
197	Operational & Support	c1955
1182	Materiel Development Facilities	c1955

* Original Building 1203

Appendix IV: List of Real Property Acronyms

The following list defines acronyms used in Real Property Accountable Records cited in the field forms. Definitions are quoted from an official Real Property Category Codes List (24 March 1994), and is based on information provided by Diana Moya, HAFB Real Property Officer (Personal communication with Martyn D. Tagg, Spring 1997).

A,B&C	Less hazardous munitions (e.g. fuse lighters, distress signals, etc.)
A/C	Aircraft
ACFT	Aircraft
ADMIN	Administration
AERO	Aerospace
AF	Air Force
AFOSI	Air Force Office of Special Investigations
AG	Above Ground
AGE	Aircraft Ground Equipment
AM	Airman
AMMO	Ammunition
ARM	Armament/Arming/Arms/Anti-Radiation Missile (?)
A/SE	Aircraft Support Equipment
ASMB	Assembly
AUTO	Automobile
BE	Base Engineer
BLDG	Building
BSE	Base
B/U	Built Up
BUR	Built-up Roof
C-Storage	Central Storage
CALIBRAIN	Calibration
CDNC	(??)
CEN	Center
CLOTH	Clothing
CMU	Concrete masonry units
CNTL	Control
COMM	Communications
CON	Control
CTR	Center
CV	Covered

NOTE: (??) = Acronym unknown; (?) = Probable meaning; [ ] = Alternate spelling.

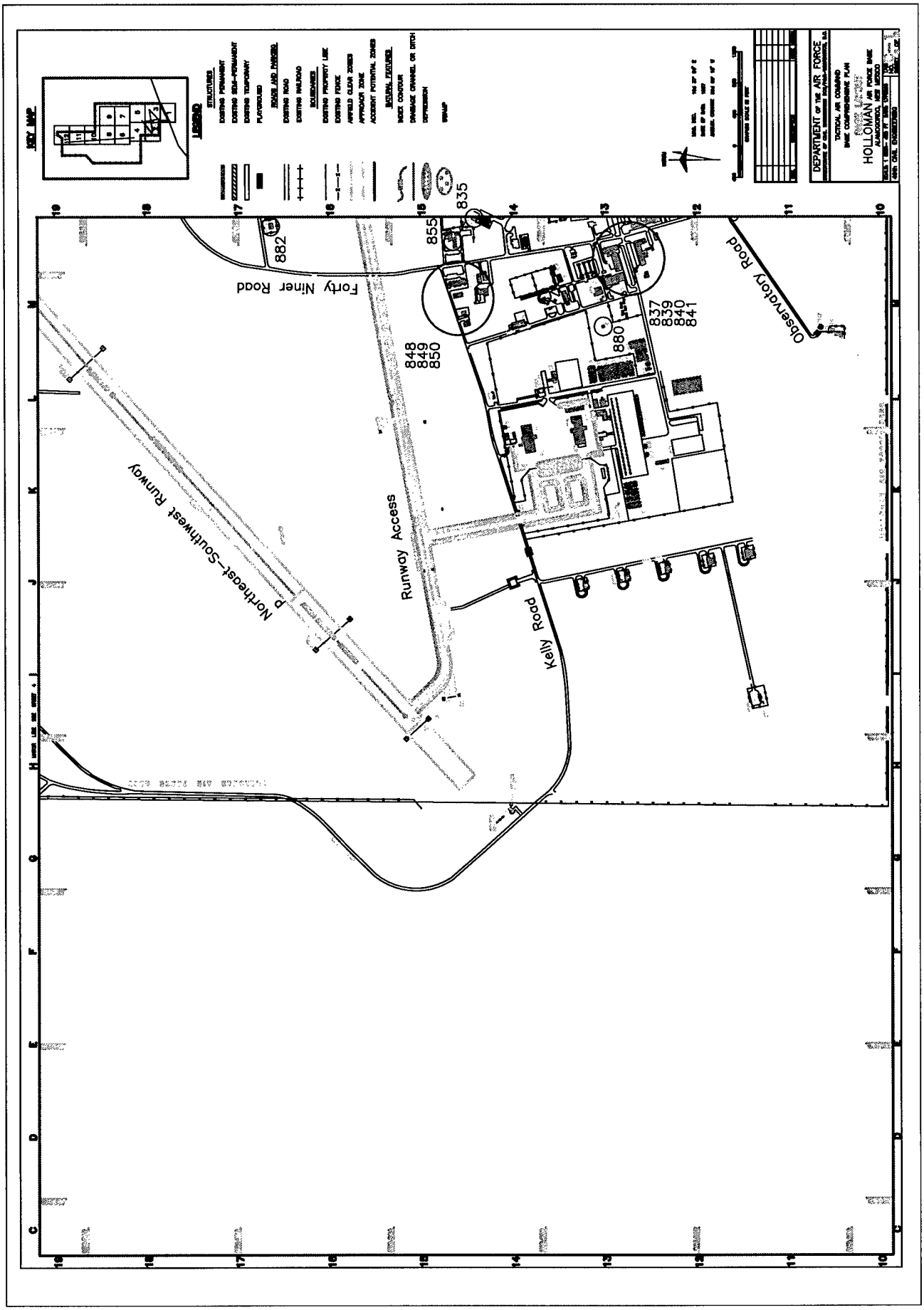
DIV	Division
DORM	Dormitory
ED	Education
EIFS	Exterior Insulation and Finish System
EL[CT]	Electrical/Electronics
ELEC[T]	Electrical/Electronics
ENG	Engine/Engineer/Engineering
ENGRG	Engineering
EQUIP	Equipment
EXCH	Exchange
FCLTY	Facility
FLT	Flight
FRT	Freight
GEN[ER]	General
GEOPHY	Geophysics
G/M	Guided Missile
GRND	Ground
GSE	(??)
HQ	Headquarters
HVAC	Heating, Ventilating, & Cooling
I	Inspection
LAB	Laboratory
LUB	Lubricant
M	Missile
M/A	Medium Aircraft
M/Assembly	Missile Assembly
MAG	Magazine
MAINT	Maintenance
MED	Medical/Medium
MGMT	Management
MSL	Missile
MUN	Munitions
MWR	Morale, Welfare, & Recreation
NAF	Non-appropriated Funds
NAVAID	Navigational Aids
NCO	Non-commissioned Officer
OFC	Office
OPR	Operating (?)
OPS	Operations
OSI	Office of Special Investigations
PCS	Permanent Change of Station
PKNG	Parking

