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Fort Huachuca Ranges: A History and Analysis

Susan I. Enscoe, Dawn A. Morrison,
Adam D. Smith, and Sunny E. Adams

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Cover Photo: View north along target butt of Range 6 (ERDC-CERL 2016).

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Abstract

Fort Huachuca Environmental and Natural Resources Division (ENRD) sent funds to ERDC-CERL to develop a historic context that assists Fort Huachuca personnel in identifying the likely history and provenance of numerous historic range features located across Fort Huachuca's training lands. The historic context will be used by cultural resources personnel to evaluate and manage the resources appropriately. Various historic training range features (e.g., structures, fragments, and items left over from previous activities) are located across the ranges of Fort Huachuca, representing its long and storied history. To help identify and catalog these features, ERDC-CERL conducted a field survey of the training ranges in 2016 in order to photograph the historic range features. Forty-one historic range features were identified. Researchers conducted archival research, literature reviews, and image analysis of historic and current maps and photographs to identify the 41 historic range features and place them within a chronological context of Fort Huachuca's training ranges. The report concludes with guidance on how to identify and associate sites and features within the overall historic training range chronology and evaluate them appropriately for significance and National Register of Historic Places (NRHP) eligibility.

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Preface

This study was conducted for the Environmental and Natural Resources Division (ENRD) in the Directorate of Public Works at Fort Huachuca, Arizona, under Project No. 454545, "Training Lands Inventory for Ft. Huachuca," MIPR 10745751. The technical monitor was Mr. Martyn Tagg, Cultural Resources Manager and later ENRD Conservation Branch Chief.

The work was performed by the Land and Heritage Conservation Branch, of the Installations Division, of the Engineer Research and Development Center, Construction Engineering Research Laboratory (ERDC-CERL). At the time of publication, Ms. Ellen Hartman was Chief, Land and Heritage Conservation Branch; Mr. Charles Schroeder was Chief, Installations Division; and Mr. Kurt Kinnevan was the Technical Director for Environmental Quality and Installations. Ms. Michelle Hanson was the Deputy Director and Dr. Andrew Nelson was the Director of ERDC-CERL.

COL Teresa A. Schlosser was Commander of ERDC, and Dr. David W. Pittman was the Director.

1 Methodology

1.1 Background

Fort Huachuca Environmental and Natural Resources Division (ENRD) contracted with ERDC-CERL to conduct research, complete a range historic context, and help identify numerous historic range features located across Fort Huachuca's training lands so cultural resources personnel can evaluate and manage the resources appropriately. Fort Huachuca has a long, and storied history that spans several major historic periods within U.S. history. From its inception as a frontier outpost, Fort Huachuca has been involved with the Apache Wars, Mexican border issues, Buffalo Soldiers, WWII, the WPA, and communications advancements during the Cold War. Its training ranges have born witness to these major historic periods and have consequently grown and adjusted to accommodate the Fort's changing missions and the U.S. military's evolving technology.

Fort Huachuca was established in 1877 to protect settlers in the southern portion of the Arizona Territory, only 15 miles north of the United States/Mexico border. Cavalry and infantry stationed at Fort Huachuca continued a frontier pacification and protection mission until the 1890s. As frontier posts throughout the West were consolidated or decommissioned, Fort Huachuca remained active due to its proximity to the international border and favorable location. Permanent buildings constructed during this period reflect the growth in size and importance of the fort. The Buffalo Soldiers of the 10th Cavalry Regiment called Fort Huachuca home for eighteen years beginning in 1913, and the post acted as the staging area and supply base for the Punitive Expedition of 1916–17.¹ Drastic troop reductions after World War I resulted in the 10th Cavalry being transferred in 1931, while Fort Huachuca became the home of the 25th Infantry from 1928 to 1942.² Fort Apache was deemed surplus to requirements in October 1922, and one of the few remaining Indian Scout detach-

¹ Cornelius C. Smith, *Fort Huachuca: The Story of a Frontier Post* (Washington, DC: U.S. Government Printing Office, 1978), 174–176, 198.

² *Ibid.*, 198.

ments was transferred to Fort Huachuca. The Indian Scouts remained activated, dwindling in number until only four remained, and the detachment was deactivated along with the post in 1947.³

During the Depression, construction by the Civilian Conservation Corps (CCC), Works Progress Administration (WPA), and Civil Works Administration (CWA) modernized and upgraded Fort Huachuca, replacing or renovating existing buildings and building new facilities. These groups were integral in rehabilitating existing or building new roads, wells, buildings, bridges, and other infrastructure critical to the survival of the installation. These work projects continued to the beginning of World War II when Fort Huachuca turned its focus to training soldiers headed to Europe and the Pacific. This new and largely temporary Depression-era construction was centered near the Van Deman Gate (previously the East Gate) of Fort Huachuca.⁴

Following World War II, the fort closed in 1947 in an effort to curb post-war spending, was reactivated in 1951 for the Korean War, and again shut down in 1953 when operations for the war subsided.⁵ However, in 1954 the fort was returned to permanent use and became the site of the U.S. Army Electronic Proving Ground (EPG). As a result, the fort saw another growth spurt during the 1950s and early 1960s that put it at the forefront of military research and development for electronic warfare. Other related army organizations were sited at Fort Huachuca during the 1960s and 1970s. These include the U.S. Army Strategic Communications (STRATCOM) command in 1967 (now the Network Enterprise Command [NETCOM]) and the U.S. Army Intelligence Center and School (USAICS) in 1971 (now the U.S. Army Intelligence Center of Excellence [USAICoE]). These major commands operate at the fort and are the main focus of activity at the present time.⁶

³ Ibid., 273.

⁴ Carla R. Van West, Mark T. Swanson, and Jeffrey H. Altschul, *Cultural Resources Management Plan for Fort Huachuca Military Reservation, Arizona*, Technical Series No. 67 1997 (Tucson, AZ: Statistical Research Inc.) [FH-97-12].

⁵ Smith, 311.

⁶ Van West et al. 1997.

1.2 Objective

The objective of this report is to create a historic context by identifying numerous historic range features located across Fort Huachuca range lands that are suspected of being remnants of former training range infrastructure.

1.3 Methodology

Researchers conducted archival research at the National Archives and Records Administration in Washington, DC, and College Park, MD, and Riverside, CA; the Fort Huachuca Real Property Office and Museum; and the Corps of Engineers in Phoenix, AZ. Materials gathered from the archival research along with previous historic contexts and training range reports were also used to compile a history and chronology of training activities at Fort Huachuca. Researchers also consulted and compared historic and current maps and photographs to ascertain a chronology of Fort Huachuca's training ranges and their locations and functions. A field survey of the training ranges was conducted in 2016 in order to photograph the historic range features.

The report is organized as follows: Chapter 2 provides an overarching chronology and historic context of training activities at Fort Huachuca from its founding to the present day. Chapter 3 focuses on the historical geography of individual training ranges located at Fort Huachuca. The material in Chapter 3 is organized by geography and traces the lineage (name and function) of each training area. Historic range features are then identified and associated with their most likely historic range function and time period.

1.4 Researchers

This project was conducted by the U.S. Army Corps of Engineers, Engineering Research Development Center, Construction and Engineering Research Laboratory (ERDC-CERL), based in Champaign, Illinois. The research team included Adam D. Smith, Master of Architecture, as project manager with 22 years of experience in military architectural history; Susan Ensore, Ph.D. Geography, with 27 years of military cultural resources experience; Sunny E. Adams, Master of Architecture, as

architectural historian with 17 years of experience; and Dawn A. Morrison, Ph.D. Geography, with 20 years of military cultural resources experience.

2 Chronology of Training Activities

2.1 Brief overview history

Fort Huachuca was founded as a cavalry outpost in 1877 by Captain Samuel Marmaduke Whitside and was made a permanent Army post in 1882.⁷ The narratives associated with the post's early years revolve around the well-known figures of Geronimo, an Apache leader, and Pancho Villa, a Mexican revolutionary. Just prior to World War I (WWI), the post grew substantially, and between 1913–1931, Fort Huachuca was home to the 10th Cavalry (redesignated the 10th Infantry in 1931), during which time the post was adapted to routine Army garrison life.⁸ During World War II (WWII), the 92nd and 93rd Infantry Divisions were assigned to the fort, making it the largest training facility for Black soldiers in the country.⁹

As a result of National Guard activation and the Selective Services Act of 1940, the Army increased in personnel strength from 230,000 to over 1.6 million by December 1941.¹⁰ The growth of Fort Huachuca during WWII was significant. The construction at Fort Huachuca was designed to facilitate an increase of the post's military population from 1,300 to 17,903.¹¹ This construction was in accordance with the revised 19 August 1941 War Department construction policy and was partially funded by the 1942 Supplemental National Defense Bill.¹²

The new construction was located east of the existing (Old Post) cantonment and extended east-west along a spur of the Southern Pacific Rail-

⁷ Rand E. Herbert, W. Turrentine Jackson, and Stephen R. Wee, *Fort Huachuca, Arizona: A Century of Development and Changing Missions 1877–1977* (Fort Huachuca, AZ: Jackson Research Projects California, 1990) [FH-09-10], 11, 29.

⁸ *Ibid.*, 85; Adam D. Smith, Susan I. Enscoe, and Samuel L. Hunter, *Analysis of the Mountain View Officers' Club*, ERDC/CERL TR-12-14 (Champaign, IL: U.S. Army Engineer Research and Development Center, 2012), 1.

⁹ *Ibid.*, 1.

¹⁰ David W. Hogan, Jr., *225 Years of the Army* (Tampa, FL: Faircount, LLC, n.d.), 292–293.

¹¹ "\$11,590,720 Huachuca Fund Approved," *Bisbee Daily Review*, December 4, 1941, 1; Giles Wright, "Fort Huachuca Military Population at Record Peak, New Buildings Ready For Additional Men; Expansion Described," *Bisbee Daily Review*, November 30, 1941, 2-1; "Huachuca Quadruples in Size Last Twelve Months," *Nogales International*, December 5, 1941, 1.

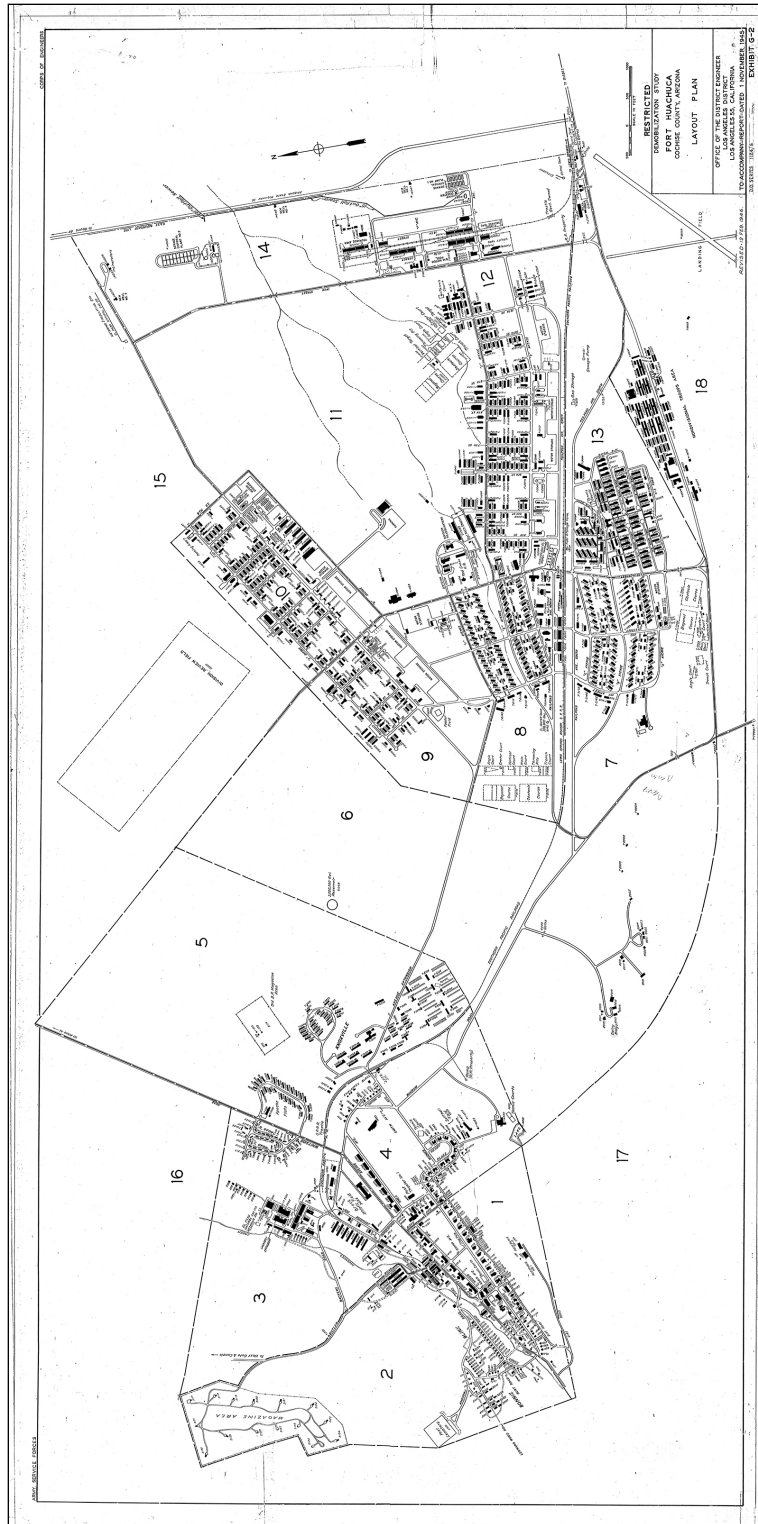
¹² War Department, *War Department Construction Policy*, (Washington, DC: Adjutant General's Office, August 19, 1941).

road. The design of the new cantonment followed the recently adopted triangle layout to parallel the Army's shift to Triangle Division that consisted of three regiments under a Division command (Figure 1).¹³ Although site plans were adjusted to fit the local conditions and topography, cantonments were standardized in size, shape, and content. This standardization included the majority of the buildings, which were of the 700 Series (supplanted by the 800 Series in 1941) of temporary building standardized plans, which encompassed 300 building types.¹⁴

¹³ John S. Garner, *World War II Temporary Military Buildings: A Brief History of the Architecture and Planning of Cantonments and Training Stations in the United States*, USACERL Technical Report CRC-93/01 (Champaign, IL: U.S. Army Corps of Engineers, Construction Engineering Research Laboratory, 1993), 65.

¹⁴ *Ibid.*, 41.

Figure 1. Map of Fort Huachuca showing layout of WWII cantonment, 1945 [north is to the left] (*Fort Huachuca Layout Plan*, Nov. 1945, Fort Huachuca Real Property Office. Public Domain).



On 15 September 1947, Fort Huachuca was closed. The property was deemed surplus, turned over to the War Assets Administration, and many of the temporary buildings in the WWII cantonment were sold. Fort Huachuca was deeded to the state of Arizona in 1949, and the Arizona Game and Fish Department established a game preserve there that included buffalo and pronghorns.¹⁵ The government reactivated Fort Huachuca in 1951 for national defense in response to the Korean War (1950–1953). During this period, Fort Huachuca was declared a Class I installation and used for Aviation Engineer training under the 419th Engineer Aviation Brigade.¹⁶ The last of these units completed their training in December 1952, and Fort Huachuca was again deactivated on 31 December.

The post was reopened in February 1954 as the U.S. Army Electronic Proving Ground (EPG). The creation of the EPG marked an increased use in the application of electronic equipment, particularly communications technology and electronics system, in the U.S. Army, and, consequently, increased research and development of electronics for tactical uses.¹⁷ Certain remaining WWII-era infrastructure was adapted for use by the EPG.¹⁸ For example, the WWII motor pool located on Kilbourne Avenue was adapted for the maintenance of EPG vehicles, particularly trucks used in the transport of field test equipment.

In July 1967, the Army's Strategic Command (STRATCOM) moved its headquarters to Fort Huachuca from Washington, D.C. Under the command of STRATCOM, the EPG became a "tenant" at Fort Huachuca.¹⁹ STRATCOM (today known as the Army Network Enterprise Technology Command [NETCOM]) answered to the U.S. Army Chief of Staff and was comparable to the Continental Army Command (CONARC) or the Army Material Command (AMC). The arrival of STRATCOM and the U.S. Army Intelligence Center and School (1971) made Fort Huachuca "the major mil-

¹⁵ "The Modern Era, 1950–2000," *Huachuca Illustrated*, A Magazine of the Fort Huachuca Museum 10, Fort Huachuca Museum Collection, Fort Huachuca, Arizona, 1999, 3.

¹⁶ *Ibid.*, 11–12.

¹⁷ "Mission of the AEPG," April 24, 1958, Fort Huachuca Museum Collection, Fort Huachuca, Arizona.

¹⁸ "The Modern Era, 1950–2000," 3.

¹⁹ Herbert, Jackson, and Wee, *Fort Huachuca, Arizona: A Century of Development and Changing Missions 1877–1977*, 214.

itary installation in Arizona and one of prominence throughout the Southwest.”²⁰ It is currently headquarters for the U.S. Army Intelligence Center of Excellence, which is the senior mission on post, and NETCOM/9th Army Signal Command. Fort Huachuca is also the headquarters of Army Military Affiliate Radio System (MARS), the Joint Interoperability Test Command (JITC), and the EPG.

2.2 Founding to WWI

In 1878, Camp Huachuca was manned by two companies of the 6th Cavalry and a company of Indian Scouts, with a combined total of 5 commissioned officers and 91 enlisted men.²¹ As the newly established camp was lacking barracks, the soldiers lived in tents. Under command of Captain S. M. Whitside, drill practice was provided for recruits only, as the other personnel were occupied with scouting, detached service, and constructing buildings for the post. Target practice for all personnel was carried out once a week.²² Inspection reports do not specify the location of this training, nor do they mention an established range.

The following year showed little change, with Captain Whitside commanding 96 personnel, including 25 Indian Scouts.²³ Officers had carried out 20 drills in the month of December 1878, and the total armaments at that time included 59 45-caliber carbines (rifles) with 55 rounds available per arm.²⁴ The number of men on post varied depending on the need for deployment to the surrounding region. When a subsequent inspection was held later in 1879, there was only one company of cavalry on post (45 enlisted, 3 officers).²⁵ The types of training provided to Army personnel dur-

²⁰ Department of the Army Headquarters, Fort Huachuca, Arizona, “Fort Huachuca Arizona History 1973,” May 7, 1974, Binder: Fort Huachuca History, 1973–1975 Annual Historical Summary, Fort Huachuca Museum Collection, Fort Huachuca, AZ, 4.

²¹ “Reports of Inspection of Posts in The Department of Arizona made by Inspector General Thriver in March, April, and May 1878,” Inspection Reports, Fort Huachuca Museum Collection, Fort Huachuca, AZ, 81.

²² *Ibid.*, 88.

²³ “Inspection Report Camp Huachuca, A. T. 1879,” Inspection Reports, Fort Huachuca Museum Collection, Fort Huachuca, AZ, 1.

²⁴ *Ibid.*, 4.

²⁵ *Ibid.*, 1.

ing this period included manual of arms, squad drill, company drill, skirmish drill, bayonet drill, and target practice.²⁶ Target practice still occurred once a week at Camp Huachuca, with 59 serviceable carbines (55 rounds per arm) and 80 pistols (25 rounds per arm) noted.²⁷ Drills were scheduled five times a week, with a parade inspection on Sunday mornings.²⁸

The inspection report for 1880 indicated Captain Whitside was in charge of 83 personnel, including the 25 Indian Scouts and one company of cavalry.²⁹ At the time of the inspection (August 1880), troop training consisted of “five drills each week, three mounted and two dismounted, when the command is present at the post. Target practice almost daily weather permitting, with rifle, carbine, and pistol.”³⁰ The number of arms had increased to 175 rifles and carbines, and 91 revolvers.³¹ This schedule of training remained the norm, with fluctuations depending on number of men actually on post, until 1885. At that point, target practice was reduced to a seasonal exercise. In April 1883, a target butt was installed to raise the target for better visibility beyond 300 yards (274 meters).³²

More information on training was provided in an inspection report for 14 March 1886. When troops were at the post, five drills were held each week, including mounted and dismounted drills. Target practice (with carbines) was only held during the spring and fall: 15 April to 15 June and 1 September to 30 October. There was no mounted target practice with carbine or pistol. Riding school was conducted on a specially prepared track. Recruits were trained for two months when the command was at post before being assigned specific duties. Due to exigencies in the field, there were no dress parades, battalion formations, or full kit marches held at that time.³³

²⁶ Ibid., 2.

²⁷ Ibid., 2–4

²⁸ Ibid., 9.

²⁹ “Inspection Report 1880,” Inspection Reports, Fort Huachuca Museum Collection, Fort Huachuca, AZ, 1.

³⁰ Ibid.

³¹ Ibid., 3.

³² *Historic Context: The Army’s Military Mission at Fort Huachuca, Arizona 1877 to 1940*, (Seattle, WA: Center of Expertise for Preservation of Structures and Buildings USACE, 2000), [FH-00-4], 19–20.

³³ “Inspection Report of Fort Huachuca, Arizona Territory,” 1885, Inspection Reports, Fort Huachuca Museum Collection, Fort Huachuca, AZ, 1–5.

Troops were equipped with rifles, carbines, and revolvers, with the cavalry also possessing sabers. Target practice was conducted on five short ranges and one long range. It is likely these were not permanent facilities, as the inspection report lists “practice season not begun” as an answer to the question of the ranges’ location, implying they were not set up at that point. The same answer was given for range condition, construction of targets and butts, and the type of system used.³⁴ An 1882 inspection report listed five ranges in operation for the training period, providing distances of 200, 300, 500, and 600 yards (approximately 183, 274, 457, and 549 meters, respectively).³⁵ A photograph from 1886 supports the assumption that the ranges were not permanent facilities and may have been nothing more than measured distance firing lines and a new target line set up each target training season (Figure 2).

Figure 2. Rifle training, 1886 (1886.21.00, Fort Huachuca Museum Collection. Public Domain).



By 1885, the post was garrisoned by 260 men with three companies of cavalry, one of infantry, and one cavalry band unit. The following year, Fort Huachuca had grown to 503 men, with six companies of cavalry and two of

³⁴ Ibid.

³⁵ “Inspection Report of Fort Huachuca, Arizona Territory,” 1882, Inspection Reports, Fort Huachuca Museum Collection, Fort Huachuca, AZ, 5.

infantry, along with the cavalry band, although garrison size would fluctuate for many years.³⁶ The arms were still rifles and carbines, and revolvers, but quantities had increased to 800 and 200 respectively.³⁷

The target practice season changed in 1887, with carbine practice held in May, June, and September and pistol practice in July, August, and October. This ramped up schedule is indicative of the more intense and professional training begun at Fort Huachuca around this time. There were parades, and both mounted and dismounted drills daily except Saturday. Target practice involved targets on wagons to raise them off the ground, and butts of stone and earth.³⁸

The first permanent target range was constructed by March 1888. The inspector that month remarked on the target range, saying that “an excellent range, one of the best in the Department has been constructed north east of post by making a long and solid abutment of earth with deep trench, the earth was very hard and rocky and it required much labor to complete the work.”³⁹ The continuous trench was 400 feet (approximately 122 meters) long and target butts were installed. Additional work was done later that year, as \$288 was appropriated for “completion of the target house and repairs to range.”⁴⁰ The repairs included construction of stairs, revetment, and platforms. Practice was held on the range three times a week during the season. An ammunition shortage had been resolved, with 34,980 rifle balls for the 108 rifles on hand, 132,900 carbine rounds, and 25,476 pistol rounds (for 11 pistols). Cartridge shells were reloaded for target practice, extending their use.⁴¹

³⁶ “Inspection Report of Fort Huachuca, Arizona Territory,” 1885, 1; “Inspection Report of Fort Huachuca, Arizona Territory,” 1886, Inspection Reports, Fort Huachuca Museum Collection, Fort Huachuca, AZ, 1.