PLT	Plant
POL	Petroleum Operating Location
PP	Permanent Party
PROF	Professional Military
PROP[UL]	Propulsion
PRPLN	Propulsion
PURP[S]	Purpose
Q/C	Quality Control
QLTY	Quality
RC	Range Control/Radio Control (?)
RDR	Radar
REPR	Repair
RES	Research
RKT	Rocket
R-L	Research Laboratory (?)
RLSE	Release
RSCH	Research
R/T	Research/Testing (?)
S/A	Small Aircraft
S/ARMS	Small Arms
SC	Science
SHP	Shop
SIMLTR	Simulator
SP	Security Police
STD	Student
STOR	Storage
SUP	Supplies
SYS	System
T	Training
TECH	Technical
TELE	Telephone
TELECOM	Telephone communications
TNG	Training/Transit
TRML	Terminal
TST	Test
UHF	Ultra High Frequency
VAQ	Visiting Airman Quarters
VEH	Vehicle
WG	Wing
WHSE	Warehouse
WPN	Weapon

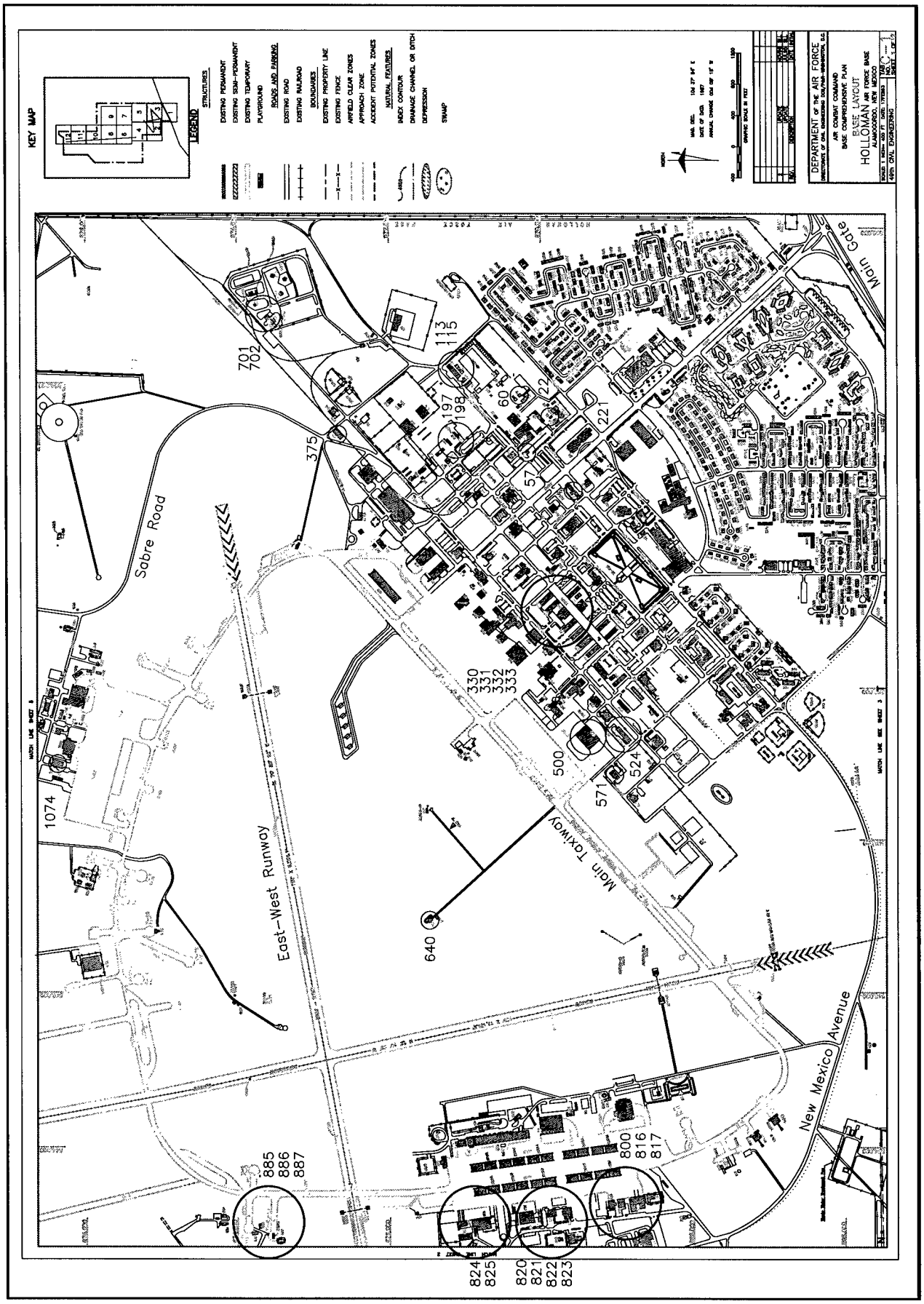
Appendix V: HAFB Building Location Maps

Holloman Air Force Base is demarcated on a series of twelve maps prepared by the 49 CES/CECNC drafting staff. The following table lists each building included in this report and its corresponding HAFB map number. Seven maps locating each of the buildings included in this report are provided in the pages following this table.

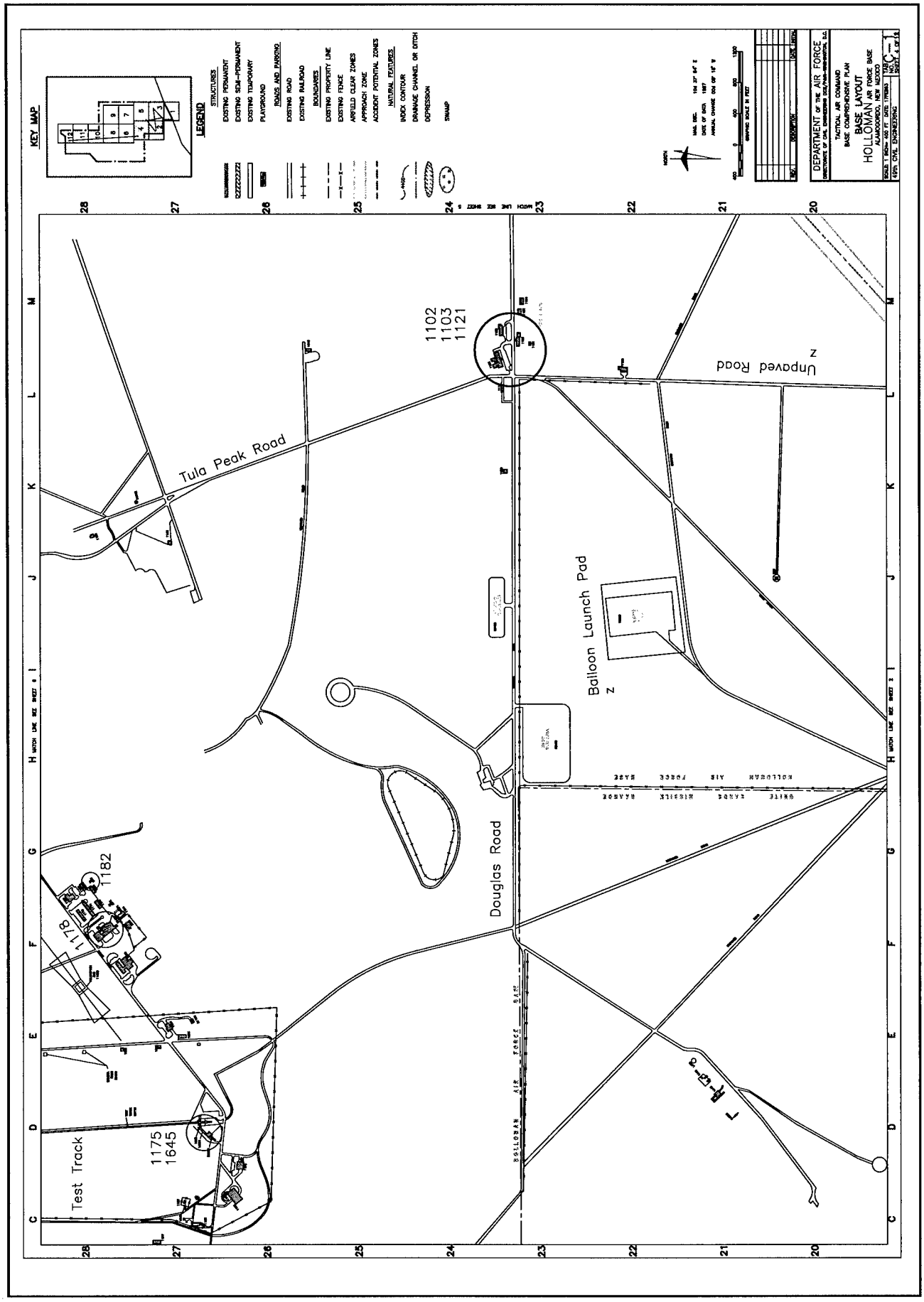
Building 22	Map 3
Building 57	Map 3
Building 60	Map 3
Building 113	Map 3
Building 115	Map 3
Building 197	Map 3
Building 198	Map 3
Building 221	Map 3
Building 330	Map 3
Building 331	Map 3
Building 332	Map 3
Building 333	Map 3
Building 375	Map 3
Building 500	Map 3
Building 524	Map 3
Building 571	Map 3
Building 640	Map 3
Building 701	Map 3
Building 702	Map 3
Building 800	Map 3
Building 816	Map 3
Building 817	Map 3
Building 820	Map 3
Building 821	Map 3
Building 822	Map 3
Building 823	Map 3
Building 824	Map 3
Building 825	Map 3
Building 835	Map 2
Building 837	Map 2
Building 839	Map 2
Building 840	Map 2
Building 841	Map 2
Building 848	Map 2
Building 849	Map 2
Building 850	Map 2
Building 855	Map 2
Building 880	Map 2
Building 882	Map 2
Building 885	Map 2
Building 886	Map 2
Building 887	Map 2
Building 1074	Map 3
Building 1097	Map 5
Building 1098	Map 5
Building 1102	Map 4
Building 1103	Map 4
Building 1121	Map 4
Building 1159	Map 8
Building 1160	Map 8
Building 1161	Map 8
Building 1162	Map 8
Building 1163	Map 10
Building 1175	Map 4
Building 1178	Map 4
Building 1182	Map 4
Building 1190	Map 5
Building 1193	Map 5
Building 1194	Map 5
Building 1195	Map 5
Building 1197	Map 7
Building 1198	Map 7
Building 1200	Map 5
Building 1201	Map 5
Building 1202	Map 5
Building 1203	Map 5
Building 1204	Map 5
Building 1205	Map 5
Building 1206	Map 5
Building 1264	Map 7
Building 1275	Map 7
Building 1645	Map 4
PRL Facility	Map 5