³⁷ “Inspection Report of Fort Huachuca, Arizona Territory,” 1886, 1.

³⁸ “Inspection Report of Fort Huachuca, Arizona Territory,” 1887, Inspection Reports, Fort Huachuca Museum Collection, Fort Huachuca, AZ, 4, 6.

³⁹ “Inspection Report of Fort Huachuca, Arizona,” 1888, Inspection Reports, Fort Huachuca Museum Collection, Fort Huachuca, Arizona, 4–5.

⁴⁰ “Inspection Report, 1888,” Record Group 94, Entry 464, Box 52, National Archives and Records Administration, Washington, D.C, 2.

⁴¹ “Inspection Report of Fort Huachuca, Arizona,” 1888, Inspection Reports, Fort Huachuca Museum Collection, Fort Huachuca, AZ, 4, 8; “Inspection Report of Fort Huachuca, Arizona,” 1890, Inspection Reports, Fort Huachuca Museum Collection, Fort Huachuca, AZ, 10.

Training continued on the target range over the next several years, with seasonal practice beginning in April and conducted for two months. The extreme range practiced was 25 yards for pistols and 200 yards for rifle and carbine. An officer was always present for conducting the target practice. The range equipment included targets, pits, butts, markers' shelter, poles and streamers, and firing points.⁴² Additional training consisted of drills, including dress parade; battalion drill; company, troop and squad drill; pack train drill; and mounted and dismounted troop drill. Additionally, there was bayonet exercise, sabre exercise, riding school, and mounted practice with pistols (Figure 3).⁴³ This was supplemented with marches and pitched camps where military problems and skirmish training were completed.⁴⁴

Figure 3. Cavalry pistol training, 1894 (1894.00.00.07, Fort Huachuca Museum Collection. Public Domain).



Training was complicated by the need to constantly shift units between posts to address local issues such as Native American raids. There was little continuity of personnel at Fort Huachuca as a result, and training was

⁴² "Inspection Report of Fort Huachuca, Arizona Territory," 1889, Inspection Reports, Fort Huachuca Museum Collection, Fort Huachuca, AZ, 2; "Inspection Report, 1889," 12.

⁴³ "Inspection Report of Fort Huachuca, Arizona Territory," 1889, 3, 7-8.

⁴⁴ "Inspection Report of Fort Huachuca, Arizona," 1892, Inspection Reports, Fort Huachuca Museum Collection, Fort Huachuca, AZ, 14.

often cut short or missed altogether due to troops being transferred for varying lengths of time. For example, between 1892 and 1893, the units posted to Fort Huachuca were completely changed. Four companies of the 24th Infantry replaced companies of the 11th Infantry, and “the two troops of the 2d Cavalry removed to Fort Bowie [were] replaced by two troops from that post.”⁴⁵

The target range had been improved by 1895, equipped with targets “for six companies up to 600 yards; one company 1000 yards; skirmish range 1000 yards; targets in pits with butts.”⁴⁶ There was also mention at that time of the existing target storage house. Communications to the range had been provided through a telephone line, with the two transmitters and telephones being rented.⁴⁷ The range was described as being near the post and facing north, with the ground sloping towards the targets. Small arms target practice was required for all company officers and enlisted men. No target practice was available for engagement with moving targets.⁴⁸ In addition to target practice, the soldiers drilled, held bayonet exercises, and participated in marches of various lengths combined with field camps.⁴⁹

An inspection report from the following year provided further information about the target range located east of the post:

- The range was equipped with 288 steel frames.
- There were three types of frames for known distance, short, and mid-ranges.
- There were 13 pits on the short, mid, and long ranges.
- Each range had a butt with the exception of one long range, which had a shelter for markers
- Each range had a shelter consisting of a dirt embankment for protection of markers.

⁴⁵ “Inspection Report of Fort Huachuca, Arizona,” 1893, Inspection Reports, Fort Huachuca Museum Collection, Fort Huachuca, AZ, 1.

⁴⁶ “Inspection Report of Fort Huachuca, Arizona,” 1895, Inspection Reports, Fort Huachuca Museum Collection, Fort Huachuca, AZ, 5.

⁴⁷ *Ibid.*, 11.

⁴⁸ *Ibid.*, 3.

⁴⁹ *Ibid.*, 4.

- There were four poles from which streamers were suspended during practice firing, and there was a sufficient number of streamers for all poles to be used simultaneously.
- Firing points consisted of wooden slabs marked with the range number and firing distance.⁵⁰

Training for that year included preliminary drills, gallery practice, and training at estimating distance. The inspection report noted the range required “considerable repairs,” but had a sufficient supply of target materials on hand for the training season.⁵¹ Target Practice was a required course of instruction for new recruits in their initial months of individual training, along with Drill Regulations, Army Regulations, and Manual of Guard Duty. Everyone was required to attend small arms target practice.⁵²

By this point Fort Huachuca’s soldiers had a more professional training regimen, with a wide variety of drills both on and off post. For example, in 1896 Company C, 15th Infantry and Troop K, 7th Cavalry had the following activities:

Company C, 15th Infantry, has had 22 battalion drills, 31 company, 40 squad, 23 parade, 27 gymnasium, 8 regimental, 80 inspections, 42 reviews; also practice in estimating distance...Company C, 15th Infantry, has had two practice marches – one of 116 miles and one of fourteen miles. The men carried shelter roll consisting of blanket, shelter tent pins and poles, a complete change of underclothing and an extra pair of shoes. The longest march was 21 miles made in seven and one-half hours. Practice was had in field cooking. The company made nine camps and was in camp three days.

Troop K, 7th Cavalry, has had 16 drills in manual of carbine, 15 squad dismounted, 6 manual of the pistol, 29 saber and fencing exercises, 26 school of the troop,

⁵⁰ “Inspection Report of Fort Huachuca, Arizona,” 1896, Inspection Reports, Fort Huachuca Museum Collection, Fort Huachuca, AZ, 12.

⁵¹ *Ibid.*, 12.

⁵² *Ibid.*, 15.

15 squad mounted, 28 school of the trooper, 18 squadron, 18 extended order, and 16 litter bearer drills; eight in estimating distances, also quite extensive field practice in both signaling and packing...Troop K, 7th Cavalry, was in camp at San Bernardino, A.T., 38 days, and detachments of the troop 4 days at Calabosa, A.T., and four days at Crittenden, A.T. The country East, South, West, and North-west of the post has been thoroughly traversed by the troop. The troop has also had four practice marches. The regular field equipment was carried on horses. The troop marched a total distance, not including detachments, of 1074 miles, and made 23 camps. 75 miles were made in 24 hours, and 109 miles in 36 consecutive hours – the troop crossing mountains en-route. Extensive instruction was given in signaling and scouting, also in field cooking.⁵³

Complaints about the target range's condition continued, with the 1898 inspection report stating that "the range is poor and should be moved to ground selected by Post Commander," and that the gallery was not sheltered. There were, however, plenty of targets and other materials available for practice in sighting drills, position, and aiming drills.⁵⁴ The range's location was described as "conveniently located, about one-fourth of a mile north-east of the post," and supplied with "targets, butts, marker's shelter, poles and streamers, firing point, etc."⁵⁵ The 1899 report describes some of the training for infantry and cavalry, mentioning good facilities for foot and mounted drill, with the mounted drill ground "being one mile from the barracks."⁵⁶ Riding school was conducted in an open air ring with riders trained in leaping obstacles (ditches and hurdles) and charging. Instruction was also given in use of weapons (pistol, saber, and carbine) while mounted (Figure 4). Infantry soldiers practiced bayonet exercises,

⁵³ *Ibid.*, 10–12 (ellipses in original).

⁵⁴ "Inspection Report of Fort Huachuca, Arizona," 1898, Inspection Reports, Fort Huachuca Museum Collection, Fort Huachuca, AZ, 8.

⁵⁵ "Inspection Report of Fort Huachuca, Arizona," 1900, Inspection Reports, Fort Huachuca Museum Collection, Fort Huachuca, AZ, 17.

⁵⁶ "Inspection Report of Fort Huachuca, Arizona," 1899, Inspection Reports, Fort Huachuca Museum Collection, Fort Huachuca, AZ, 9.

and were trained in “advanced guard, rear guard outpost, fortification of a position, defense of a canon [sic], and reconnaissance of a position.”⁵⁷

Figure 4. Mounted pistol practice by men of the 9th Cavalry at Fort Huachuca, 1899 (RG111-SCA Book #3 469891, National Archives and Records Administration [NARA], College Park, MD. Public Domain).



By the turn of the 20th century, there were approximately 220 officers and enlisted men garrisoned at Fort Huachuca, plus about a dozen Indian Scouts.⁵⁸ Training for the soldiers continued with no major changes for the next several years. Inspection reports continue to list various drills, such as hasty entrenchments, reconnaissance, and attack and defense of positions. Also included were marches, camp formation, and riding school (Figure 5).⁵⁹

Figure 5. View to the north-northwest of Cavalry training, 1905 (1905.00.00.08, Fort Huachuca Museum Collection. Public Domain).



⁵⁷ Ibid., 9.

⁵⁸ “Inspection Report of Fort Huachuca, Arizona,” 1900, 1.

⁵⁹ “Inspection Report of Fort Huachuca, Arizona,” 1903, Box 67, Entry 9, Record Group 159, (Washington, DC: National Archives and Records Administration), 6.

The 1903 inspection report lists the available ordnance, with two field guns and one Gatling gun in addition to rifles, carbines, and revolvers. The report also mentions the poor condition of the target range but offers hope for improvements:

The location of range is reported not especially suitable. The butts are $\frac{3}{4}$ of a mile northeast of post, the direction of fire being 15 degrees east of north. The range is completely provided with equipments. The pits are in poor repair, money has been allotted for them...The Range Officer reports that the light is bad on the target range; that when the shooting is best on account of least wind, the light is poorest, as the targets are thrown in the shade, - this happening in the early morning, - that at about 9:30, the wind comes up and the mirage is considerable; and states that the whole direction of the range should be different.⁶⁰

By 1908, troops on post included a machine gun platoon, but there is no indication as to any associated training facilities.⁶¹ Sometime before 1912, a new target range was constructed at a further distance from the cantonment. A report for an inspection conducted in May 1912 mentions the disposition of troops, including two troops of the 4th Cavalry, which were “encamped on the target range near Fort Huachuca”:

These troops were encamped on the target range and engaged in target practice. They had been relieved from duty on the border by two other troops which had completed the target practice and it was expected that upon completion of the target practice by these troops that they would relieve other troops on the border, which would come in and engage in the season’s target practice.⁶²

⁶⁰ Ibid., 12 (ellipsis in original).

⁶¹ “Inspection Report of Fort Huachuca, Arizona,” 1908, Box 67, Entry 9, Record Group 159, (Washington, DC: National Archives and Records Administration), 4.

⁶² “Inspection Report of Fort Huachuca, Arizona,” 1912, Box 147, Record Group 159, (Washington, DC: National Archives and Records Administration), 1.

The creation of a new target range was likely associated with the expansion of Fort Huachuca to a two squadron post, underway by September 1911.⁶³ Increased troop levels may have necessitated the new target range. The location of the new range in relation to the cantonment can be seen in a map from 1911 (Figure 6 and Figure 7). The range was approximately three miles to the southeast.⁶⁴ There were several buildings in the area, likely associated with the range and the lengthy troop encampments.

In addition to target practice, the troops encamped on the range were also given field problems, often utilizing the terrain of Garden Canyon (lower section of Figure 6) for patrols, offensive and defensive maneuvers, and reconnoitering.⁶⁵ Expansion continued at Fort Huachuca, as the increase from a regimental to a brigade post was confirmed in August 1913. As a result, new barracks, officers' quarters, one stable, and a hospital expansion were in place by the end of that year, and the 10th Cavalry arrived to garrison the post.⁶⁶ The 10th Cavalry would remain the primary Army unit on duty at Fort Huachuca until 1931.⁶⁷ The target range was also reportedly being expanded from a capacity of four troops to ten troops.⁶⁸

⁶³ "Fort Huachuca at the Turn of the Century," *Huachuca Illustrated: A Magazine of the Fort Huachuca Museum*, vol. 8 (Fort Huachuca, AZ: Fort Huachuca Museum, 1999), 140.

⁶⁴ Lieut. Colonel Jacob J. Galbraith, 4th Cavalry, Commanding, Letter to the Adjutant General, Western Division, San Francisco, California, July 11, 1912, Record Group 159, Box 147, (Washington, DC: National Archives and Records Administration), 4.

⁶⁵ "Inspection Report of Fort Huachuca, Arizona," 1912, Box 147, Record Group 159, (Washington, DC: National Archives and Records Administration), 2-3.

⁶⁶ "Fort Huachuca at the Turn of the Century," 141.

⁶⁷ Dennis Gilpin, *Archaeological Survey of 1,798 Acres in the West Range, Fort Huachuca, Cochise County, Arizona*, Cultural Resources Report 08-516 (Tucson, AZ: SWCA Environmental Consultants, 2009) [FH-08-3], 17.

⁶⁸ "Fort Huachuca at the Turn of the Century," 140.

Figure 6. Plan of proposed pipeline, October 1911 (RG92 Blueprint File #30-1, NARA, College Park, MD. Public Domain).

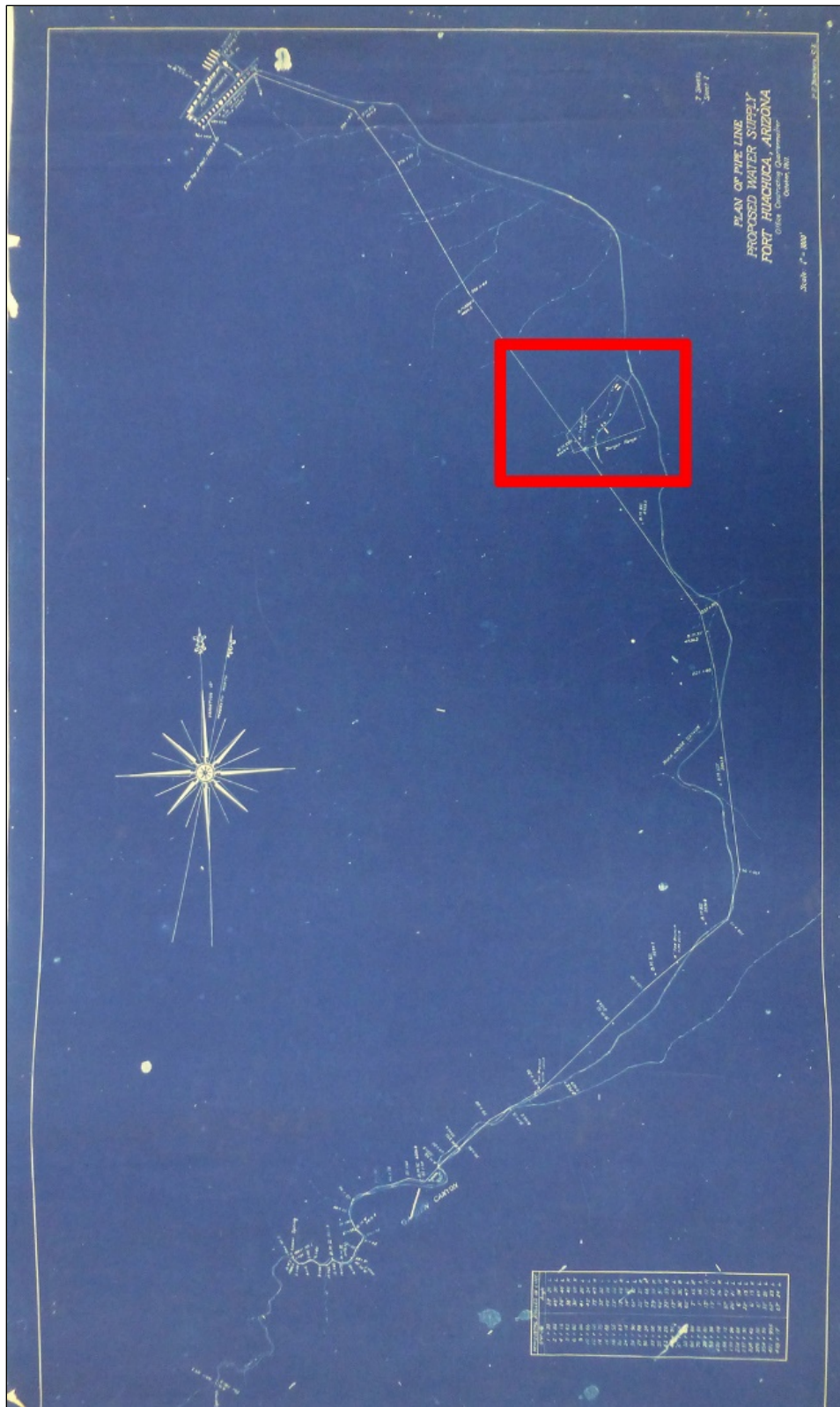
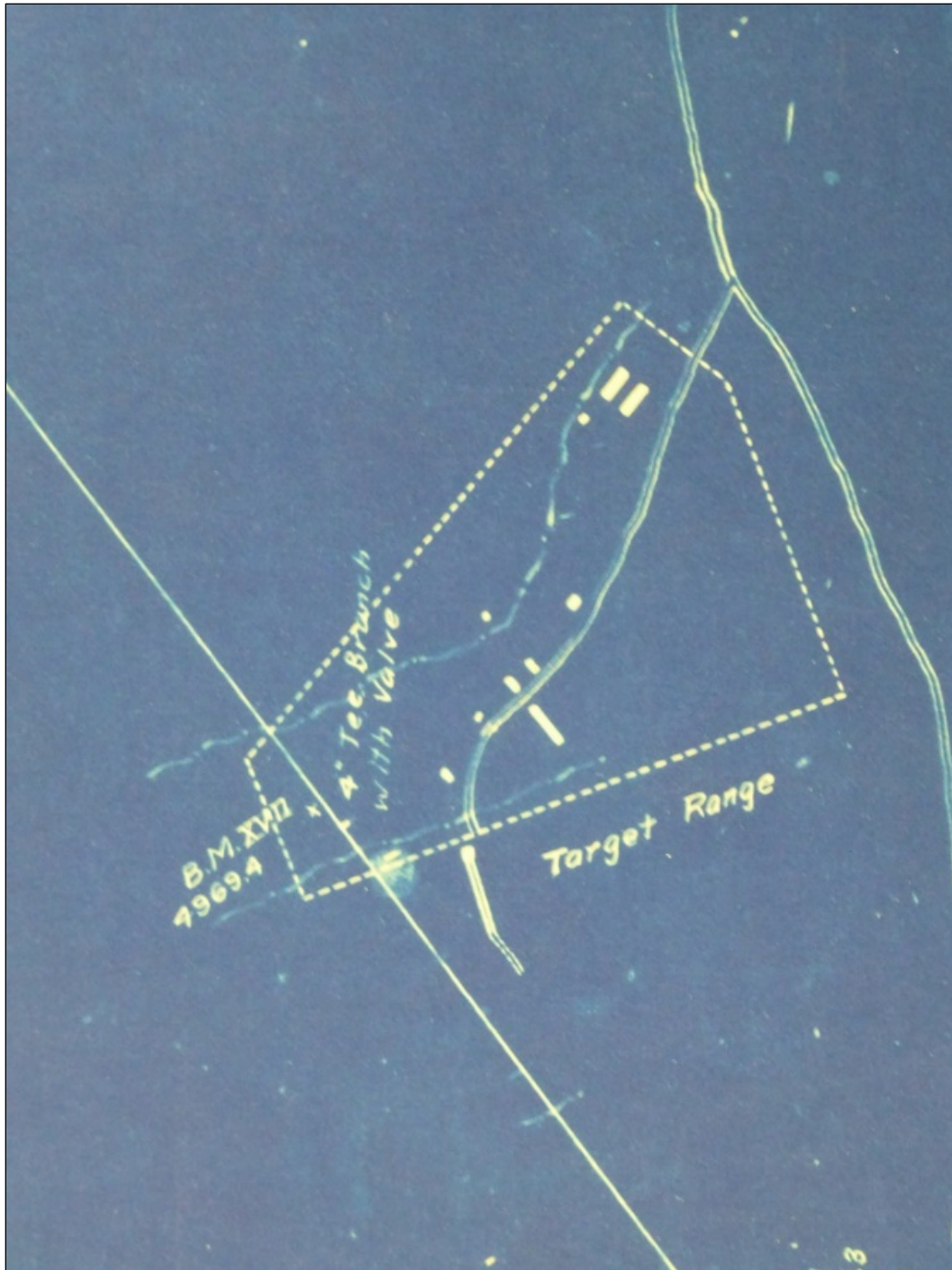


Figure 7. Detail from *Plan of Pipeline*, October 1911 showing target range (RG92 Blueprint File #30-1, NARA, College Park, MD. Public Domain).



The 1915 inspection report indicates an increase in numbers at Fort Huachuca, with 44 officers and 807 enlisted men on the rolls.⁶⁹ Training was carried out for the cavalry with inspection drills including jumping obstacles, saber exercises, and tactical problems.⁷⁰ A Machine Gun Troop was listed as part of the 10th Cavalry at Fort Huachuca. The inspection report, however, makes no mention of a machine gun firing range. Artillery practice was also conducted, utilizing the large amount of open space at the post (Figure 8). The report includes mention of a “rusted out” toilet “on the target range incinerator.” The report goes on to explain that although the toilet was “installed simply for use of troops while at target practice, it has for nearly a year been in continuous use due to a troop being quartered at the range.”⁷¹ A 1916 photograph shows the target butts (the pits) at the end of the range (Figure 9). The targets were placed in a trench and in front of a concrete wall. Target paper was placed within frames for accuracy verification, and the targets were raised or lowered by counterweights. The image also shows a small building, probably for the range officer.

Figure 8. View to the south of artillery practice, 1915 (1915.00.00.18, Fort Huachuca Museum Collection. Public Domain).



⁶⁹ “Report of Annual Inspection of Fort Huachuca, Arizona,” 1915, Box 29, Record Group 159, (Washington, DC: National Archives and Records Administration), 1.

⁷⁰ *Ibid.*, 6.

⁷¹ Letter from Commanding Officer, Fort Huachuca to Commanding General, Southern Department, included in “Report of Annual Inspection of Fort Huachuca, Arizona,” 1915, Box 29, Record Group 159, (Washington, DC: National Archives and Records Administration), 1.

Figure 9. Target butt on target range, 1916 (1916.15.00.67, USACE Seattle Box 15, Fort Huachuca Museum Collection. Public Domain).



After the Apache hostilities had drawn to an end in 1896, the training undertaken by Fort Huachuca soldiers was put to use in border defense. Political upheaval in Mexico and incursions across the border came to a head during the Punitive Expedition in 1916–1917. Mexican revolutionary Pancho Villa’s raid into New Mexico and return across the border on March 9, 1916 resulted in 10,000 Army troops moving into Mexico in pursuit. Some of these troops were from Fort Huachuca. The expedition ended in 1917 without Pancho Villa’s capture, but with a new constitution for Mexico and dwindling border problems.⁷²

2.3 World War I to World War II

Some 800 recruits were assigned for training at Fort Huachuca in the spring of 1917 in preparation of deployment to Europe. Trenches were dug, and recruits trained in trench warfare, gas attacks, and grenade throwing.⁷³ In the end, however, the 10th Cavalry was not deployed during the

⁷² Gilpin, 17.

⁷³ Steven D. Smith, *The African American Soldier at Fort Huachuca Arizona, 1892–1946*, (Seattle, WA: U.S. Army Corps of Engineers, Seattle District, 2001), [FH-01-3], 46–47.

First World War. They remained stationed at Fort Huachuca, going out on patrols of the border where there were occasional skirmishes.

After the war ended, training at Fort Huachuca continued as before, with horsemanship and use of sabre mentioned in reports. A machine gun school was active by 1919.⁷⁴ One inspection report includes a note that “systematic training is being carried on along progressive lines.”⁷⁵

A more peaceful period meant less troops were needed and several camps in the vicinity of Fort Huachuca were closed. Among these were Camp Douglas and Camp Lochiel, which were taken apart and some of the material found its way to Fort Huachuca. The records mention relocating the Camp Lochiel pumping plant and light plant to the Huachuca target range.⁷⁶

The Arizona National Guard used training land on Fort Huachuca by 1920 for summer training (Figure 10). By 1923, Fort Huachuca was garrisoned by “Headquarters Troop, Service Troop, Headquarters Detachment, 1st Squadron, Headquarters Detachment, 2nd Squadron, Troops A, B, C, E, and F, 10th Cavalry, and Indian Scout Detachment and detachments of the staff corps and departments, aggregating 40 officers, 5 warrant officers and 847 enlisted men.”⁷⁷ Cavalry training continued to be the primary focus at Fort Huachuca (Figure 11). The target range was being developed with permanent messing and bathing facilities and was used by both the regular troops and the Arizona National Guard training camp held at the range during the summer.⁷⁸ Some of the post construction utilized salvaged lumber from Camp Douglas.⁷⁹ A description of the range from 1927 describes it as located about three miles from the post and equipped with

⁷⁴ “Report of Annual Inspection of Fort Huachuca, Arizona,” 1918, Box 29, Record Group 159, (Washington, DC: National Archives and Records Administration), 1; “Report of Annual Inspection of Fort Huachuca, Arizona,” 1919, Box 29, Record Group 159, (Washington, DC: National Archives and Records Administration), 1.

⁷⁵ “Report of Annual Inspection of Fort Huachuca, Arizona,” 1920, Box 29, Record Group 159, (Washington, DC: National Archives and Records Administration), 2–3.

⁷⁶ Smith, *The African American Soldier at Fort Huachuca Arizona*, 53.

⁷⁷ “Report of Annual Inspection of Fort Huachuca, Arizona,” 1923, Box 29, Record Group 159, (Washington, DC: National Archives and Records Administration), 1.

⁷⁸ The Arizona National Guard had a camp at Fort Huachuca since at least 1920. “Annual Report of the Chief of the Militia Bureau, 1921,” Annual Reports, War Department, Fiscal Year Ended June 30, 1921, (Washington, DC: Government Printing Office, 1921), 72.

⁷⁹ “Report of Annual Inspection of Fort Huachuca, Arizona,” 1.

frame and concrete rifle butts. The Arizona National Guard maintained “permanent wooden mess halls, kitchens, and lavatories. Two gas engines and two electric generators supply electricity for the camp” (see Figure 16).⁸⁰ A full listing of all buildings at that time makes no mention of other training facilities at Fort Huachuca.

Figure 10. Machine gun training by the National Guard, 1920 (“National Guard at FH [Gregory Coll.],” Fort Huachuca Museum Collection. Public Domain).



⁸⁰ “Survey of Fort Huachuca, Arizona,” 1927, Box 29, Record Group 159, (Washington, DC: National Archives and Records Administration), 15.

Figure 11. View to the north of Cavalry training on the South Range, 1925 (1925.00.00.04, Fort Huachuca Museum Collection. Public Domain).



In the first half of 1928, the 3rd Battalion, Headquarters, and Service Company of the 25th Infantry transferred from Nogales, Arizona to Fort Huachuca. The move was accomplished with both motor and animal transportation.⁸¹ The stationing of infantry troops at Fort Huachuca would increase in the future, as the horse cavalry was nearing its end.

A letter from the Fort Huachuca commanding officer in August 1928 discusses the need to use troop labor on maintenance and repair projects around the installation, “on days when major work requiring a large amount of troop labor is necessary training will be suspended for all personnel except recruits,” and that “the care of property must be considered of equal importance with training.”⁸² The target range was the recipient of

⁸¹ Robert L. Collins, Adjutant General to Commanding General, Eighth Corps Area, Fort Sam Houston, Texas, November 3, 1927, Box 29, Record Group 159, (Washington, DC: National Archives and Records Administration), 1; Gilpin, 17.

⁸² Office of the Commanding Officer, Headquarters of Fort Huachuca, Arizona, “Progress of Maintenance, Repairs and Other Projects requiring Government Material and Troop or other labor for fiscal year 1928,” 1928, Box 29, Record Group 159, (Washington, DC: National Archives and Records Administration), 1, 3.

some of this troop labor. Project No. 58 that year involved two phases: “extension of [the] wall to make the entrance gallery safe, replacing present wood storehouse on east end by concrete storehouse, remodeling of concrete storehouse in center of range, repairing targets, replacing target numbers. The estimates for second part include the placing of 25 or less new targets in butt 300 yards to south of and 100 yards to east of present lines of targets.”⁸³ It is not known if the second phase was completed as planned. Project No. 66 involved an extension to the road leading to the target range and potentially beyond it to Garden Canyon.⁸⁴ A total of \$819.40 was expended in 1928 for target range repairs.⁸⁵

By this point, there were approximately 1,000 men stationed at Fort Huachuca, including detachments of Signal Corps, Medical Corps, Quartermaster Corps, Dental and Veterinary Corps, Finance and Ordnance Departments, and Indian Scouts. Summers also saw the use of the fort for training by the Arizona National Guard. The 10th Cavalry was transferred in 1931, and Fort Huachuca became an infantry post. The reduced garrison had to temporarily forego training to care for the 10th Cavalry horses that had been left behind, as well as to operate the post and conduct post repairs, although mention was made of satisfactory completion of chemical warfare training.⁸⁶ The movement of 25th Infantry troops from Camp Harry J. Jones and Camp Stephen D. Little (both in Arizona) was completed by 1933. The only mention of training ranges in that year’s inspection report was a discussion of target paper for Machine Gun Range practice. The paper was described as being able to “stand up without being pasted on the target frames to a cotton cloth back ground.”⁸⁷ The location of the machine gun range was not given. There were multiple machine gun companies at Fort Huachuca at this time, and practice was seasonal. It is likely they were firing the M1919 Browning machine gun, as it used .30 caliber ammunition, and the fort had supplies available.⁸⁸

⁸³ *Ibid.*, 13.

⁸⁴ *Ibid.*, 14.

⁸⁵ “Survey of Fort Huachuca, Arizona,” 1928, Box 29, Record Group 159, (Washington, DC: National Archives and Records Administration), 6.

⁸⁶ *Ibid.*, 6, 9; Gilpin, 17; “Annual Inspection of Fort Huachuca, Arizona,” 1931, Box 29, Record Group 159, (Washington, DC: National Archives and Records Administration), 2, 5, 14.

⁸⁷ “Annual Inspection of Fort Huachuca, Arizona, Fiscal Year, 1933,” 1932, Box 29, Record Group 159, (Washington, DC: National Archives and Records Administration), 13, 15.

⁸⁸ “Annual Inspection of Fort Huachuca, Arizona,” 1931, 12.

The Known Distance Rifle Range was improved in 1934 with the addition of three new range houses for target storage (Buildings 15335, 15339, and 15343).⁸⁹ The single-story, rectangular range houses were of wood construction, except for the rear wall which was the backside of the concrete retaining wall at the end of the butts. They were used as storage for the targets utilized at the firing ranges. All three were constructed on the rifle ranges.⁹⁰ They were placed at one end of the butts, one per gallery (Figure 12 and Figure 13).

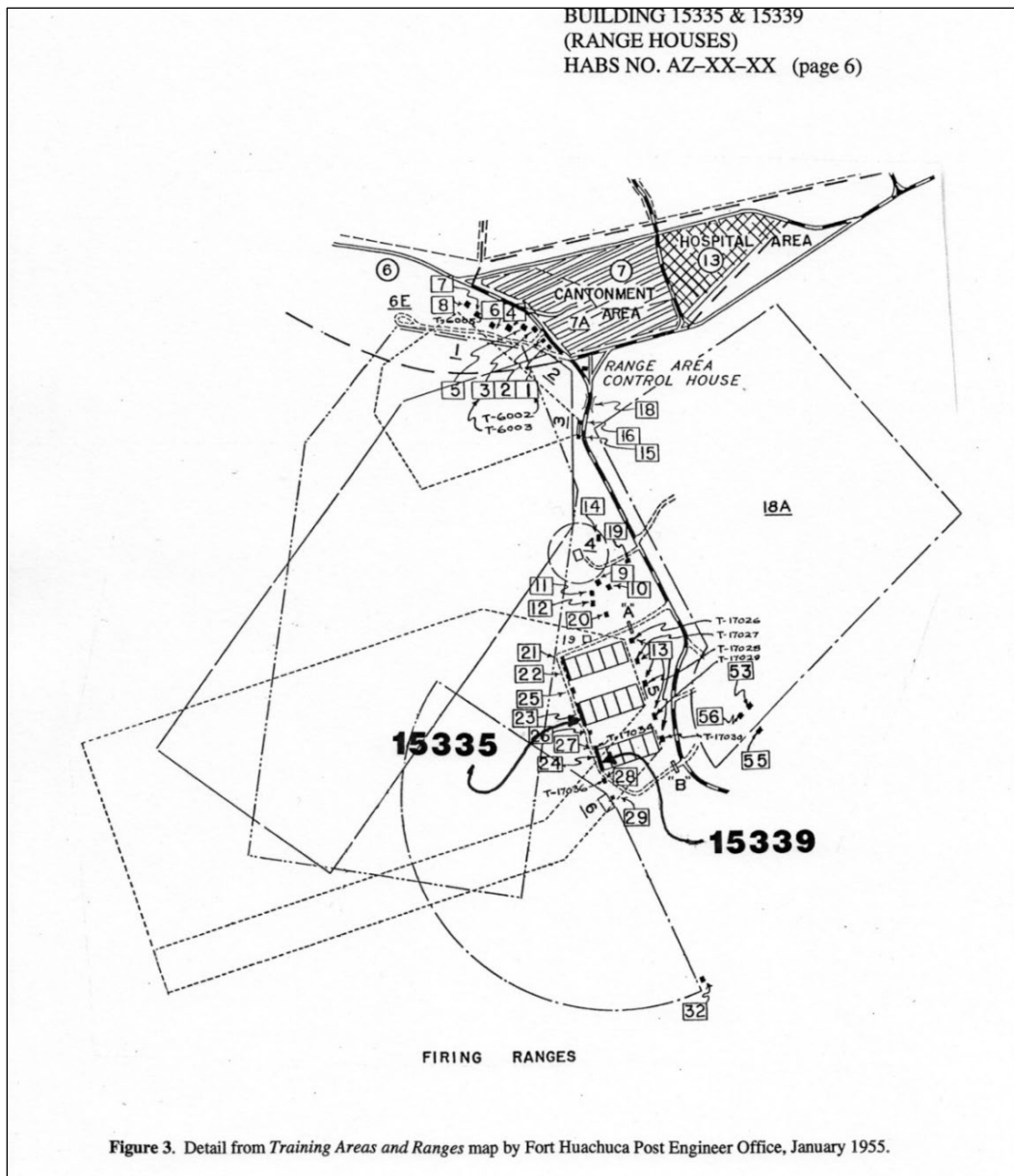
Figure 12. Range house at rifle range with targets above, n.d. (USACE Seattle Box 15, Fort Huachuca Museum Collection. Public Domain).



⁸⁹ Building 15343 is no longer extant.

⁹⁰ Paul W. Chattey and Ezra Abraham, "Range Houses (Buildings No. 15335 & 15339)," Survey (photographs, measured drawings, written historical and descriptive data), (Historic American Buildings Survey, National Park Service, U.S. Department of the Interior, 1998), 1.

Figure 13. Location of range houses #15335 and #15339 at the ends of the firing ranges (Firing Ranges, USACE Seattle Box 15, Fort Huachuca Museum Collection. Public Domain).



By 1934, the group of buildings at the target range used to house enlisted men were deteriorating. A 1934 inspection report recommended “concerted action should be directed to improvement of the target range enlisted men’s settlement.”⁹¹ In response, the commanding officer replied that the issue was being studied with the thought of using a fund collected from enlisted soldiers. The men were not legally entitled to quarters, but it was deemed desirable to have them resident on post instead of looking for housing open to Black soldiers in the surrounding off-post areas.⁹² Although the following year’s inspection did not specifically mention work on the target range housing, it did indicate a large amount of troop labor had been utilized to support a large program for new construction and rehabilitation instituted in 1935. Dwellings for married enlisted men had been accomplished with troop labor and salvaged materials.⁹³ Mention was also made in the 1935 report of a new combat range for field firing that had been constructed “to accommodate the needs of regimental problems.” No location or specification information was provided.⁹⁴

A latrine (Facility #15331) was constructed at the target range in 1938. The design of the latrine was done by the post engineer, and Fort Huachuca utilized Works Progress Administration (WPA) labor for the construction of the rubble-stone building (Figure 14). It was assigned building number 377.⁹⁵

⁹¹ “Inspection Report of Fort Huachuca, Arizona,” 1934, Box 29, Entry 9, Record Group 159, (Washington, DC: National Archives and Records Administration), 7.

⁹² *Ibid.*, 8.

⁹³ “Inspection Report of Fort Huachuca, Arizona,” 1935, Box 29, Entry 11, Record Group 159, (Washington, DC: National Archives and Records Administration), 3.

⁹⁴ *Ibid.*, 4.

⁹⁵ “Latrine Completion Report,” 1938. Today the building is Facility 15331.

Figure 14. View to the northwest of target range latrine (Facility #15331), June 1938 (Entry 391, Box 133, NARA, College Park, MD. Public Domain).



Weapons in use by the Army in 1935 were primarily produced prior to or during WWI. These munitions included 75 mm light field artillery and Springfield rifles. A recommendation was made in 1936 that Fort Huachuca retire its 75 mm guns and replace them with 50 caliber machine guns.⁹⁶ It is highly likely this recommendation was approved, as the following year's inspection report listed 75 mm ammunition in stock that was "not of any use at this post."⁹⁷

Citizens' Military Training Camps (CMTC) were established by the War Department in 1921 to provide a "system of military, physical, and moral training" to provide "for the physical betterment and military instruction of America's youth."⁹⁸ The popular one-month program consisted of military instruction in the mornings and the afternoons spent in recreation and athletics. This gave the young men "rudiments of the military art" which could be augmented with more advanced military training for those returning in subsequent years.⁹⁹ After a few years, the initial 12 camps were increased, and placed at permanent Regular Army posts (Figure 15). By 1928, 35,660 young men were enrolled in 52 camps located across 34 states and Puerto Rico.¹⁰⁰ The full expansion of the program resulted in a set of four progressive training camps (one each summer) and a graduate of all four courses was eligible for a commission in the Officers' Reserve Corps.¹⁰¹ The CMTC continued until the United States' entry into World War II.

⁹⁶ "Report of the Secretary of War to the President, 1935," *Annual Reports War Department Fiscal Year Ended June 30, 1935*, (Washington, DC: Government Printing Office, 1935), 52; "Inspection Report of Fort Huachuca, Arizona," 1936, Box 29, Record Group 159, (Washington, DC: National Archives and Records Administration).

⁹⁷ "Inspection Report of Fort Huachuca, Arizona," 1937, Box 29, Record Group 159, (Washington, DC: National Archives and Records Administration), 15.

⁹⁸ "Report of the Secretary of War to the President, 1928," *Annual Reports War Department Fiscal Year Ended June 30, 1928*, (Washington, DC: Government Printing Office, 1928), 14, 16.

⁹⁹ *Ibid.*, 15.

¹⁰⁰ *Ibid.*, 14-15.

¹⁰¹ "Report of the Secretary of War to the President, 1935," 50-51.

Figure 15. CMTC locations, 1923 (Color Poster No. 323715, "Citizens' Military Training Camps," 1923, Pritzker Military Museum and Library, <https://digitalarchives.pritzkermilitarylibrary.org/digital/collection/p16630coll2id/1946>. Public Domain).



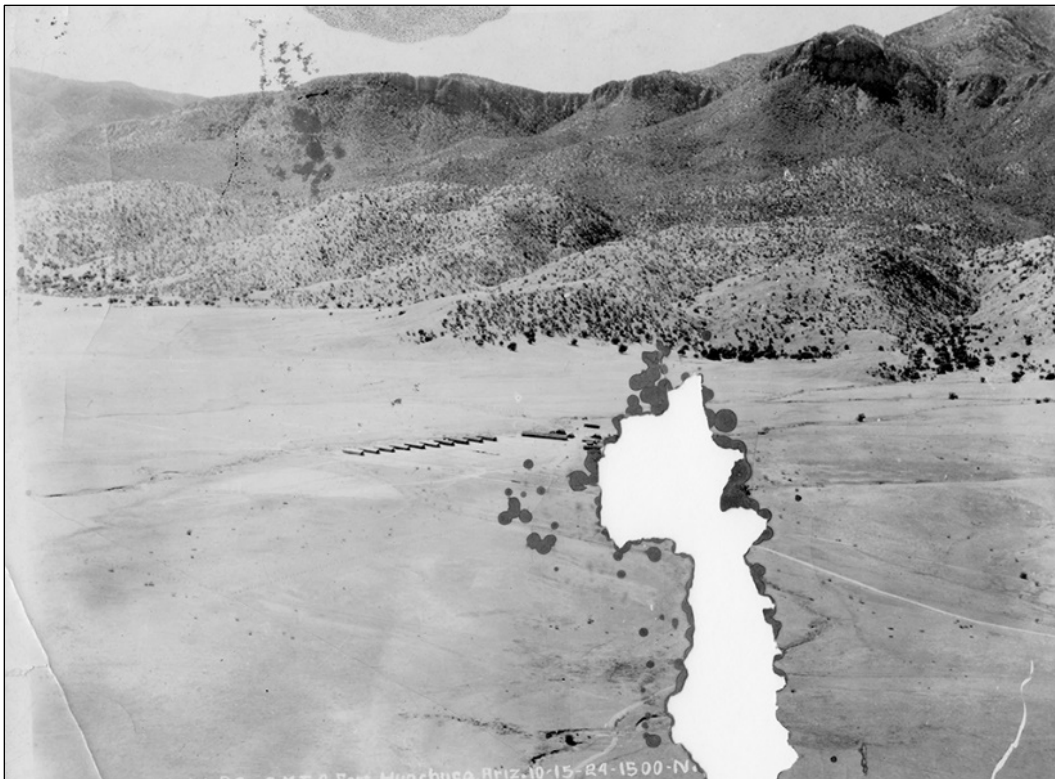
The CMTC at Fort Huachuca was initially located on the South Range (Figure 16). A new training camp was constructed in 1935–1936 to be used by the students taking part in the Reserve Officer Training Corps (ROTC), Officers Reserve (OR), and the CMTC, with the goal to provide facilities where they could be “conveniently and comfortably housed while in attendance at the instruction courses offered by the personnel of the post, and by those instructors from other points who are also assembled here to give necessary instruction.”¹⁰² This new camp was sited adjacent to the existing Civilian Conservation Corp (CCC) camp, both were east of the main cantonment near an area known as “Knoxville” where there were five barracks in place (Figure 17, Figure 18).¹⁰³

¹⁰² Office of the Constructing Quartermaster, “Completion Report, Training Camp,” 1935, Fort Huachuca Museum Collection, Fort Huachuca, AZ, 2.

¹⁰³ There is some speculation the CMTC camp was located at Range 6; this was likely the enlisted men’s camp used when at firing practice. It may have also been used by the National Guard.

The new camp included concrete tent floors, lavatories, and electric, water, and sewer lines. There were three wooden lavatory buildings, two for enlisted men and one for officers, “of wood construction set on concrete footings and basement walls to the floor level, the floor is of concrete.”¹⁰⁴ The type of construction and materials were very similar to that employed in CCC camps, with stud walls and roofs both covered with roofing paper. There were 82 tent floors of reinforced concrete; 12 were 9 ft × 12 ft and 72 were 6 ft × 16 ft (Figure 19, Figure 20).¹⁰⁵ Construction primarily took place during the first half of 1936, and the camp opened for training by the start of summer (Figure 21, Figure 22). The area of these camps was completely built over after World War II.

Figure 16. View to the southwest of training camp on the South Range, 1924 (C-761-1st.P.S.-C.M.T.C. Fort Huachuca, Ariz.10-15-24-1500-N, Fort Huachuca Museum Collection. Public Domain).



¹⁰⁴ “Office of the Constructing Quartermaster,” 1.

¹⁰⁵ Ibid.

Figure 17. Summer training area (right center), 1939 (Base map Fort Huachuca Military Reservation, Fort Huachuca Museum Collection. Public Domain).

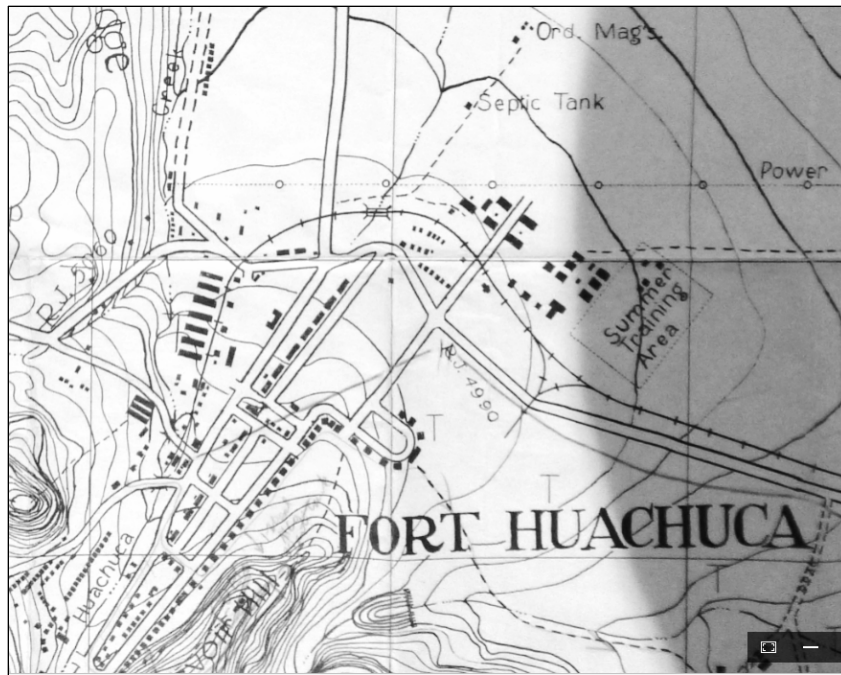


Figure 18. "Knoxville" area showing tent camp (lower right), 1945 (Fort Huachuca Layout Plan, November 1945, Fort Huachuca Museum Collection. Public Domain).