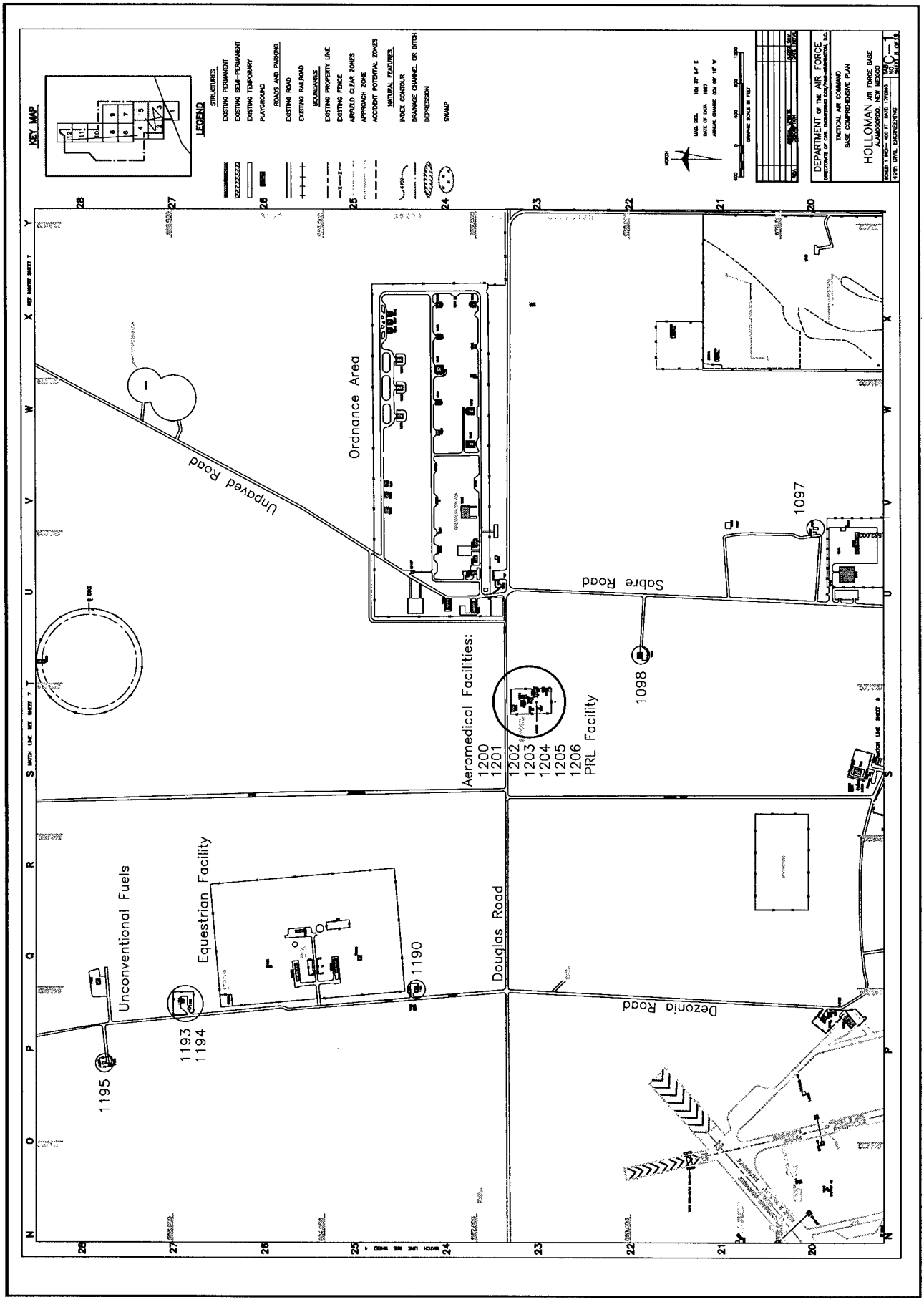
Locator Map 2: Buildings 835, 855, 837, 839-841, and 848-850