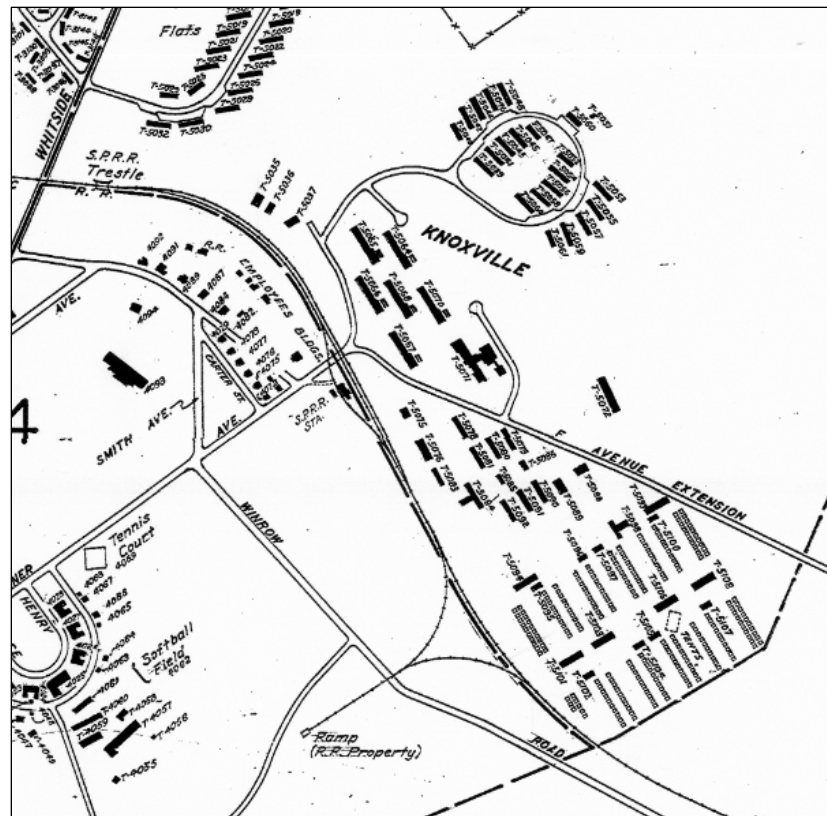


Figure 19. Completed lavatory and tent in place over tent slab, training camp, 22 July 1936, (Office of the Constructing Quartermaster, "Completion Report, Training Camp," Fort Huachuca Museum Collection. Public Domain).

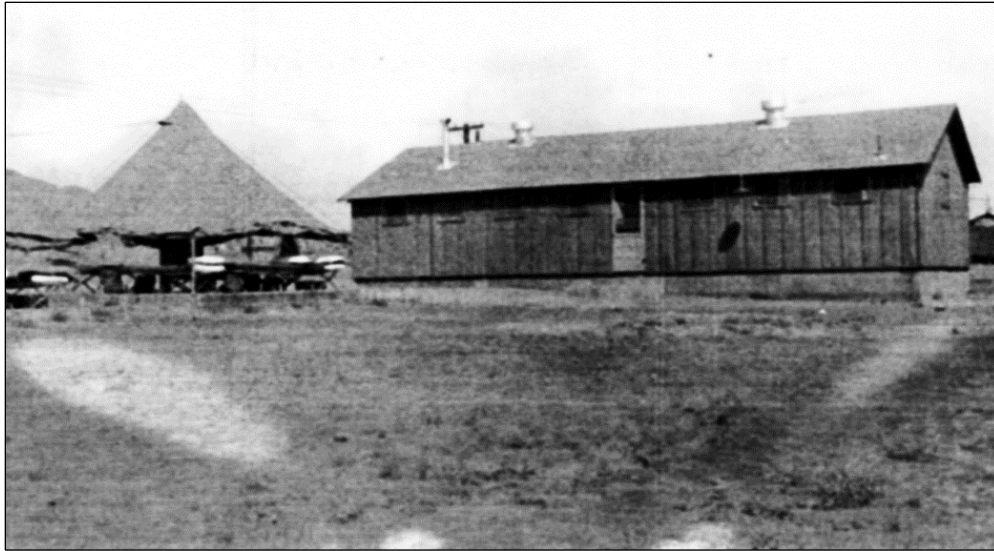


Figure 20. Jack Hanley and Robert Wright in the CMTC camp, 14 November 1940 (*CMTC Training Camp Company Street*, Fort Huachuca Museum Collection. Public Domain).



Figure 21. CMTC training firing line on the Browning automatic rifle range, 11 November 1940 (*CMTC Training Firing Line Browning Automatic Rifle Range*, Fort Huachuca Museum Collection. Public Domain).



Figure 22. CMTC training targets on Browning automatic rifle range, 15 November 1940 (*CMTC Training Targets on BAR Range*, Fort Huachuca Museum Collection. Public Domain).



By late 1940, Fort Huachuca was expanding to become home to two infantry regiments (Figure 23, Figure 24). In October 1940, a recommendation was made to double the size of the target range to support the enlarged population, and such action was underway the following month. In addition, a new anti-tank 37 mm gun had been received on post.¹⁰⁶

Figure 23. Machine gun training, 1939 (*25th Inf. Machine Gun Company Firing Range, Fort Huachuca Museum Collection. Public Domain*).



Figure 24. Learning to fire, 1939 (1939.00.00.04, Fort Huachuca Museum Collection. Public Domain).



¹⁰⁶ "Inspection Report of Fort Huachuca, Arizona," 1940, Box 29, Record Group 159, (Washington, DC: National Archives and Records Administration), 6, 8, 14.

2.4 World War II

2.4.1 Army expansion

The rapid expansion of Germany across Europe in 1940 solidified fears at the United States War Department that America might soon be party to an expanding conflict. The first steps toward preparation for this impending war were taken when Congress authorized the President to call up the National Guard and approved the Selective Service Act of 1940. As a result, the Army increased in troop strength from a low of 230,000 to over 1.6 million by December 1941.¹⁰⁷ This rapid influx of soldiers resulted in a tremendous need for construction—not only expanding existing military installations, but also creating entirely new training camps from scratch. By the end of June 1940, supplemental military appropriations approaching two billion dollars had been requested and granted to President Roosevelt. Troop strength expanded first to 375,000, and \$217 million became available for military construction.¹⁰⁸ These were the first of many appropriations and troop expansions, and in the following months vast sums of money were expended to recruit, house, train, supply, and feed 1.5 million new soldiers. Twenty new cantonments were completed by the time America formally entered the war on 7 December 1941.¹⁰⁹

To speed construction and provide ease of oversight, the cantonments were developed according to standardized plans. Early in the war, the most common design shifted from a quadrangle to a triangle layout, as Army organization shifted to Triangle Divisions consisting of three regiments under a Division command. Each leg of the cantonment triangle contained a regiment, with their training ranges adjacent.¹¹⁰ From August 1940 to June 1941, the Quartermaster Corps built facilities for nearly one million troops.

During WWII, Fort Huachuca was home to first the 93rd, then the 92nd Infantry Division, both of which were composed of Black troops. As such, the fort was the largest training facility for Black soldiers and therefore unique

¹⁰⁷ Hogan, Jr., 292–293.

¹⁰⁸ Diane Shaw Wasch, et al., *World War II and the U.S. Army Mobilization Program: A History of 700 and 800 Series Cantonment Construction*, (Washington, DC: U.S. Department of the Interior, National Park Service, 1993), 9.

¹⁰⁹ Garner, 16.

¹¹⁰ *Ibid.*, 65.

in this aspect. During 1941 and 1942, the historic border outpost underwent a massive development program designed to house and support the requirements of a full-strength combat division. A new cantonment was constructed, complete with housing, logistical, utility, administration, education, recreation, and religious facilities.¹¹¹ Fort Huachuca became home for over 25,000 personnel during the war.

In addition, new training facilities had to be developed and constructed, including weapon and combat training ranges. The existing target range was deemed inadequate for the number of soldiers present as early as November 1941.¹¹² Other types of training areas had also been planned, with a report in early December 1941 stating plans were underway for “adding an air field, artillery, aerial gunnery and rifle ranges” with the construction of the new cantonment.¹¹³ In advance of funding for expanding the target ranges, the Area Engineer at Fort Huachuca had completed estimates, and the locations had been approved by 10 September 1941. A request for consideration asking that the District Engineer in Albuquerque, New Mexico, construct the ranges was made on 2 March 1942.¹¹⁴ It was, however, decided on 11 March that the target ranges were a lower priority than an artillery range and maneuver area.¹¹⁵

A site in Cochise County had been selected for an artillery range and surveyed in early summer of 1941, but no further action was taken until February 1942 when the project was revived.¹¹⁶ Action was quick and approval for acquisition of 34,960 acres adjoining Fort Huachuca was secured by 12 April 1942.¹¹⁷ By late May, the U.S. attorney’s office in Tucson had received orders to start condemnation proceedings for 10,460 acres of land owned

¹¹¹ Smith, Enscoe, and Hunter, 8.

¹¹² “Inspection Report of Fort Huachuca, Arizona,” 1941, Box 525, Record Group 159, (Washington, DC: National Archives and Records Administration), 9.

¹¹³ “Huachuca Quadruples in Site Last Twelve Months,” *Nogales International*, December 5, 1941, 1.

¹¹⁴ “Inspection Report of Fort Huachuca, Arizona,” 1941, 21.

¹¹⁵ *Ibid.*, 22.

¹¹⁶ “10,460 Acre Range for Fort Huachuca,” *Bisbee Daily Review*, May 21, 1942, 1.

¹¹⁷ “Inspection Report of Fort Huachuca, Arizona,” 1941, 26.

by 31 people.¹¹⁸ The acquisition expanded to 40,000 acres, and was completed by early July.¹¹⁹ The land became the Fort Huachuca East Range (Figure 25).

Figure 25. Artillery range in 1942 (*Artillery Range 93rd Division*, Fort Huachuca Museum Collection. Public Domain).



On 15 May 1942, the 93rd Infantry Division was officially reactivated as part of the Third Army.¹²⁰ The recruits then immediately began their training to become soldiers. This consisted of a 17-week course including “close order drill, military courtesy and discipline, first aid, marksmanship, and many more things that all come under the general heading of Military Science.”¹²¹ Training for the new recruits also included physical training that consisted of marches “several times a week for distances ranging from 5 to 20 miles over mountains and across the arid desert,” often combined with

¹¹⁸ “10,460 Acre Range for Fort Huachuca,” 1.

¹¹⁹ “Land Project in Huachuca Area Now Completed,” *Bisbee Daily Review*, July 4, 1942, 5.

¹²⁰ “Fort Huachuca Becomes Major Training Center,” *Nogales International*, August 14, 1942, 1.

¹²¹ “Maj. General Chas. P. Hall Heads Newly Organized 93rd,” *Bisbee Daily Review*, May 17, 1942, 1.

large scale maneuvers that were held in many places on the installation and often in the neighboring Coronado National Forest (Figure 26, Figure 27, Figure 28).¹²² The 93rd Infantry left Fort Huachuca in September 1943, and the 92nd Infantry Division took their place the following month, remaining until January 1944.¹²³

Figure 26. Indian Scouts filing up the side of a mountain, April 1942 (RG111-SCA Book #2 131144, NARA, College Park, MD. Public Domain).



¹²² Robert Franklin Jefferson, *Fighting for Hope: African American Troops of the 93rd Infantry Division in World War II and Postwar America*, (Baltimore, MD: John Hopkins University Press, 2010), n.p.

¹²³ War Department, *Analysis of Existing Facilities for Master Planning, Fort Huachuca, Cochise County, Arizona*, (Los Angeles, CA: Office of the District Engineer, 1946), 2.

Figure 27. 92nd Infantry soldiers on the march, 1944 (*Huachuca Cavalcade*, 3, Fort Huachuca Museum Collection. Public Domain).



Figure 28. 93rd Division soldiers using smoke screen for cover, 1942 (RG111-SCA Book #2 148132, NARA, College Park, MD. Public Domain).



An overview of soldier training during the war was provided by Private Chester A. Burrill in a 1945 edition of *The Apache Sentinel*, a post newspaper:

Natural water courses were put into use by engineers in training for bridge building and an artificial lake was built in the new area for training with inflated rafts and pontoon bridges. The many miles of open semi-desert provided excellent training ground for desert warfare, camouflage and other tactical problems. Rifle ranges, artillery ranges were built in carefully selected positions all over the area.

Troops were taught the necessary methods of taking care of themselves as well as handling the tools and implements of war. This included mastering the infiltration course, firing of individual weapons, rifles, pistols, hand grenades, machine guns and trench mortars, team fighting where actual battle conditions were simulated. Field problems were worked out by day and night, in the heat of summer and the cold of winter.¹²⁴

A more detailed description of training for the 93rd Infantry focuses on the summer and fall of 1942:

It was under these circumstances that the men of the 93rd underwent training in desert and urban warfare. Throughout much of August [1942], soldiers of the Division's 318th Engineer Battalion participated in demolition, road and bridge construction, field fortification and tactical assault training exercises. During six days of arduous movement during October, hundreds of men in the 593rd, 594th, 595th, and 596th Field Artillery Battalions along with the 318th Quartermaster Battalion maneuvered in the Northern Arizona Desert. Broken into two attacking sectors, men in these

¹²⁴ Chester A. Burrill, "Fort Huachuca at War," 68th Anniversary Issue, *The Apache Sentinel*, March 9, 1945.

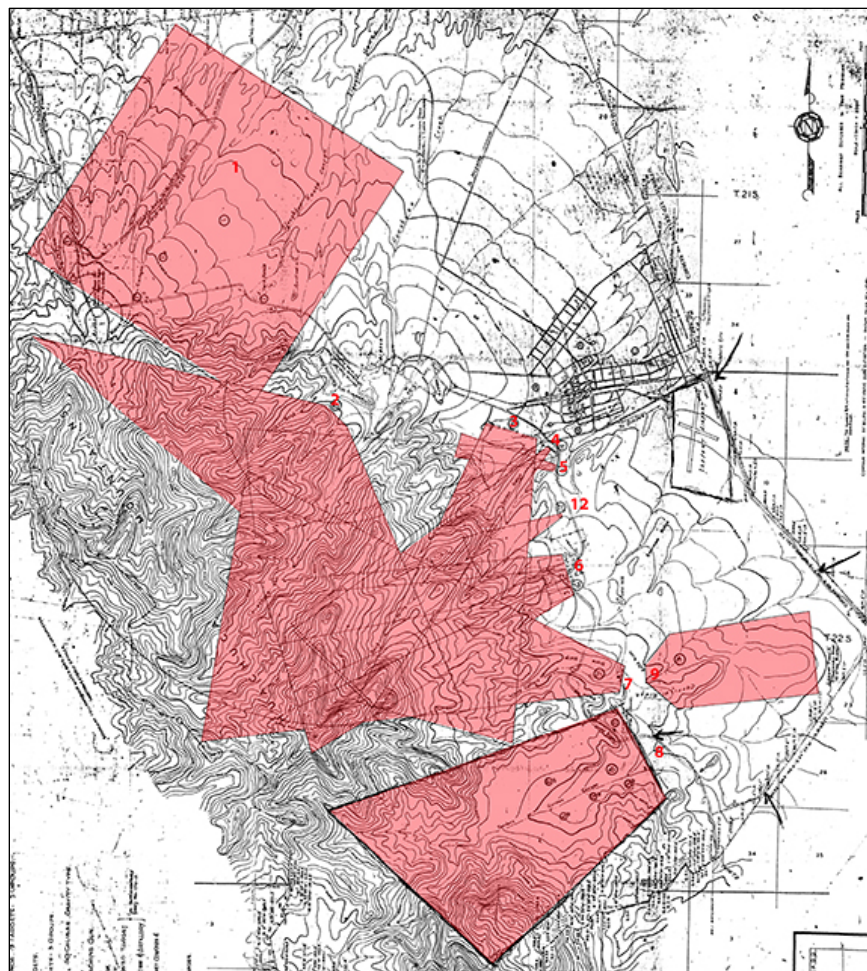
units took up offensive and defensive positions, directing barrages of “Big Berthas” against the imaginary enemy.¹²⁵

The intensive training required numerous types of courses and ranges. There was a need for ranges suitable for particular weapons, ranges suitable for particular types of targets, and ranges suitable for physical conditioning and hand-to-hand combat training. A 1943 map shows the ranges available for training at Fort Huachuca (Figure 29). Covering vast areas west and south of the cantonment, ten ranges were identified on the map:

- Range 1: Field Target Range—Rifle and Light Machine Gun
- Range 2: Anti-Aircraft Range Miniature, 3 Ranges
- Range 3: Machine Gun and Anti-Tank 1000' Range, 90 Tracks
- Range 4: Landscape Target Range, 9 Targets, 3 Groups
- Range 5: Pistol Range, 25 Targets
- Range 6: Rifle Range, 150 Targets, 3 groups
- Range 7: Moving Target Range, 50 Caliber Gravity Type
- Range 8: Field Target Range, Machine Gun
- Range 9: Mortar Range, 60 and 81 mm
- Range 12: 37 mm Anti-Tank Sub-Caliber Range 1000'

¹²⁵ Jefferson, *Making the Men of the 93rd*, 249–250.

Figure 29. Detail of installation map with ranges highlighted by ERDC-CERL, 1943
(*Topographic Map and Reservation Boundary, USACE Phoenix Archive. Public Domain*).



When training for marksmanship, the recruits would progress from the Known Distance Range, to a transition range, and then to a field range. The Rifle Range (Range 6), had three adjacent sets of targets, each set containing 50 targets with a firing line, butts, target mechanisms, and buildings with the purpose of storage, support, or both (Figure 30). Known distances were marked on the range. There was a separate range (Range 3) for machine gun target training (Figure 31). A Rifle Transition Range was added the following year, with modified firing positions and targets at various distances, to more closely simulate combat firing conditions (Figure 32). Field target ranges (Ranges 1 and 8) are large areas of open land with varied terrain containing pits with targets and target operators. The targets would be suddenly moved into position, appearing in pits, behind hills

or debris piles, in windows of buildings, or other places of concealment to surprise the trainees.

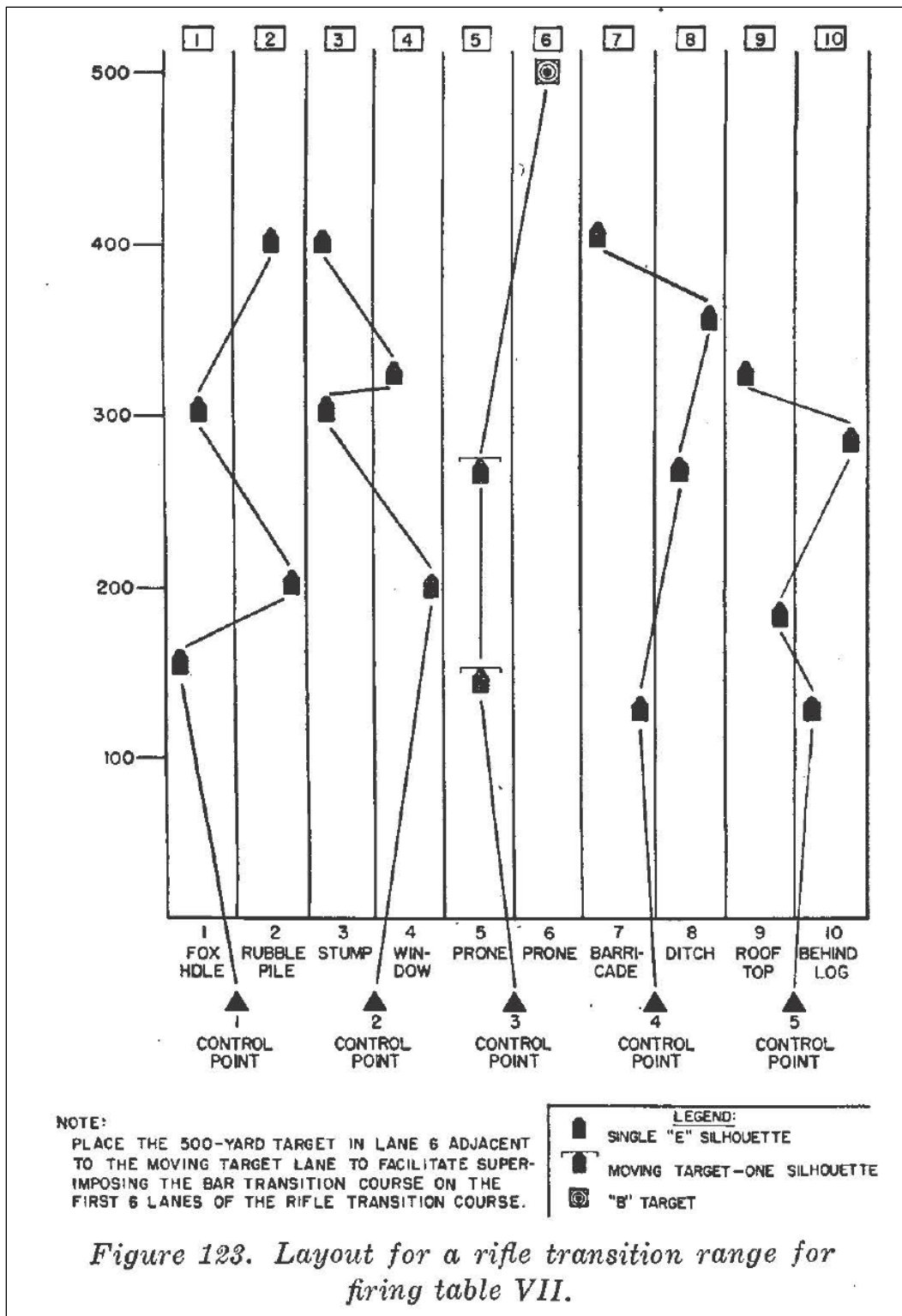
Figure 30. 93rd Division soldiers on firing line, 1942 (RG111-SCA Book #2 146270, NARA, College Park, MD. Public Domain).



Figure 31. 93rd Division soldiers firing a machine gun, 1942 (RG111-SCA Book #2 146270, NARA, College Park, MD. Public Domain).

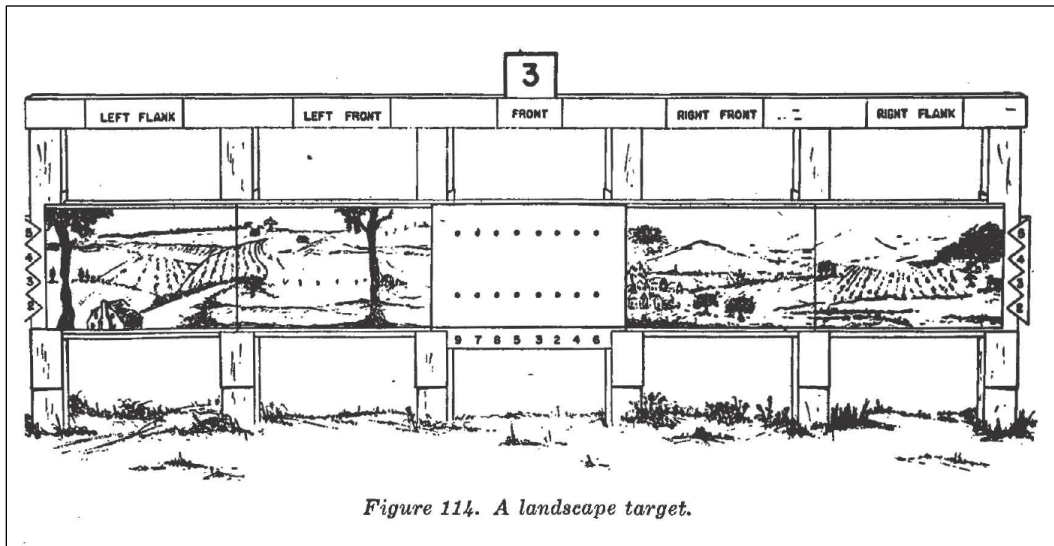


Figure 32. Typical layout for a Rifle Transition Range, 1951 (Departments of the Army and the Air Force 1951. Public Domain).



Rifle Landscape Target Ranges (Range 4) were 1,000-inch ranges, where soldiers fired “at panels which contain a picture of a landscape as it might appear to a squad in combat” with features recognizable at 1,000 inches (Figure 33).¹²⁶ These target ranges were a preparatory step for field target firing. The small scale of the range facilitated close supervision, and negated the need for personnel operating target systems, field communications, or other activities necessary on larger ranges. Landscape target practice could also be conducted indoors.¹²⁷ Training for other weapons included flame throwers and bazookas (Figure 34).

Figure 33. Typical target for a rifle landscape range, 1951 (Departments of the Army and the Air Force 1951. Public Domain).



¹²⁶ Departments of the Army and the Air Force, *M-1 Rifle*, FM 23-5, (Washington, DC: Government Printing Office, 1951), 368.

¹²⁷ *Ibid.*, 368–371.

Figure 34. 93rd Division soldiers with flame thrower training, 1942 (1940.15.00.101, Fort Huachuca Museum Collection. Public Domain).



Artillery training was provided for various guns, as well as anti-tank training (refer to range list on page 67), and anti-aircraft gun training (Figure 35, Figure 36, Figure 37, Figure 38). The artillery range contained an Anti-Aircraft Range & Towed Target, and a Moving Target Range, 37 mm.

Figure 35. 93rd Division soldiers using artillery on the East Range, 1942 (1940.15.00.88, Fort Huachuca Museum Collection. Public Domain).



Figure 36. 93rd Division soldiers using 155 mm guns, 1942 (RG111-SCA Book #2 148130, NARA, College Park, MD. Public Domain).



Figure 37. 93rd Division soldiers using 155 mm guns, 1942 (RG111-SCA Book #2 148126, NARA, College Park, MD. Public Domain).



Figure 38. 93rd Division soldiers watching 155 mm explosion, 1942 (RG111-SCA Book #2 148119, NARA, College Park, MD. Public Domain).



Specialized training was also conducted, with an engineer training area on the South Range that contained bridge building facilities and an artificial lake for amphibious training (Figure 39). Engineers were taught demolition techniques as well (Figure 40).

Figure 39. Amphibious vehicle training on the South Range, 1942 (1940.15.00.88, Fort Huachuca Museum Collection. Public Domain).

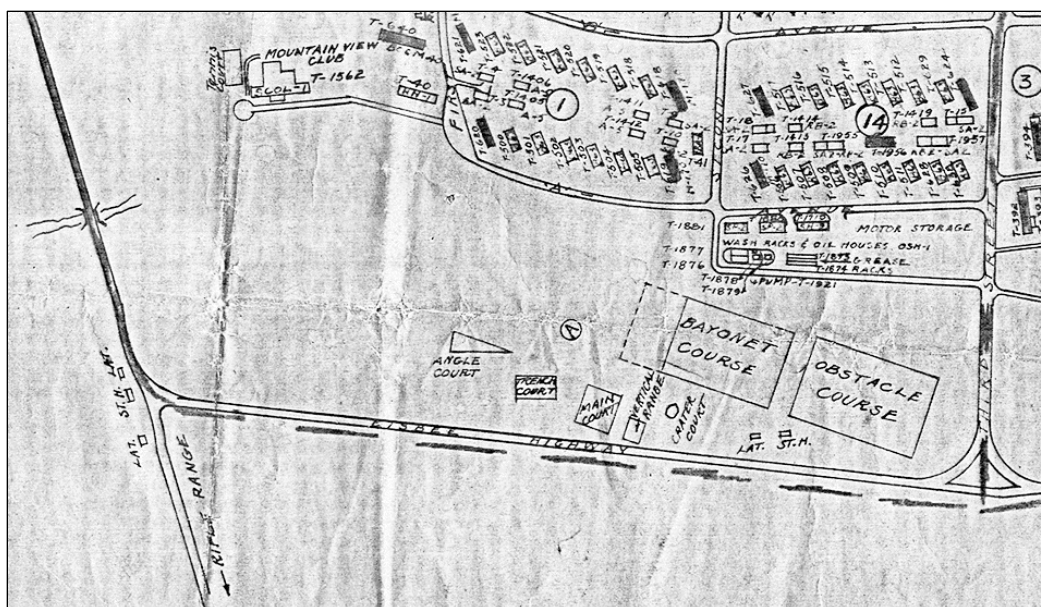


Figure 40. 93rd Division soldiers wrapping explosives around trunk of tree, 1942 (RG111-SCA Book #2 148118, NARA, College Park, MD. Public Domain).



For physical training and hand-held weapons, courses were constructed in regimental groups at the edges of the new cantonment (Figure 41, Figure 42, and Figure 43). The training courses included bayonet courses, obstacle courses, crater courts, vertical courts, main courts, trench courts, angle courts, and throwing pits. Each of the three training areas also had a latrine and a storehouse. There is some indication the training courses were built by troop labor as the post newspaper recounts the 359th Infantry Regiment having constructed an obstacle course and bayonet course.¹²⁸ Following are images showing training in trenches and over obstacles most likely in the training courts near the regimental cantonment areas (Figure 44, Figure 45, Figure 46, and Figure 47).

Figure 41. Training courses on the southern edge of the new cantonment, 1944 [AZ EE:7:410 (ASM)] (Office of the Post Engineer Revised Map of New Cantonment Area, Fort Huachuca Directorate of Public Works [DPW]. Public Domain).



¹²⁸ 93rd Blue Helmet, "369th Inf., Youngest Regiment, Has Record of Achievement Any Outfit Could Well be Proud of," December 23, 1942, 13.

Figure 42. Training courses on the western edge of the new cantonment, 1944 [no longer extant] (*Office of the Post Engineer Revised Map of New Cantonment Area, Fort Huachuca DPW. Public Domain*).

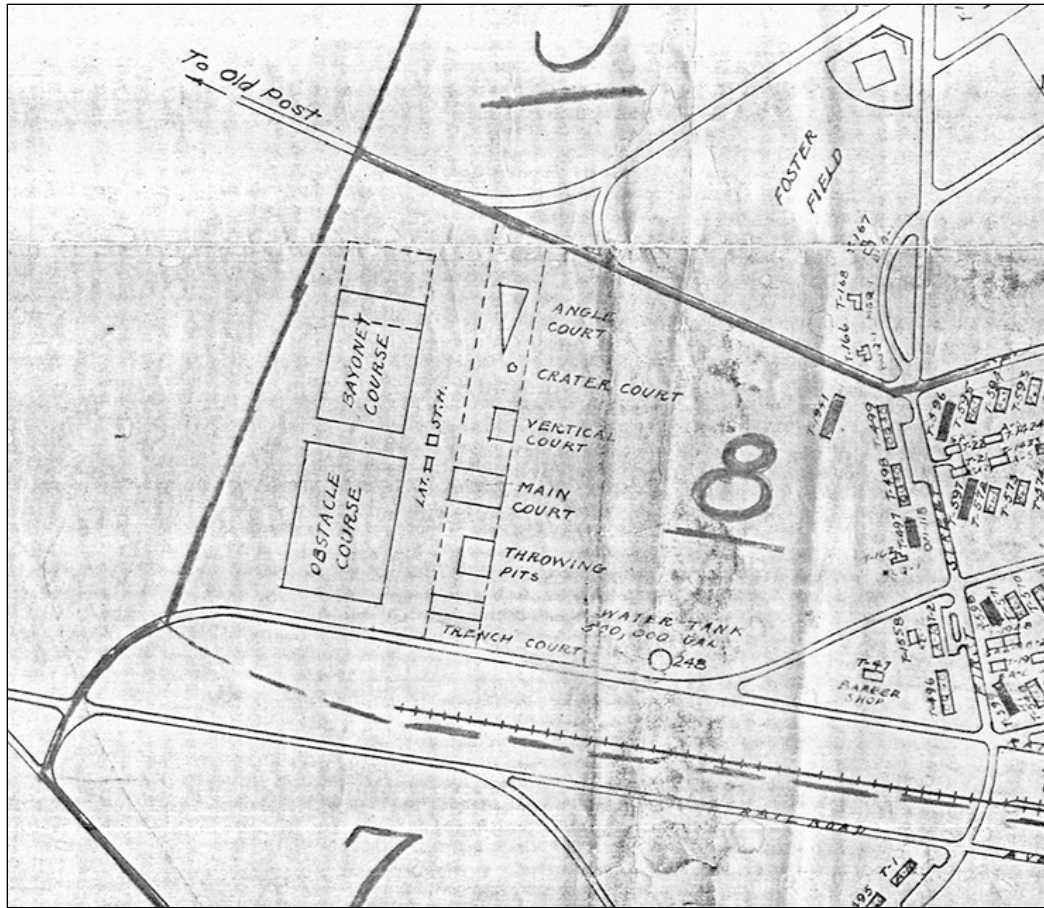


Figure 43. Training courses on the eastern edge of the new cantonment, 1944 (AZ EE:7:408 [ASM]) (Office of the Post Engineer Revised Map of New Cantonment Area, Fort Huachuca DPW. Public Domain).

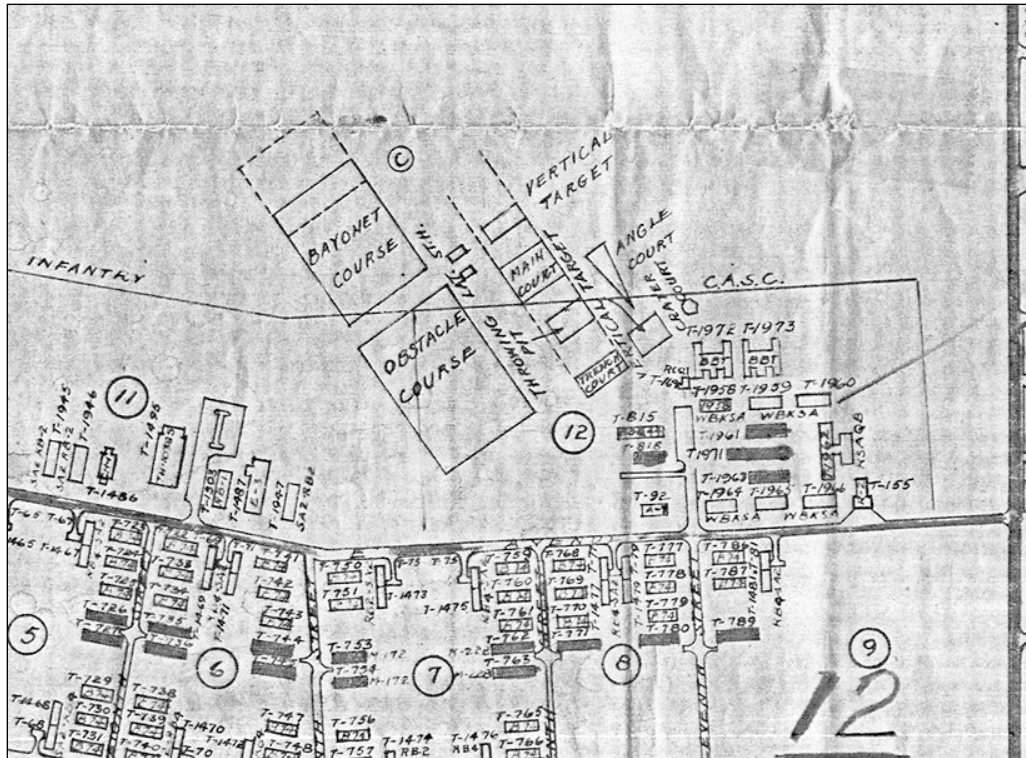


Figure 44. Soldiers receive training, 1942 (1941.00.00.12, Fort Huachuca Museum Collection. Public Domain).



Figure 45. 93rd Division soldiers in trench, 1942 (RG111-SCA Book #2 148129, NARA, College Park, MD. Public Domain).



Figure 46. 93rd Division soldiers going through grenade action covered by rifles, 1942 (RG111-SCA Book #2 148127, NARA, College Park, MD. Public Domain).



Figure 47. 93rd Division soldiers jumping from stone wall, 1942 (RG111-SCA Book #2 148122, NARA, College Park, MD. Public Domain).



2.4.2 Charleston

Charleston was an ore processing town on the west bank of the San Pedro River that was founded in 1879 and largely abandoned by 1888 (Figure 48). That year the Arizona and South Eastern Railroad was built, and the town was somewhat revived until the train stop at Charleston was discontinued in the early 20th century.¹²⁹

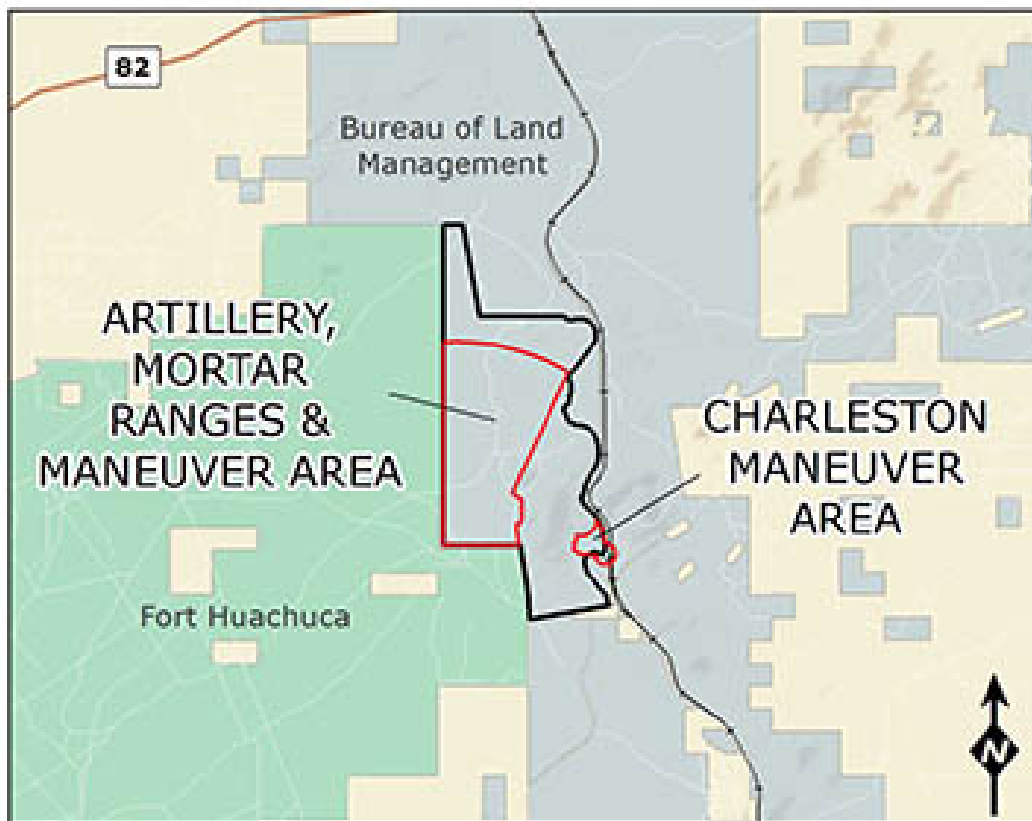
During WWII, Charleston served as a troop objective during field training in urban assault, street fighting and close combat.¹³⁰ The 93rd Infantry Di-

¹²⁹ Jennifer Levstik, "Mapping and Documentation of Contention City AZ EE:4:9(ASM), and Charleston, AZ EE:8:141(ASM), Along the San Pedro River in Cochise County, Arizona," (Tucson, AZ: SWCA Environmental Consultants, 2008), 9.

¹³⁰ Chester A. Burrill, "Fort Huachuca at War," *The Apache Sentinel: 68th Anniversary Issue*, March 9, 1945.

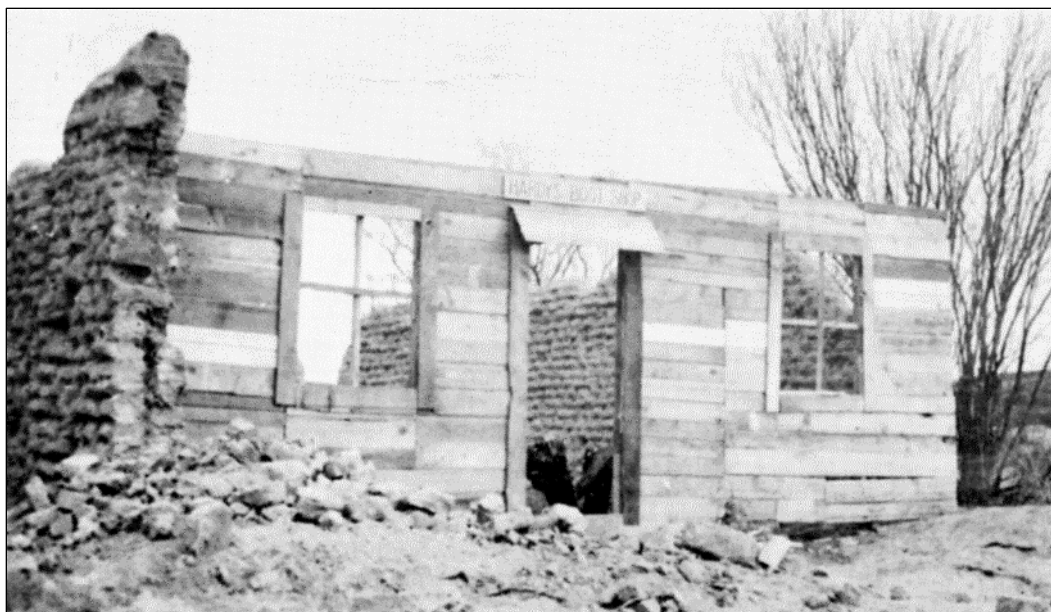
vision “rebuilt” portions of the town in January and February 1943 to simulate a European town. The adobe buildings still standing had new fronts installed, new buildings or facades were constructed, and streets were smoothed out or newly built (Figure 49). Only Main Street was used for training, with the other buildings as background.¹³¹

Figure 48. Map showing location of Charleston Maneuver Area, undated (Jackson Research Associates, Public Domain).



¹³¹ 93rd Blue Helmet, “Charleston Revived So Soldiers May Practice Street Fighting,” January 22, 1943.

Figure 49. Example of one of the “buildings” rebuilt in Charleston by the 93rd Infantry Division, 1945 (1945.07.13.58, Fort Huachuca Museum Collection. Public Domain).



Training included an infiltration course, which required troops to crawl across the sands of the San Pedro River bed, ease under barbed wire, and avoid the live ammunition Browning machine gun fire zipping overhead (Figure 50 and Figure 51). The bluff to the town itself was scaled using rope nets (Figure 52). In the town, urban tactics were used among the buildings, with straw-stuffed dummies as targets (Figure 53).¹³² The training at Charleston could last for extended periods. Members of the 369th, 368th, and the 25th Infantry Regiments spent weeks in the mock village “undergoing various phases of combat fighting and street fighting amidst exploding dynamite charges and light machine gun firing. Afterwards, each unit led an assault 300 yards to the rear of the village before marching up the surrounding mountains back to Fort Huachuca.”¹³³

¹³² 93rd *Blue Helmet*, “Combat Course At Charleston Has Many Thrills For Soldiers,” February 26, 1943,

¹³³ Jefferson, *Making the Men of the 93rd*, 249–250.

Figure 50. Soldiers of the 93rd Infantry Division crawl through the infiltration course in an attack on Charleston, 1943 (1943-15-00-04, Fort Huachuca Museum Collection. Public Domain).



Figure 51. Soldiers of the 93rd Infantry Division in the San Pedro River bed about to attack Charleston, 1943 (1943-15-00-04, Fort Huachuca Museum Collection).



Figure 52. Soldiers from the 93rd Infantry Division use nets to scale the bluff during an attack on Charleston, 1943 (1943-15-00-04, Fort Huachuca Museum Collection).



Figure 53. Soldier from the 93rd Infantry Division utilizing one of the adobe walls in Charleston, 1943 (1943-15-00-04, Fort Huachuca Museum Collection).