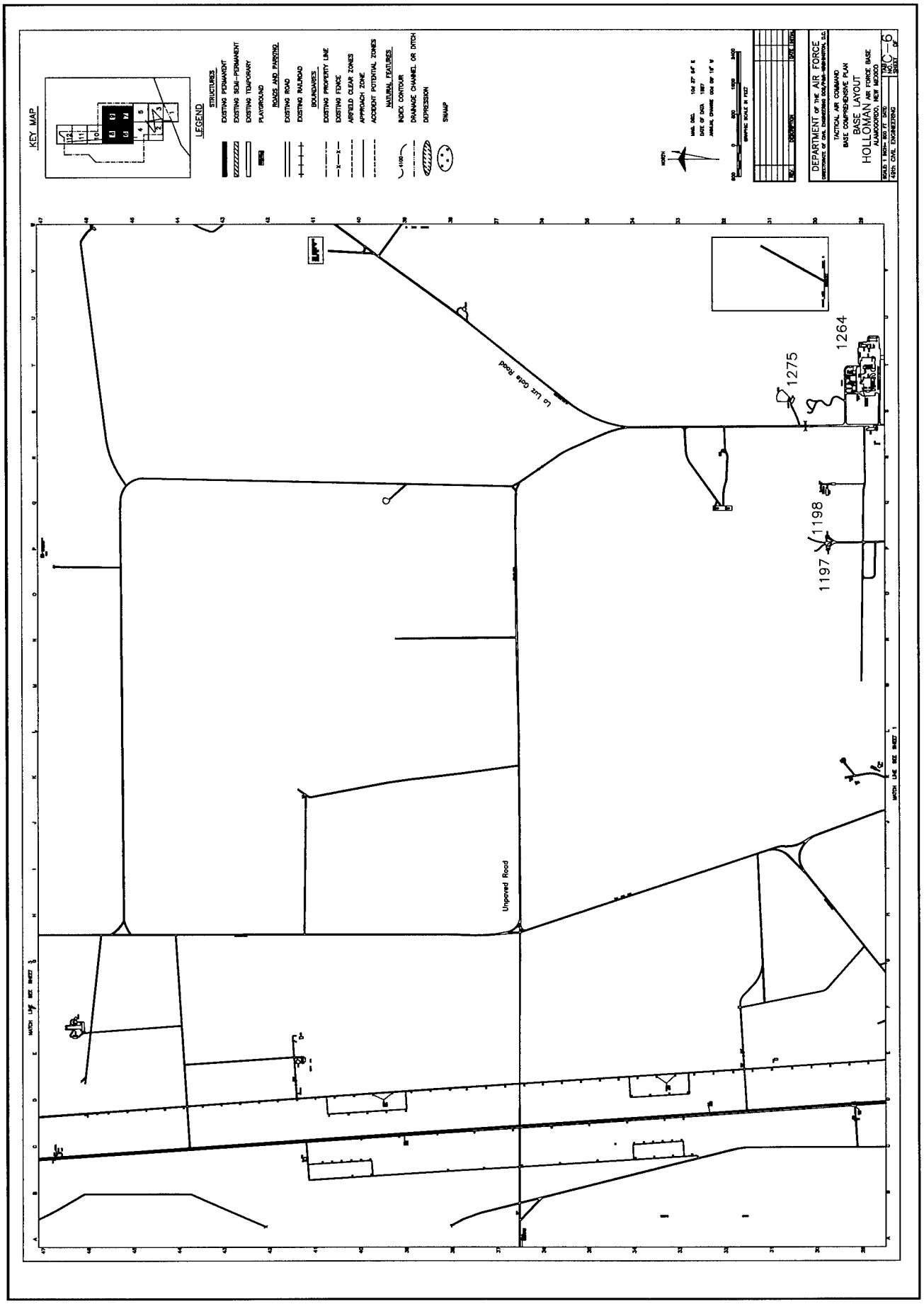
Locator Map 3: Buildings 22, 57, 113, 115, 197-198, 221, 330-333, 375, 500, 524, 571, 640, 701-702, 800, 816-817, 820-825, 885-887 and 1074