Charleston was abandoned again at the end of WWII. The lease on the far eastern portion of Fort Huachuca along the San Pedro River was terminated in June 1947.¹³⁴

2.5 WWII to Electronic Proving Ground (EPG)

By the end of WWII, Fort Huachuca was a fully equipped training installation for infantry and other associated troops. After the war, there was a massive reduction in the size of the military, both in numbers of troops and numbers of installations. Fort Huachuca was inspected in 1946 and its facilities analyzed in terms of future utility. For the most part, the ranges which existed at that time remained the primary training areas. The 1946 survey gave the reservation size as 76,500 acres. An associated map shows the cantonment and adjacent areas divided into 18 sections (Figure 55)). The artillery range was designated the 19th section. The survey report included a description of the training facilities:

The southerly part of the reservation (areas 17 and 18) is used for firing ranges and miscellaneous training aids situated on the foothill slopes of the Huachuca Mountains. The artillery area (area 19) comprises the northeasterly portion of the reservation...Adequate training aids and firing ranges are available on the military reservation for the requirements of a combat infantry division, together with many other AGF [Army Ground Forces] and ASF [Army Service Forces] units, including light tank battalions. The reservation is sufficiently large to accommodate various types of tactical exercises and maneuvers and provides numerous bivouac areas away from danger zones. A number of training aids not requiring extensive safety zones are located adjacent to the post and cantonment areas; however, most aids and ranges are situated north of the post area and south of the cantonment area. No undue loss in training tie has occurred because of present locations of training aids and firing ranges. Motorized transportation and

¹³⁴ *Real Estate Map*, 1947, scale not given, (Phoenix, AZ: Corps of Engineers), Box 21, USACE Phoenix Archive.

equipment have generally been used in reaching the more distant training areas and ranges, as well as the mock village in the northeasterly leased portion of the reservation northwest of Charleston.¹³⁵

The survey listed ranges and training areas located by section on the associated map (Figure 54 and Figure 55). The following were listed as training aids located in areas nearby the cantonment, or adjacent to the post and cantonment areas:¹³⁶

- One sanitation demonstration area—Area 12
- One drivers' training area—Area 11
- One signal area—Area 12
- One swimming Pool—Area 12
- One engineer bridge bldg. and training area—north of Area 15
- One amphibious landing area (flooded lake)—Area 11
- Three bayonet courses (27 lanes total)—Areas 7, 8, and 11
- Three obstacle courses (27 lanes total)—Areas 7, 8, and 11
- Three grenade courts (practice)—Areas 7, 8, and 11
- One grenade court (live)—Range G
- Two gas chambers (chlorine and cyanide)—Area 11
- Three 1,000-inch antitank (sub-cal.) ranges (3 firing points)—Range D, Area 6
- Three 1,000-inch machine gun (sub-cal.) range (90 tracks)—Range D, Area 6
- Three landscape ranges (9 targets total)—Range E, Areas 6 and 17
- Pistol (45-cal.) range (15 and 25 yards, 25 targets)—Range F, Area 17
- One antiaircraft towed target range—Range H, Area 17

The following ranges and training areas were listed as areas located more than 30 minutes marching time and therefore removed from the post and cantonment areas:

- Three known-distance ranges (100-200-300-5—yards, 150 firing points)—Range K, 3 miles

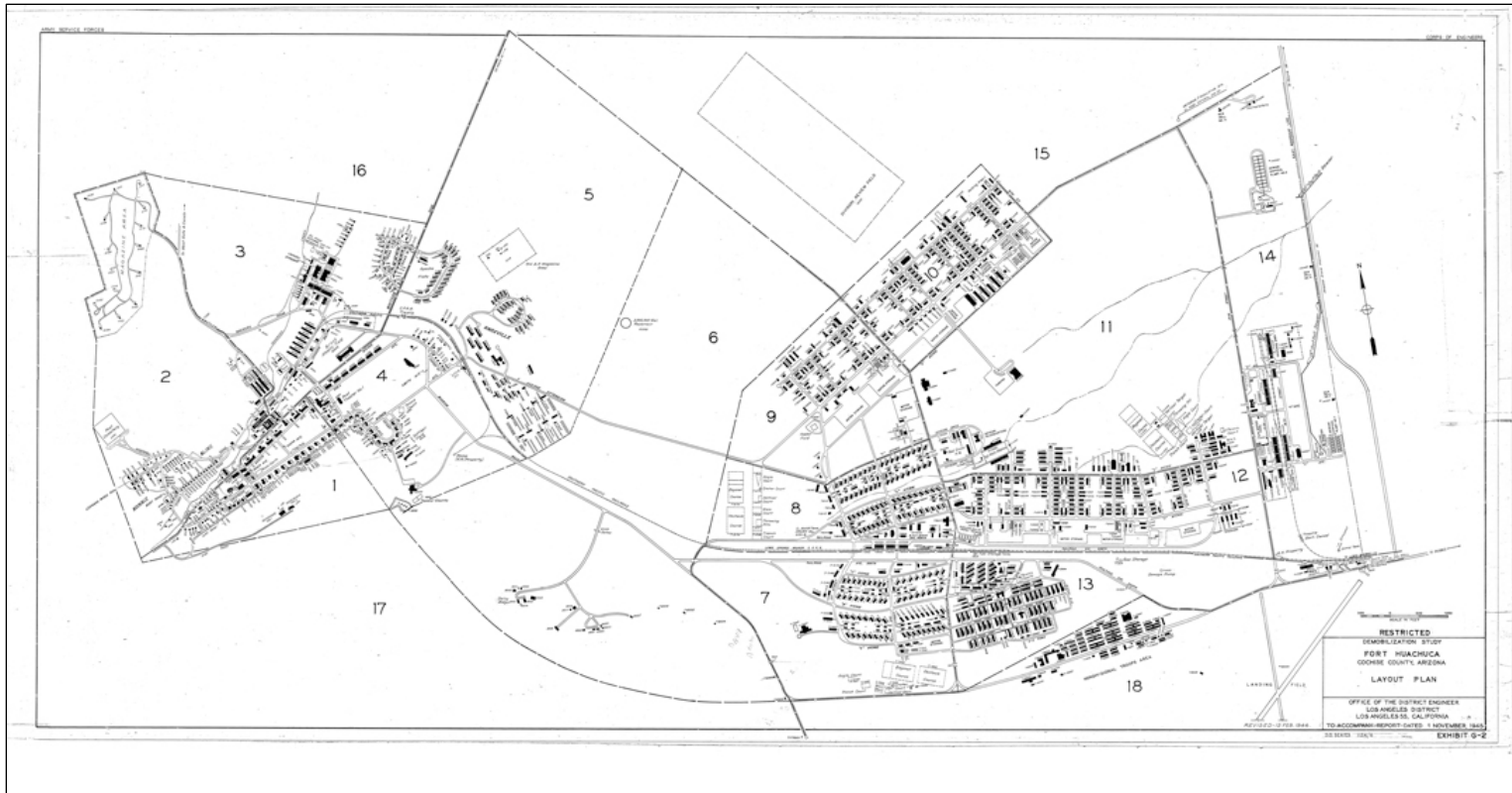
¹³⁵ War Department, *Analysis of Existing Facilities for Master Planning, Fort Huachuca, Cochise County, Arizona*, (Los Angeles, CA: Office of the District Engineer, 1946), 6 (ellipsis in original).

¹³⁶ *Ibid.*, 6–7.

- One submachine gun range (1 firing point)—Range O, 4 miles
- Three miniature antiaircraft ranges (3 firing points)—Range C, 3 miles
- Three 1,000-inch 37-mm antitank (sub-cal.) ranges, Apex, (3 firing points)—Range O, 4 miles
- One moving vehicle range (1 firing point)—Range J, 4 miles
- Two moving target ranges (4 firing points total)—Range P, 4 miles
- Two field firing (30-cal) ranges, rifle, and machine gun (6 pits each)—Ranges A and Q, 7 and 5 miles
- One mortar range—Range N, 4 miles
- One rifle mortar range—Range, area 18
- One rocket launcher range—Range M, 3 miles
- Two transition ranges—Ranges R and T, 8 and 8½ miles
- Two transition ranges—Ranges S and U, 8 and 9 miles
- One close combat course—Range B, 3½ miles
- Two antiaircraft CQ-2A airplane target ranges—space available in Range H and artillery range (Area 19), 2 miles and 8 miles
- One demolition area—Range N, 4 miles
- One infiltration course—Range V, 9 miles
- One artillery range, up to 155 mm (5 observation points, impact area in mountains in northeast portion of artillery range—Area 19, 8 miles to battery positions on south and east boundaries, battery position also in Range A)
- One fortified assault area (mortar and rocket)—12 miles¹³⁷

¹³⁷ Ibid.

Figure 54. Map showing cantonment layout with numbered sections, 1945 (*Fort Huachuca Layout Plan*, Nov. 1945, Fort Huachuca Museum Collection. Public Domain).



The 1946 survey provides some information regarding buildings on the training areas and ranges. In Area 6, there were two range houses (#T-6002 and #T-6005), and three latrines (#T-6003, #T-6004, and #T-6006). In Area 7, a latrine (#T-7005) and a storehouse (#T-7006) accompanied the angle court, trench court, main court, vertical court, obstacle course, bayonet course, and crater court. Area 11 contained two gas training houses (#T-11085 and #T-11090), a latrine (#T-11094), and a storehouse (#T-11095), supporting the nearby bayonet course, obstacle course, vertical target, main court, throwing court, trench court, angle court, and crater court. Area 17 had a latrine (#T-17001), observation tower (#17010), a custodian's house for the rifle range (#17011), and a range house (#T-17012).¹³⁸

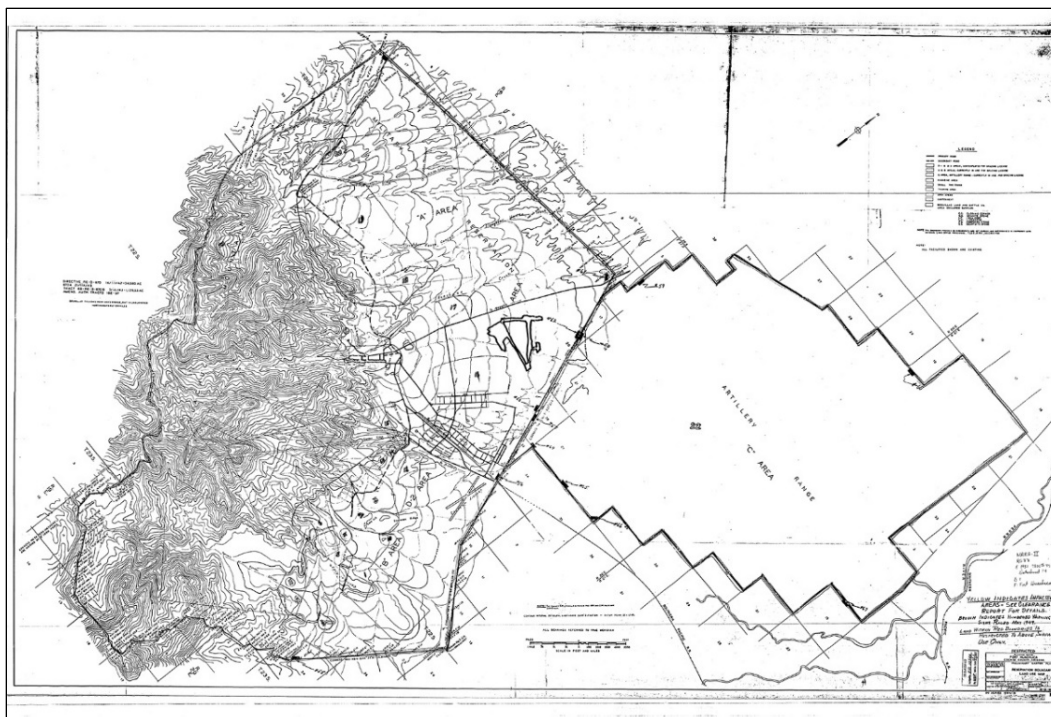
The installation was declared surplus on 31 May 1947 and was closed on 15 September 1947. The property was turned over to the War Assets Administration, and many of the temporary buildings in the WWII cantonment were sold.¹³⁹ Fort Huachuca was deeded to the state of Arizona in 1949, and the Arizona Game and Fish Department established a wildlife refuge there on 32,752 acres located on the north, west, and south range lands (Figure 55).¹⁴⁰

¹³⁸ *Ibid.*, 43–44, 63, 76.

¹³⁹ "The Modern Era, 1950–2000," 3.

¹⁴⁰ "The Modern Era, 1950–2000," 14–15; Herbert, Jackson, and Wee, 147.

Figure 55. Map showing entire installation with boundary and artillery range, 1947
(*Reservation Boundary Land Use Map, Fort Huachuca DPW. Public Domain.*)



The Arizona National Guard was deeded the “Old Post” area and the artillery range for training. What was not turned over to the state of Arizona or the National Guard was controlled by the Air Force from February 1951 to March 1951. In March 1951, the government reactivated Fort Huachuca in response to the Korean War (1950–1953) and the Army retook possession. During the period between 1951 and 1953, Fort Huachuca was declared a Class I installation and used for aviation engineer training. First to arrive was the 419th Engineer Aviation Brigade, a reserve unit from New Jersey.¹⁴¹ Several other engineer aviation units had arrived by June 1951, all recalled from reserve status. The Engineer Aviation Unit Training Center (EAUTC) was established at Fort Huachuca on 5 June 1951 and staffed with personnel from the 419th Engineer Aviation Brigade.¹⁴² The first training cycle began in July 1951, with an Advanced Individual Training (AIT) course, as well as a limited basic training course for personnel with

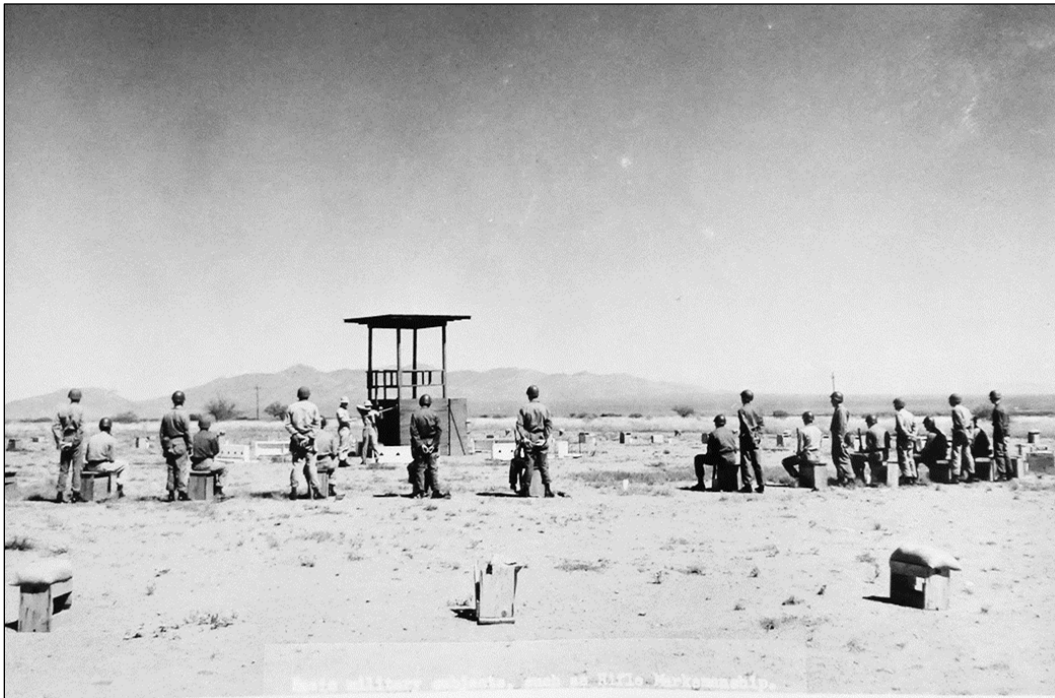
¹⁴¹ “The Modern Era, 1950–2000,” 11–12.

¹⁴² *Fort Huachuca: A Pictorial Essay 1877–1952*, (Fort Huachuca: U.S. EAUTC, 1952), n.p.

no prior military experience.¹⁴³ Ranges and other training facilities were rehabilitated to support EAUTC needs, and by 1952 were deemed:¹⁴⁴

Capable of supporting the general and specialized training of over 8,000 Engineer Troops. Ranges (classroom sites, physical conditioning courses) and other required training facilities, suitable for an Infantry Division during World War II, have been in rehabilitated [sic], to a point where they are capable of handling a much greater load than has been imposed by the EAUTC. Other specialized training areas, such as a Fixed Bridge Site, Gas Chamber, Bayonet Courses, Obstacle area, and other sites, are more than adequate for present needs. (Figure 56, Figure 57, Figure 58, and Figure 59)¹⁴⁵

Figure 56. EAUTC rifle marksmanship, c. 1951 (*Fort Huachuca: A Pictorial Review, 1877–1952*, Fort Huachuca Museum Collection. Public Domain).



¹⁴³ Ibid.

¹⁴⁴ Ibid.

¹⁴⁵ Ibid.

Figure 57. EAUTC rifle marksmanship, c. 1951 (*Fort Huachuca: A Pictorial Review, 1877–1952*, Fort Huachuca Museum Collection. Public Domain).



Figure 59. EAUTC bivouac area, c. 1951 (*Aggressors move in to attack a bivouac area, Fort Huachuca Museum Collection. Public Domain*).



Figure 60). The first training cycle also saw the rehabilitation of the existing airfield, and the design of a new airfield for Fort Huachuca. The second cycle of training put the design into construction, and this became the major project of the EAUTC at Fort Huachuca, resulting in the fully equipped and functional Libby Army Airfield (LAAF).

Figure 60. EAUTC Bailey bridge construction training, c. 1951 (*Fort Huachuca: A Pictorial Review, 1877-1952*, Fort Huachuca Museum Collection. Public Domain).



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Figure 61 shows the ranges at Fort Huachuca during the EAUTC era, with nearly all WWII facilities in place. As the Charleston training area was no longer available, a new mock village was built in 1951, likely by the EAUTC engineer troops. Known as a Combat in Cities facility, it was located in the Garden Canyon area and contained a street lined with wooden structures utilized for urban assault training (Figure 62, Figure 63, and Figure 64).

¹⁴⁶ "Building Usage List Fort Huachuca, Arizona," Fort Huachuca Museum Collection, Fort Huachuca, AZ, 16, 27, 54-55.

Figure 61. Map showing ranges and training sites, c. 1951 (*Fort Huachuca Arizona Layout of Military Reservation*, Fort Huachuca Museum Collection. Public Domain).

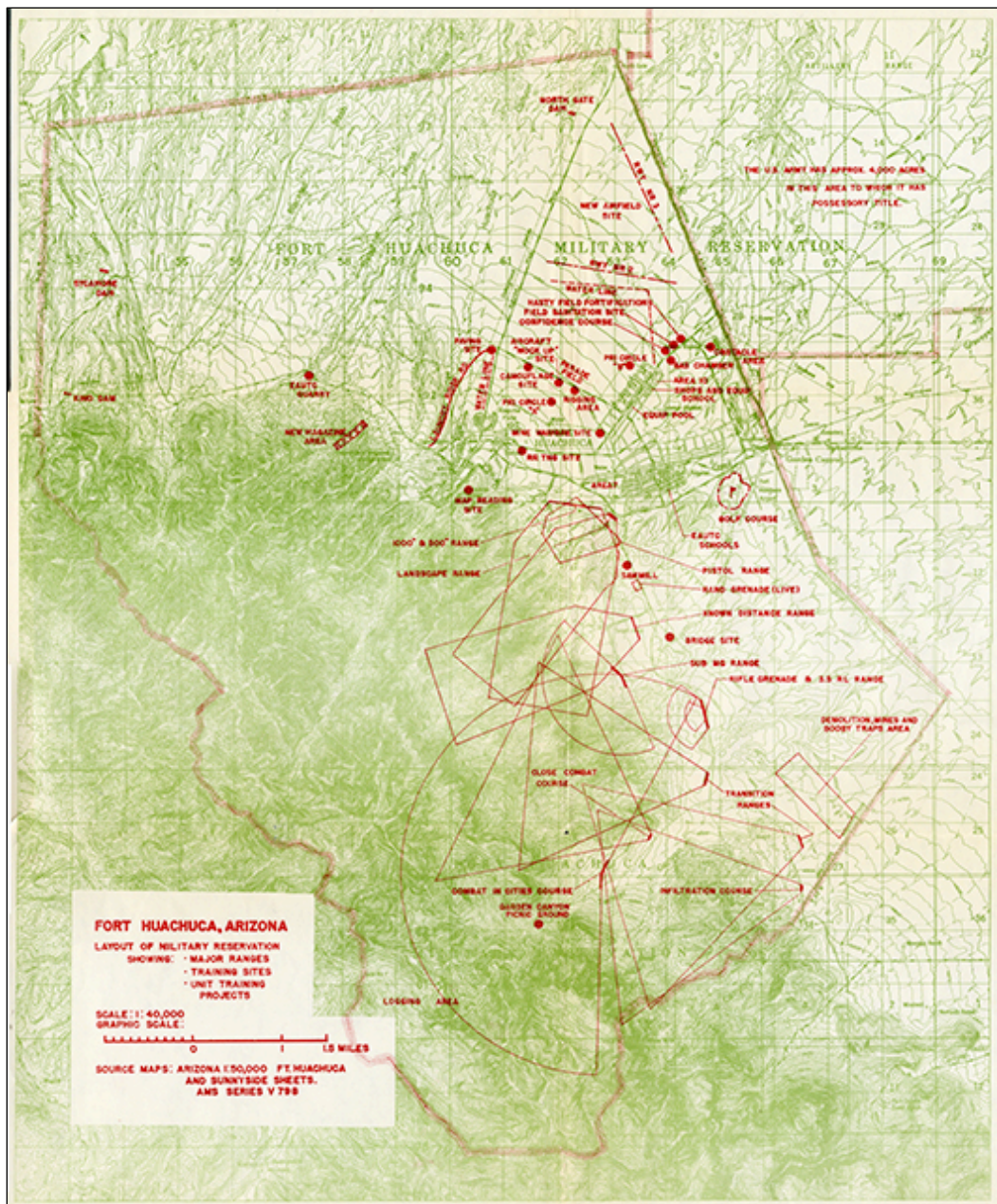


Figure 62. Detail of map showing location of Combat in Cities Course, c. 1951 (*Fort Huachuca Arizona Layout of Military Reservation*, Fort Huachuca Museum Collection. Public Domain).

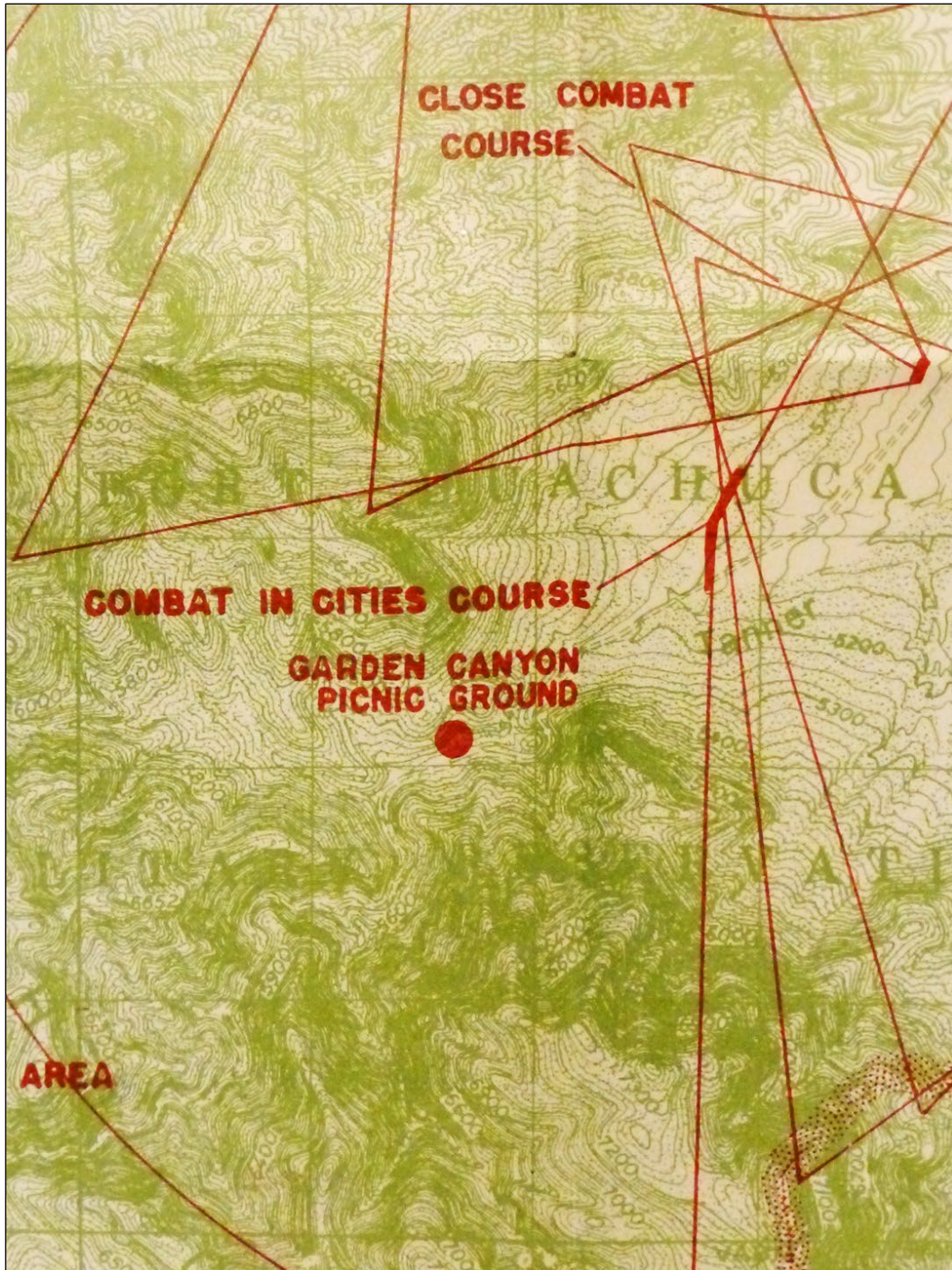
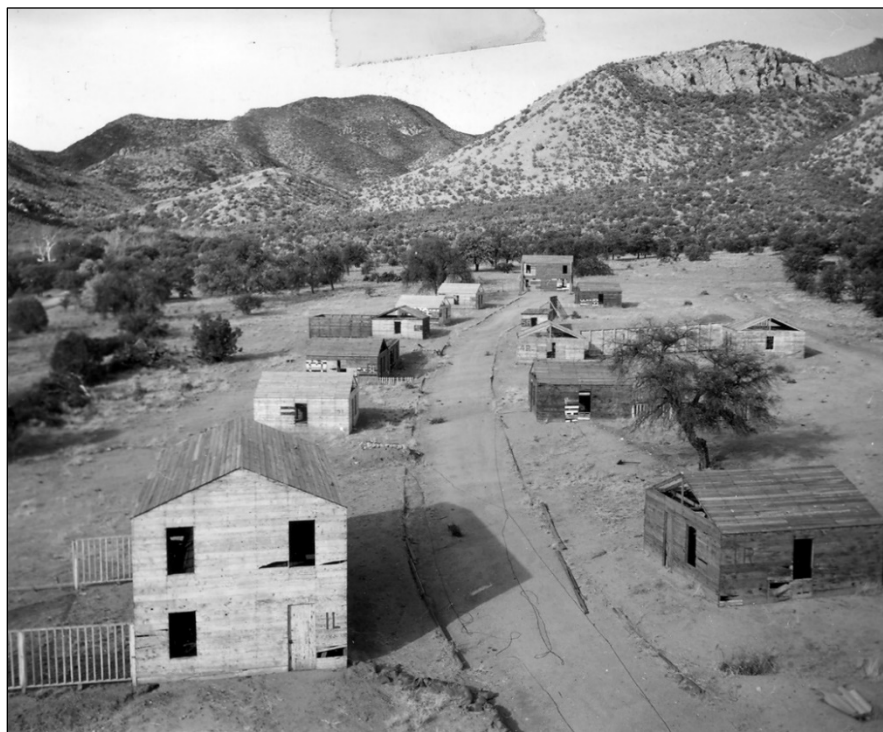
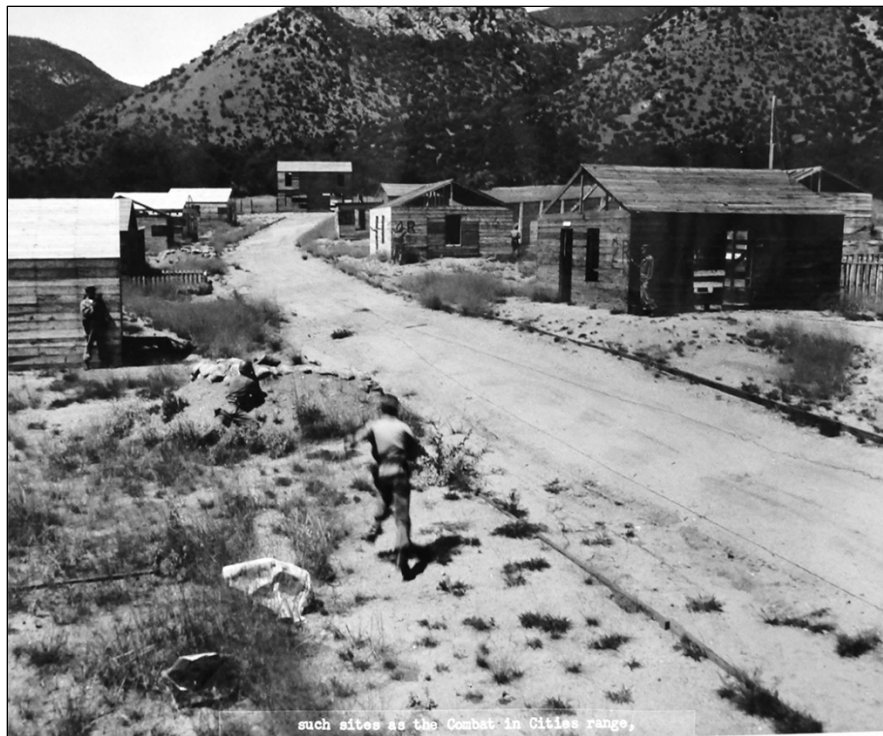


Figure 63. EAUTC Combat in Cities Course, c. 1951 (*Fort Huachuca: A Pictorial Review, 1877-1952*, Fort Huachuca Museum Collection. Public Domain).



The last of the EAUTC units completed their training in December 1952, and Fort Huachuca was placed on standby status on 1 June 1953. The East Range was fenced by the Army during the 1951–1953 period.¹⁴⁷ The Arizona National Guard continued their weekend and summer training on the artillery range (Figure 65). The installation would not stay idle long.

Figure 65. National Guardsmen firing artillery, c. 1951 (Folder: Pictorial Section EAUTC, Fort Huachuca Museum Collection. Public Domain).



On 14 January 1954, the Department of Defense (DoD) officially announced the formation of the U.S. Army EPG, which formally established Fort Huachuca as a Class II installation with an active status (Army General Order No. 2) under the command of the Signal Corps.¹⁴⁸ On 1 June

¹⁴⁷ Rein Vanderpot and William M. Graves, eds., *A 3,977-Acre Intensive Survey and NRHP-Eligibility Evaluations of 25 Previously Recorded Sites on Fort Huachuca, Arizona*, Technical Report 12-31, (Fort Huachuca, AZ: Environmental and Natural Resources Division [ENRD], Directorate of Public Works, U.S. Army Garrison Fort Huachuca, 2013), [FH-12-7], 14.

¹⁴⁸ Headquarters United States Army Test and Evaluation Command Aberdeen Proving Ground, Maryland, "USATECOM Regulation No. 10-15 Organization and Functions U.S. Army Electronic Proving Ground Fort Huachuca, Arizona," January 17, 1963, 1. Gregory Chronologic Files 1961–1963, Fort Huachuca Museum Collection, Fort Huachuca, AZ.

1954, the Secretary of the Army approved Fort Huachuca as a permanent installation (Army General Order No. 60, 16 August 1954).¹⁴⁹ The installation would be put to use as an area for Signal Corps testing and aviation activities.¹⁵⁰ The creation of the EPG marked a significant shift in the application of electronic technology within the U.S. Army. Prior to the technology's new application, the increasing presence of electronic equipment during WWII and the Korean War demonstrated both a need for and application of communications technology and electronics systems during military activity. Further, the increase of electronic devices both on and off the battlefield caused concern that the presence of electronic noise would negatively impact the field operations' capability of the military. As a result, the active development, testing, and evaluation of electronic equipment for tactical purposes became a necessity. The EPG at Fort Huachuca was established as a facility to "bridge the gap between the scientist working in the laboratory developing and improving equipments [sic], and the soldier who must rely on the equipment in battle."¹⁵¹

This new use for Fort Huachuca did not focus on traditional military training (Figure 66).¹⁵² As a result, the WWII ranges and training facilities still in existence continued to be used for the limited training necessary to maintain marksmanship proficiency and to continue summer training, occasionally with updated training aids (Figure 67, Figure 68, Figure 69, Figure 70, and Figure 71).¹⁵³ The East Range and part of the West Range were used for artillery practice conducted in conjunction with the EPG to track projectile trajectories.¹⁵⁴

¹⁴⁹ "Organization of the USAEPG," October 1, 1962, 01.00. Gregory Chronologic Files 1961–1963, Box 31, Folder: Installation Diary (History) 1962, Fort Huachuca Museum Collection, Fort Huachuca, AZ.

¹⁵⁰ Herbert, Jackson, and Wee, 181.

¹⁵¹ "Mission of the AEPG," April 24, 1958. Fort Huachuca Museum Collection, Fort Huachuca, AZ.

¹⁵² The USAEPG primarily used the open space at Fort Huachuca for testing electronic equipment. The training that was associated with this was in the use and repair of the equipment. For more information about USAEPG testing and training, see Adam Smith, et al., "Fort Huachuca Electronic Proving Ground: Historic Context, Inventory, and Evaluation," Draft report, (Champaign, IL: US Army Corps of Engineers, ERDC-CERL, forthcoming).

¹⁵³ Most of the training courses near the new cantonment were lost when the area's buildings were sold off or demolished after WWII.

¹⁵⁴ Stephen C. Gregory, Fort Huachuca Museum, conversations with Susan Ensore, 11–15 July 2016.

Figure 66. Example of EPG radar tracking training on the South Range, 1960 (1960.00.00.75, Fort Huachuca Museum Collection. Public Domain).



Figure 67. ROTC cadets observe 13th Infantry Sergeant demonstrating an atomic foxhole during summer training, 1960 (RG111SC 576506, NARA, College Park, MD. Public Domain).



Figure 68. *Training Areas and Ranges* map, 1955 (*Training Areas and Ranges*, Fort Huachuca Museum Collection. Public Domain).

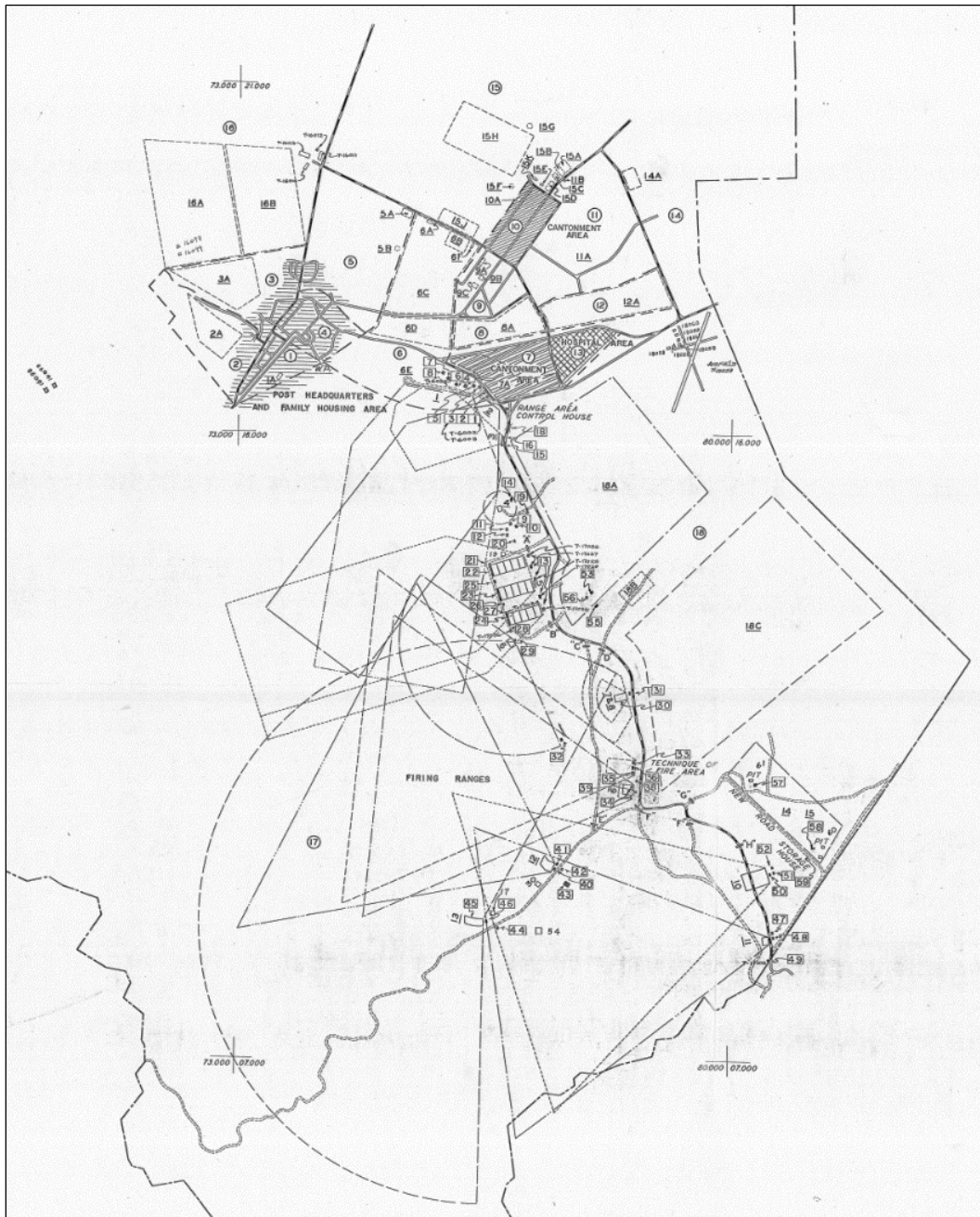


Figure 69. Index to buildings, *Training Areas and Ranges* map, 1955 (Fort Huachuca Museum Collection. Public Domain).

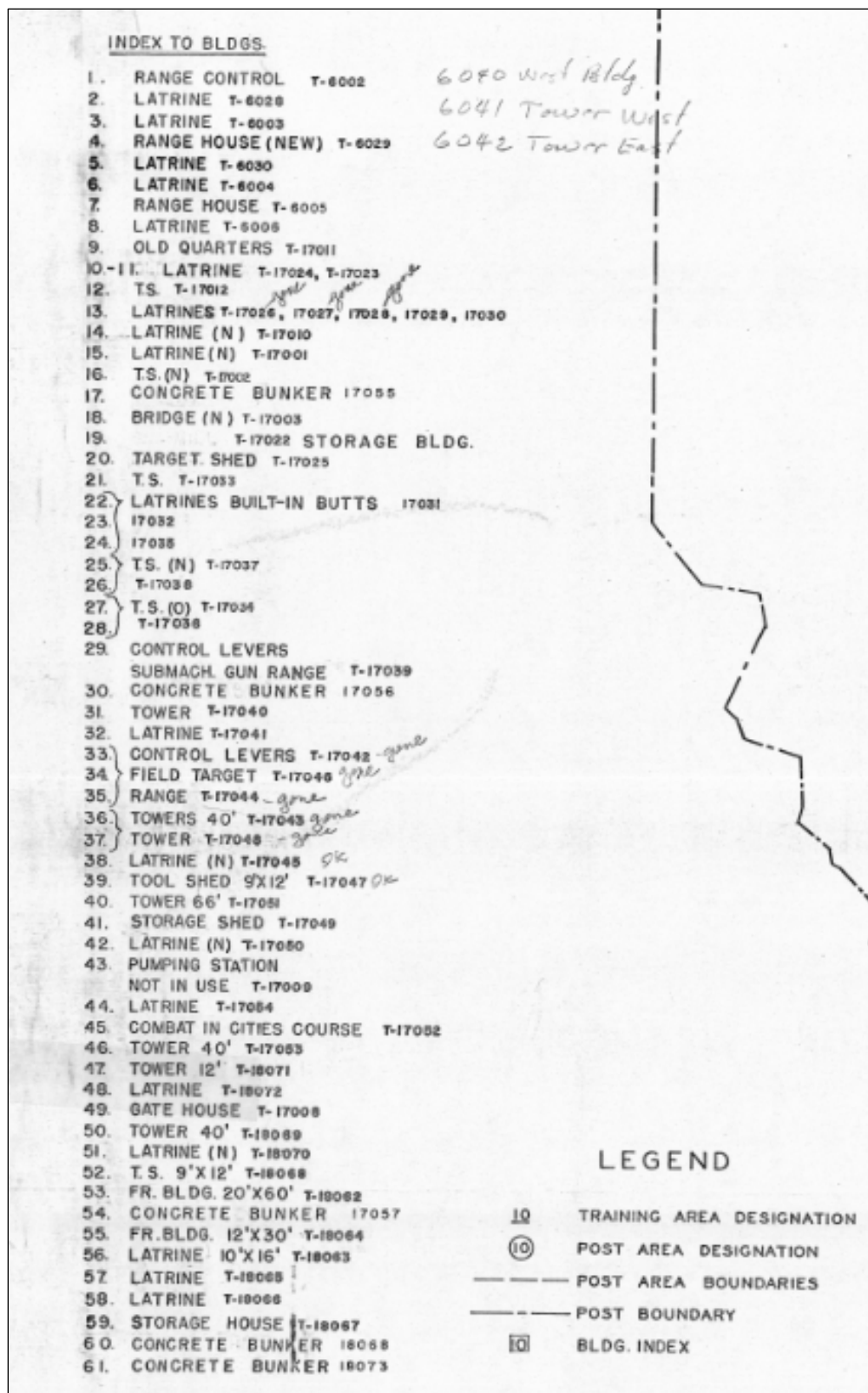


Figure 70. List of ranges, *Training Areas and Ranges* map, 1955 (Fort Huachuca Museum Collection. Public Domain).

	RANGES	NUMBER OF FIRING POINTS
1	1000" MACH. GUN, M-1 & CARBINE	180
2	LANDSCAPE TARGET	18 25 FOOT TARGETS
3	PISTOL RANGE	25
4	HAND GRENADE LIVE	12
5	KNOWN DIST. RIFLE RANGE	100
6	SUBMACHINE GUN	2
7	RIFLE GRENADE	4
8	ROCKET LAUNCHER 3.5"	4
9	FIELD TARGET RANGE M-1 TABLE IX, & CARBINE TABLES IV & V	6 LANES
10	TRANSITION RANGE M-1 & CARBINE	
11	INFILTRATION COURSE	
12	CLOSE COMBAT RANGE	2 LANES
13	MOCK VILLAGE	
14	DEMOLITION AREA	CON-CURRENT TRG. 2 CO'S.
15	MINES & BOOBY TRAPS	SAME AS 14

Figure 71. List of training areas, *Training Areas and Ranges* map, 1955 (Fort Huachuca Museum Collection. Public Domain).

TRAINING AREAS	FUNCTIONS
NO. 1A	MAP READING
5A	CAMOUFLAGE
5B	PRI CIRCLE "A"
6A	AIRCRAFT "MOCK - UP"
6B	RIGGING
6F	ROAD CONSTRUCTION
9A	HAND TOOLS
9B	POWER TOOLS
9C	MINES & BOOBY TRAPS
10A	COMMUNICATION SCHOOL
11A	ENGR. EQUIPMENT OPERATORS
11B	GAS CHAMBER
12A	VEHICLE DRIVING
14A	OBSTACLES
15A	HASTY FORTIFICATIONS
15B	FIELD SANITATION
15C	CONFIDENCE COURSE
15D	GRENADE PRACTICE COURT
15E	BAYONET TRAINING
15F	PRI CIRCLE "B"
15G	PRI CIRCLE "C"
15J	REVIEW FIELD
15K	PRACTICE DRILL FIELD
6E	PORTION OF RANGE SITE
18B	FIXED BRIDGE
2A-3A-6C-6D-	
7A-8A-15H-16A-	
16B-18A-18C:	FIELD TRAINING AREAS

The 1955 *Training Areas and Ranges* map provides information on the buildings associated with each listed range.¹⁵⁵ The table below associates buildings and building uses with the ranges in their vicinity (Table 1).

Table 1. Buildings and building uses associated with nearby ranges.

Range #	Range Title	Associated or Nearby Buildings and Structures in 1955
1	1000" Machine Gun, M1 & Carbine	Range House (T-6029) Latrines (T-6004, T-6006) Range House (T-6005)
2	Landscape Target	Range Control (T-6002) Latrines (T-6028, T-6003, T-6030)
3	Pistol Range	Latrine (T-17010) T.S. [Target Shed] (T-17002) Bridge (T-17003)
4	Hand Grenade Live	Latrines (T-17010, T-17023, T-17024) Old Quarters (T-17011) T.S. [Target Shed] (T-17012) Storage Building (T-17022) Target Shed (T-17025)
5	Known Distance Rifle Range	Latrines (T-17026, T-17027, T-17028, T-17029, T-17030) T.S. [Target Shed] (T-17033, T-17034, T-17036, T-17037, T-17038) Latrines Built-in Butts (17031, 17032, 17035) Across road: FR. Building 20 ft × 60 ft (T-18062); FR. Building 12 ft × 30 ft (T-18064); Latrine 10 ft × 16 ft (T-18063)
6	Submachine Gun	Control Levers (T-17039)
7	Rifle Grenade	Concrete Bunker (T-17056) Tower (T-17040)
8	Rocket Launcher 3.5"	Concrete Bunker (T-17056) Tower (T-17040)
9	Field Target Range (M-1 Table IX, & Carbine Tables IV and V)	Latrines (T-17041, T-17045) Control Levers (T-17042) Field Target (T-17046) Range (T-17044) Towers 40 ft (T-17043) Tower (T-17048) Tool Shed 9 ft × 12 ft (T-17047)

¹⁵⁵ Post Engineer Office, *Training Areas and Ranges*, 1955, 1:25,000 scale, (Cochise County, AZ: Fort Huachuca), Fort Huachuca Museum Collection.

Range #	Range Title	Associated or Nearby Buildings and Structures in 1955
10	Transition Range M-1 & Carbine	Tower 40 ft (T-18069) Latrine (T-18070) T.S. [Tool Shed] 9 ft x 12 ft (T-18068)
11	Infiltration Course	Tower 12 ft (T-18071) Latrine (T-18072) Gate House (T-17008)
12	Close Combat Range	Tower 66 ft (T-17051) Storage Shed (T-17049) Latrine (T-17050) Pumping Station, not in use (T-17009)
13	Mock village	Latrine (T-17054) Combat in Cities Course (T-17052) Tower 40 ft (T-17053) Concrete Bunker (17057)
14	Demolition Area	Latrine (T-18065) Concrete Bunker (18073)
15	Mines & Booby Traps	Latrine (T-18066) Storage House (T-18067) Concrete Bunker (18068)

2.7 STRATCOM/NETCOM Era

In the early 1960s, Army basic training was still modeled on WWII-era requirements. Basic training consisted mainly of physical exercises and weapons instruction that lasted for eight weeks. Basic training was followed by Advanced Individual Training (AIT) where Military Occupational Specialty (MOS) duties were assigned. The length of AIT varied depending on the MOS, and individual installations were associated with training different specialties. Training for both the active Army and the Army Reserves was significantly impacted by the conflict in Vietnam. Overall, training programs were shortened so that more men could be trained and quickly deployed. At the peak of the Vietnam War in 1968, the Army converted all infantry AIT to Vietnam-oriented training, adding an additional week to prepare the trainees for the specific geographic and combat conditions of Vietnam.¹⁵⁶

¹⁵⁶ Department of Defense, *Department of Defense Annual Report for Fiscal Year 1968* (Washington, DC: Department of Defense, 1968), 174.

Fort Huachuca was not a recruit induction center during the Vietnam War. Instead, Fort Huachuca conducted AIT from 1967 until 1970 or 1971 for troops deploying to Vietnam. AIT courses included teletype, radio, driver, lineman, and typist. Some AIT courses utilized the remaining WWII ranges and training facilities ranges for practice (Figure 72 and Figure 73).¹⁵⁷ Army requirements for deployment training for personnel below Lieutenant Colonel included completion of 16 hours of M16AI firing practice, and completion of 16 hours of Vietnam orientation training. Officers being assigned to Southeast Asia were required to receive seven hours of Surveillance, Target Acquisition, Night Observation (STANO) training. The requirement for increased rifle training and orientation training were dropped on 15 April 1971.¹⁵⁸

Figure 72. Foxhole training, 1966 (1966.16.00.08, Fort Huachuca Museum Collection. Public Domain).



¹⁵⁷ Stephen Gregory, Fort Huachuca Museum, conversation with Susan Ensore, 11 July 2016.