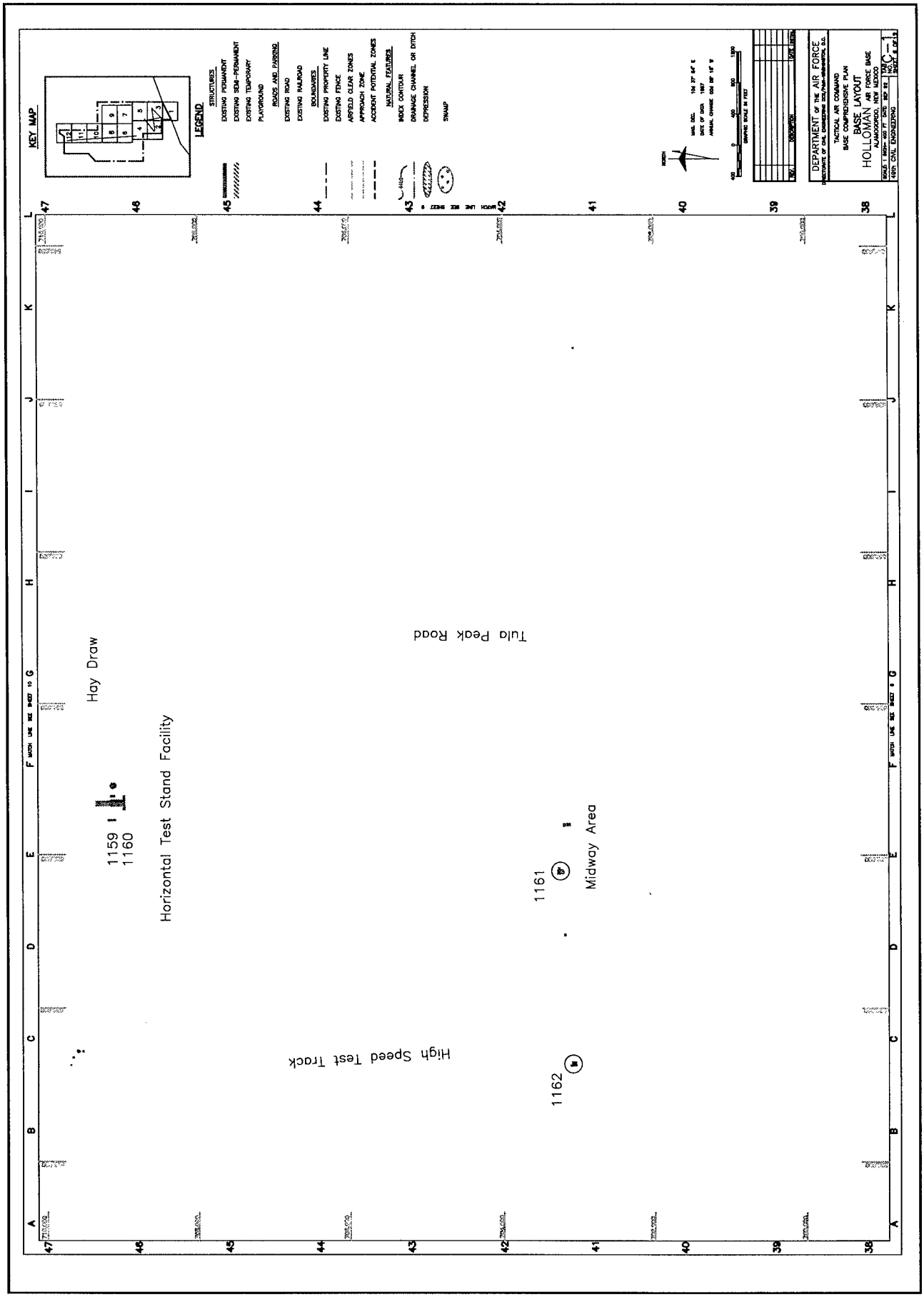
Locator Map 4: Buildings 1102-1103, 1121, 1175, 1178, 1182, and 1645



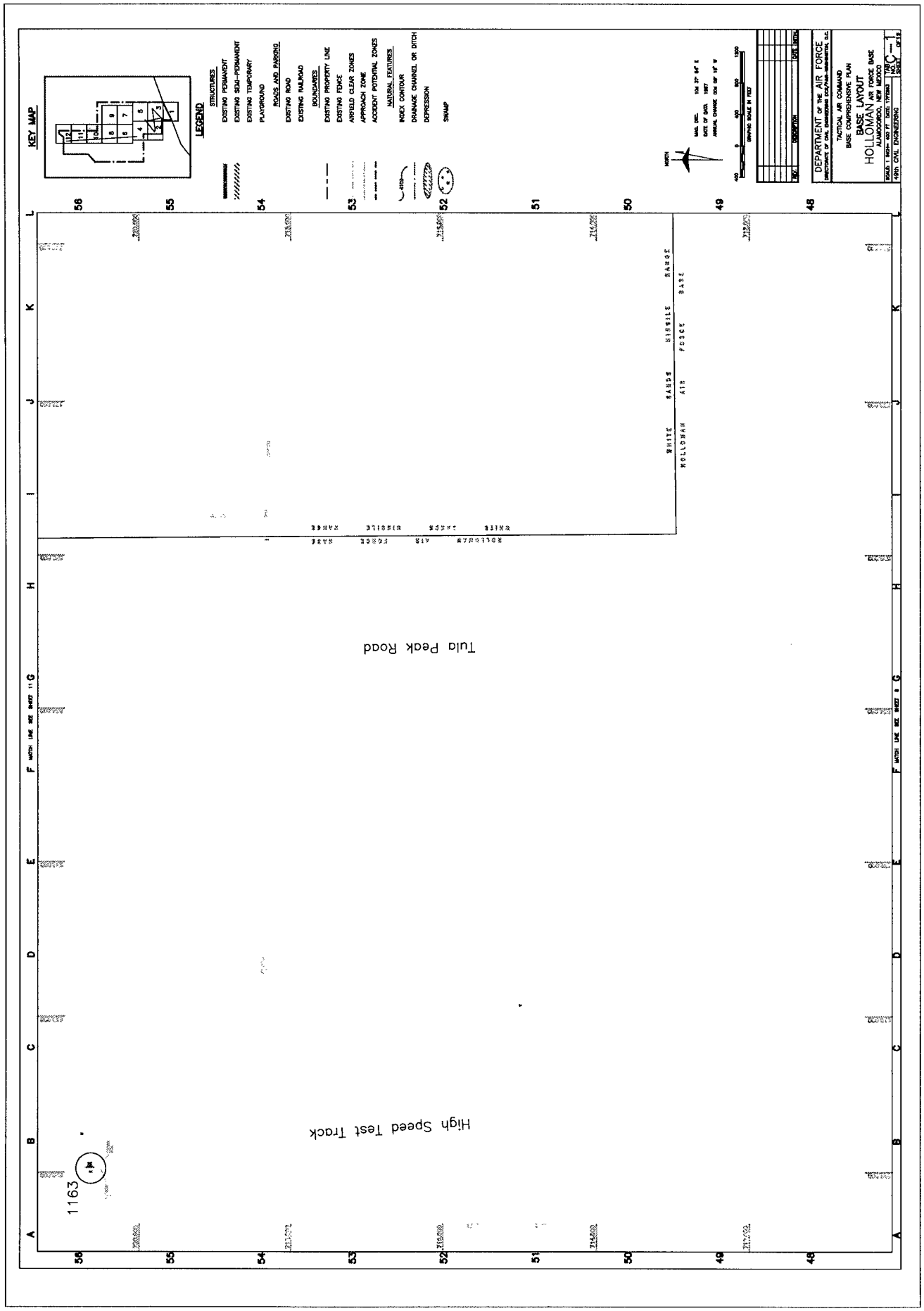
Locator Map 5: Buildings 1097-1098, 1190, 1193-1195, 1200-1206 and the PRL Facility



Locator Map 7: Buildings 1197-1198, 1264, and 1275



Locator Map 8: Buildings 1159-1163



Locator Map 10: Building 1163

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Jean Fulton received a B.A. in English and Anthropology from West Virginia University in 1981, and received a B.A. in Historic Preservation from Mary Washington College in 1993. She is pursuing a Master of Arts degree in Public History at New Mexico State University, and a Certificate of Computer Graphics at New Mexico State University Dona Ana Branch. As an archaeologist with the USDA Lincoln National Forest, Jean participated in cultural resource clearance surveys and prepared nominations to the National Register of Historic Places. Currently, Jean is providing Level I HABS/HAER documentation including large-format photographs and AutoCAD-generated measured drawings of the Crescent Moon historic homestead for the USDA Coconino National Forest. She is providing Level IV HABS/HAER documentation of 32 World War II properties at Holloman Air Force Base for Geo-Marine, Inc. (El Paso, TX) as co-investigator and is serving as Project Director for Human Systems Research, Inc. (Las Cruces, NM) on two National Historic Landmark ranch house stabilizations for the White Sands Missile Range, and an adobe stabilization project at Fort Selden for the Museum of New Mexico, New Mexico State Monuments program.

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HOLLOMAN AFB CULTURAL RESOURCES PUBLICATIONS

1. I NEVER LEFT A PLACE THAT I DIDN'T CLEAN UP: The Legacy of Historic Settlement on Lands Administered by Holloman Air Force Base. Lori S. Hawthorne, 1994.

2. "WE DEVELOP MISSILES, NOT AIR": The Legacy of Early Missile, Rocket, Instrumentation, and Aeromedical Research Development at Holloman Air Force Base. Wayne O. Mattson and Martyn D. Tagg, 1995.

3. "FULL MORAL AND MATERIAL STRENGTH": The Early Cold War Architectural Legacy at Holloman Air Force Base, New Mexico (ca. 1950-1960). Jean Fulton and Sonya Cooper, 1996.

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