¹⁵⁸ "Installation Diary (History) 1972," Fort Huachuca Museum Collection, Fort Huachuca, AZ.

Figure 73. Foxhole training, 1966 (1966.16.00.09, Fort Huachuca Museum Collection. Public Domain).



During WWII, mock villages became a popular training tool that allowed soldiers to be immersed in realistic environments. WWII-era mock villages reflected the areas of conflict by being built to resemble European or Japanese villages. During the Korean War, training took place in Korean village replicas and, during the conflict in Vietnam, in Vietnam village replicas. These training villages were elaborately constructed courses that featured typical styles of housing, communal buildings, and shrines as found in the countries they represented. More elaborate mock villages featured additional elements; for example, some Vietnam Villages had replica rice paddies and livestock pens. In addition to buildings, mock villages would often feature camouflaged elements, simulated enemy personnel, disappearing targets, booby traps, punji stakes, tunnel systems, and landmines.¹⁵⁹

During the Vietnam War, training villages were constructed at nearly all basic training facilities across all services. Bases in the southeastern United States were prioritized as sites for Vietnam villages because the vegetation, terrain, and climate were most similar to Vietnam, thereby creating a realistic training environment for recruits.¹⁶⁰ As the war progressed, Vietnam training villages and mock prisoner of war (POW) camps were constructed at more facilities across the United States. The POW camps were similar in layout and construction to the villages but were used to train soldiers in what to expect if taken prisoner.

Mock village construction modified the existing terrain to introduce soldiers to Southeast Asian infrastructure as well as to illustrate how guerilla fighters used elements of a village to gain an advantage over U.S. troops. A site's topography and vegetation were enhanced to limit visibility and illustrate how the enemy could hide in close proximity. Training scenarios would include soldiers dressed up as villagers and as Viet Cong (VC) soldiers that the trainees would have to fight.

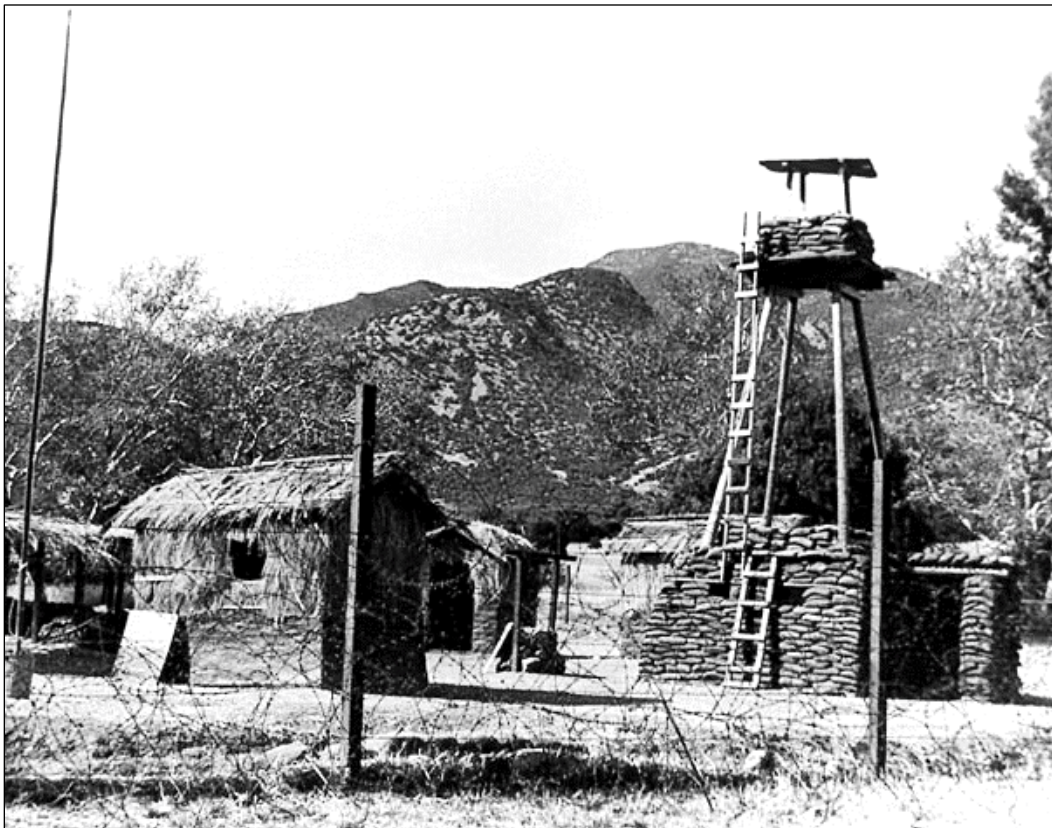
The Vietnam village at Fort Huachuca, named Bau Don, was built in 1967 to support basic training. It was located in Garden Canyon. There was also a POW camp constructed nearby in a triangular shape and equipped with

¹⁵⁹ Daniel Archibald, Adam Smith, Sunny Adams, Manroop K. Chawla, *Military Training Lands Historic Context: Training Village, Mock Sites, and Large Scale Operations Areas*, ERDC/CERL TR-10-10, (Champaign, IL: ERDC/CERL, 2010), 7.

¹⁶⁰ Richard P. Weinert, *The Role of USCONARC in the Army Buildup, FY 1966 (U)*. (Fort Monroe, VA: Headquarters United States Continental Army Command, October 27, 1967), 75.

guard towers (Figure 74, Figure 75, Figure 76, Figure 77, and Figure 78). Based on the location, it appears that archaeological site AZ EE:11:82 (ASM) is the POW camp, but it might also include part of the village. The Bau Don village training site also included a H-21 helicopter (without rotors) “crashed” on the hillside nearby, as well as foxholes, trip wire, and defensive positions set up around the helicopter.¹⁶¹

Figure 74. A mock Vietnam training village at Fort Huachuca in the 1960s (Folder: Bau Don, Vietnam Village, 1967–71, Fort Huachuca Museum Collection. Public Domain).



¹⁶¹ Stephen C. Gregory, Fort Huachuca Museum, conversations with Susan Ensore, 12–15 July 2016.

Figure 75. View of huts in mock Viet Cong village, c. 1969 (Folder: Bau Don, Vietnam Village, 1967-71, Fort Huachuca Museum Collection. Public Domain).

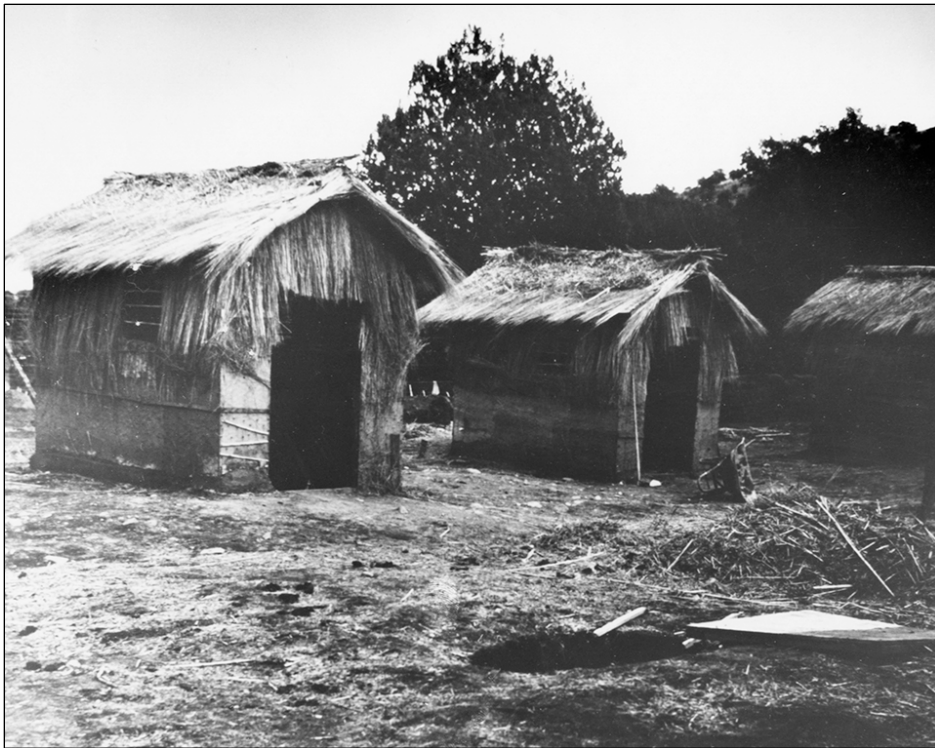


Figure 76. Activity in mock Viet Cong village, c. 1969 (Folder: Bau Don, Vietnam Village, 1967-71, Fort Huachuca Museum Collection. Public Domain).



Figure 77. Aerial of mock Viet Cong POW camp, c. 1969 (Folder: Bau Don, Vietnam Village, 1967-71, Fort Huachuca Museum Collection. Public Domain).



Figure 78. Historic photographs of Vietnam War-era training area at Fort Huachuca (Folder: Bau Don, Vietnam Village, 1967-71, Fort Huachuca Museum Collection. Public Domain).



Even as the Vietnam War wound down, training continued at Fort Huachuca. In 1972, a new range control building (Building #15425) was constructed at the corner of Garden Canyon Road and Winrow Road.¹⁶² During 1973, new ranges were constructed to support the Military Intelligence (MI) Officers Basic Course conducted by the U.S. Army Intelligence Center and School. The new ranges were a Close Combat Course, 81 mm Mortar Range, 4.2 inch Mortar Range, and 105 mm Howitzer Range.¹⁶³

In addition to maintaining readiness for installation personnel, the fort served as a training site for various other Regular Army and National Guard units. The Arizona National Guard has held summer training camps at Fort Huachuca since the WWI era. The U.S. Army Reserve held week-end drills and summer camp training at the fort from the 1950s to the 1990s.¹⁶⁴ From 1973 to the mid-1990s, the 8th Battalion, 40th Armored Division from Tucson used the fort for tank training (maneuvers and firing M48s and M60s) on Range 14.¹⁶⁵ Some examples from 1973 provide a sense of the types of training activities occurring on the installation:

- On January 7, 1976 men from 3rd Battalion, 5th Special Forces Group, Fort Bragg, North Carolina, were air dropped into Fort Huachuca for Field Training Exercise (FTX) GOBI SPRINGS IX, which occurred from January 7–25, 1973.
- On June 2, Company C, 1st Battalion, 7th Special Forces Group, Fort Bragg, were dropped by air into Fort Huachuca, and moved immediately by helicopters from the 997th Assault Helicopter Company, Arizona National Guard, to the Bisbee-Douglas Airport for operations from June 2 to 25.
- Arizona Military Academy, Arizona National Guard, conducted their Officer Candidate School/Noncommissioned Officer training at Fort Huachuca during the period of July 14–28 with 200 people participating.

¹⁶² “The Modern Era, 1950–2000,” 114.

¹⁶³ “1973 Annual History: ‘Plans, Training, Security,’” Unit Report, Fort Huachuca Museum Collection, Fort Huachuca, AZ.

¹⁶⁴ Stephen C. Gregory, Fort Huachuca Museum, conversations with Susan Enscore, 12–15 July 2016.

¹⁶⁵ Stephen C. Gregory, Fort Huachuca Museum, conversations with Susan Enscore, 12–15 July 2016.

- The 261st USASTRATCOM; Delaware National Guard . . . conducted annual training with elements of Headquarters, Fort Huachuca from 21 July to 4 August 1973.¹⁶⁶

A 1976 Environmental Assessment report provided details on training areas at Fort Huachuca. The training facilities and ranges were considered “adequate for administrative and school type missions...suitable for all types of ground training, tactical exercises and maneuvers where ice, water, and snow are not involved.”¹⁶⁷ There were sufficient areas available for training in Infantry, Mechanized Units, Maneuvers, Small Arms, and Drill and Review. The area for maneuvers contained about 15,000 acres and could accommodate “an infantry battalion for non-firing exercises, or four companies of engineers training in Fixed-Bridge Building.”¹⁶⁸

In addition to Army Reserve and National Guard units, ROTC personnel also trained at the fort. During 1982, nine Reserve and Guard units (about 1,400 personnel) had annual training, and 2,600 Reserve, Guard, and ROTC personnel had weekend training.¹⁶⁹ These exercises included “live tank gunnery firing, airborne operations, patrol training, offensive and defensive operations, armor, and air defense” (Figure 79 and Figure 80).¹⁷⁰

¹⁶⁶ “1973 Annual History: ‘Plans, Training, Security.’”

¹⁶⁷ Department of the Army, “Installation Environmental Assessment, Fort Huachuca, Arizona,” 1976, (Binder: Fort Huachuca: Headquarters, U.S. Army Communications Command), Fort Huachuca Museum Collection, Fort Huachuca, AZ, 14.

¹⁶⁸ Department of the Army, “Installation Environmental Assessment, Fort Huachuca, Arizona.”

¹⁶⁹ “Ft. Huachuca History 1982,” Fort Huachuca Museum Collection, Fort Huachuca, AZ, 54.

¹⁷⁰ *Ibid.*, 55.

Figure 79. Tank training, 1980 (1980.21.00.03, Fort Huachuca Museum Collection. Public Domain).



Figure 80. Tank training, 1980 (1980.21.00.06, Fort Huachuca Museum Collection. Public Domain).



There was also a six-week training exercise in 1982 for 165 personnel from the 5th Special Forces (Airborne) and the 1st Brigade, 82nd Airborne Division. The U.S. Army Intelligence Center and School also used the ranges and training areas for training 4,500 enlisted and officer personnel stationed at Fort Huachuca.

In 1982, several modifications were made to the training areas. The Burma Road Endurance Course was refurbished, modifications were begun on Range 14 to expand capability to full scale tank tables, and construction was started on Range 15.¹⁷¹ The layout of ranges in 1983, and a corresponding range list, can be seen in Figure 81, Figure 82, and Figure 83.

¹⁷¹ Ibid.

Figure 81. 1983 range map (*Reservation Land Use Map, Fort Huachuca DPW. Public Domain.*)

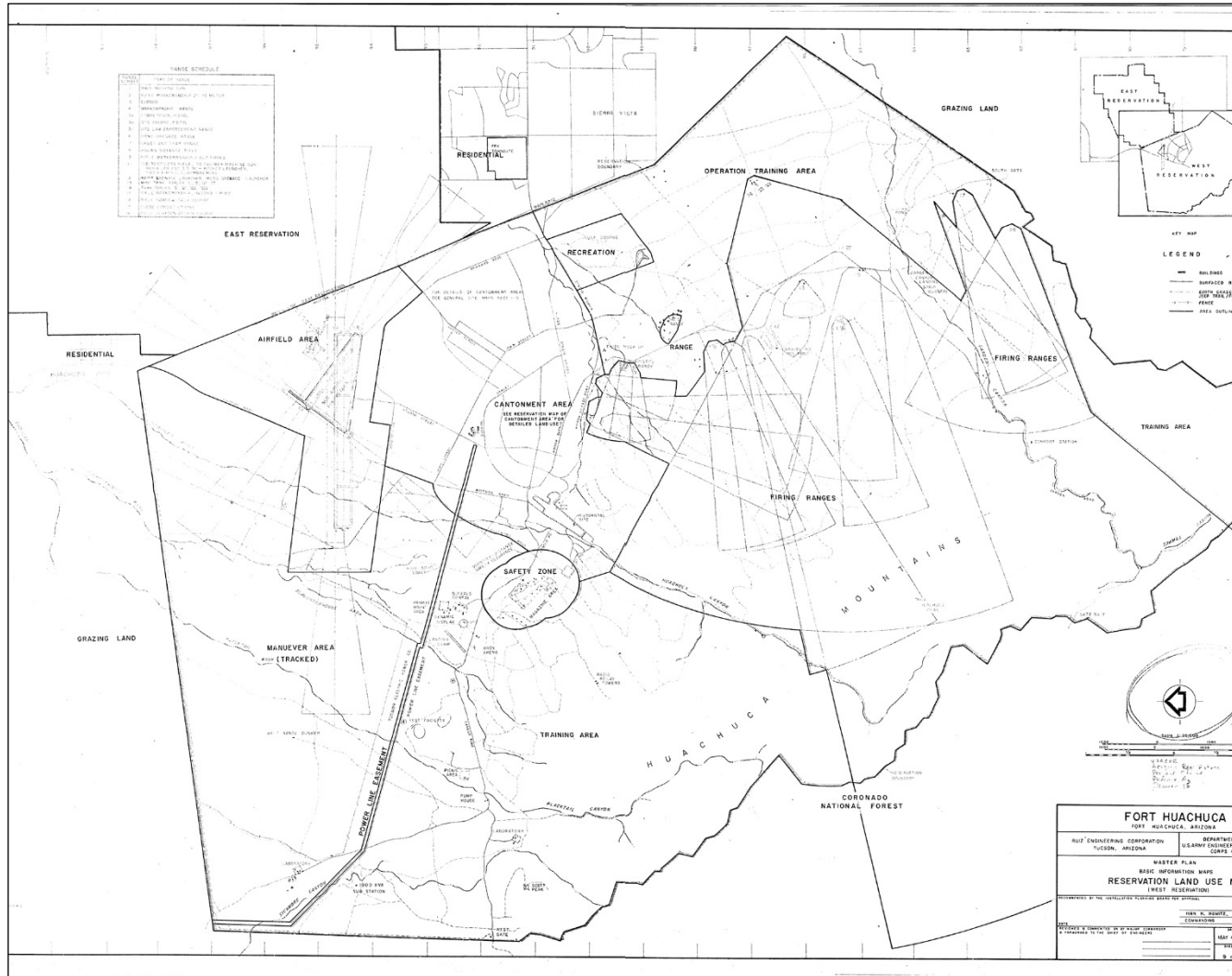
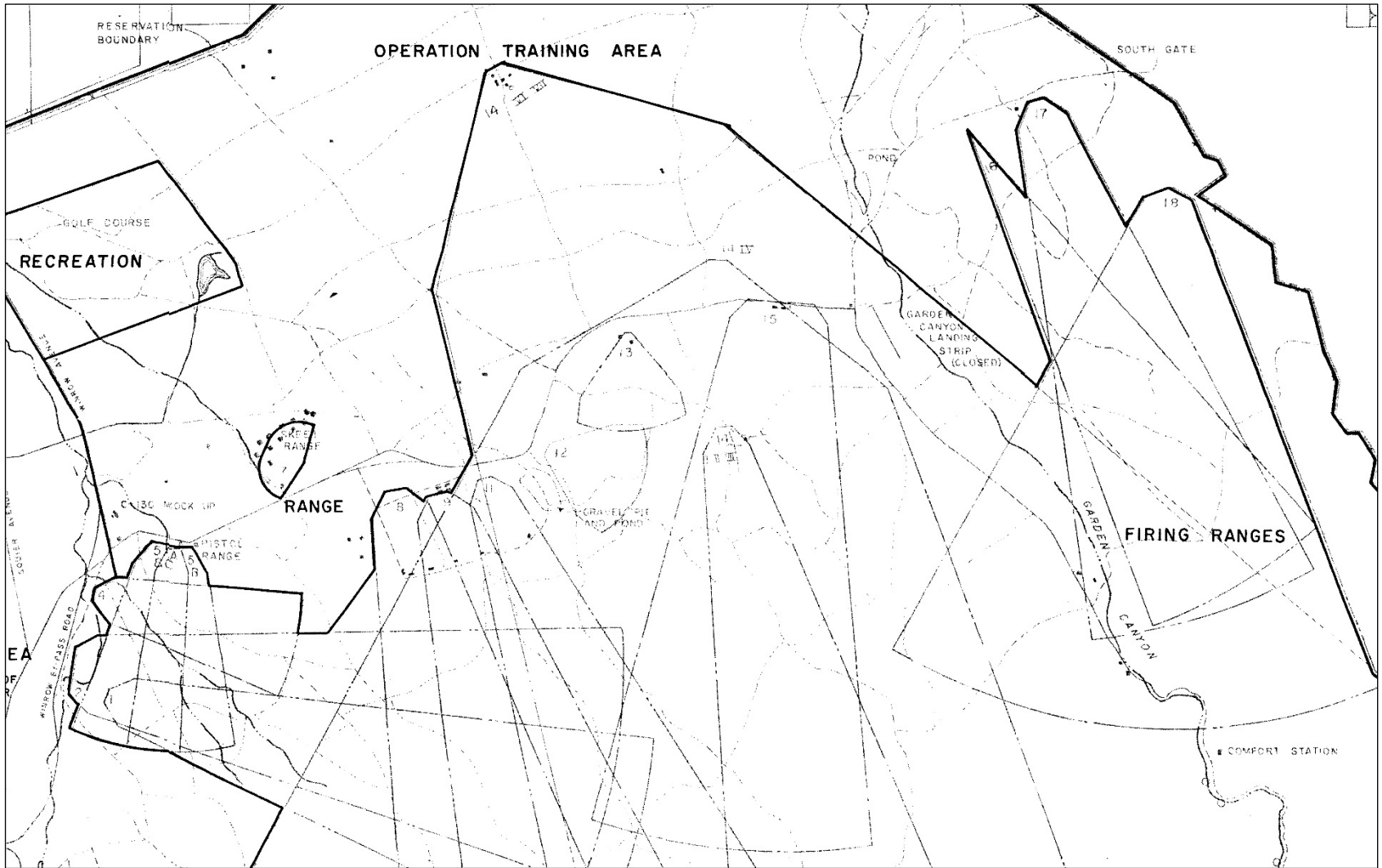


Figure 82. List of ranges corresponding to the 1983 range map (*Reservation Land Use Map Update No. 13, Fort Huachuca DPW. Public Domain*).

			UPDATE NO. 13
FUNCTION TITLE		RANGES	
CATEGORY CODE see below			
NUMBERING INSTRUCTIONS P - Permanent; F - Field; Z - Other than Housing; SAR - Small Arms Range; HGR - Hand Grenade Range; TNR - Tank Range; PRR - Projectile Range; Suffix 1&2 - Range Number.			
NUMBER		DESCRIPTION	CATEGORY CODE
PFZSAR	0 1	Range #1 M60 Machine Gun	17911
PFZSAR	0 2	Range #2 Rifle Marksmanship	17905
PFZSAR	0 3	Range #3 Unit Marksmanship (INACTIVE)	17902
PFZSAR	0 4	Range #4 Junior Rifle Team	17902
PFZSAR	0 5	Range #5 A, B, C Pistol Ranges	17928
PFZHGR	0 6	Range #6 Hand Grenade Range	17913
PFZSAR	0 8	Range #8 Known Distance, Rifle	17906
PFZSAR	0 9	Range #9 Rifle Marksmanship, Field Firing	17902
PFZSAR	1 1	Range #11 .50 cal mach gun, 90mm LAW, field firing	17911
PFZSAR	1 2	Range #12 40mm Grenade Launcher	17917
PFZSAR	1 3	Range #13 Mini Tank Range	17932
PFZTNR	1 4	Range #14 Tank Range	17933
PFZSAR	1 5	Range #15 Rifle Marksmanship, Record Fire	17905
PFZSAR	1 6	Range #16 Squad Assault Course	17926
PFZSAR	1 7	Range #17 Close Combat Course	17902
PFZSAR	1 8	Range #18 Tank Range, Rifle Platoon Attack Course	17933
PFZPRR	1 9	Range #19 Mortar	17925
PFZPRR	2 0	Range #20 Mortar	17925
PFZPRR	2 1	Range #21 105 mm	17945
PFZTSR	0 7	Range #7 Trap & Skeet Range (SEE NEXT PAGE FOR FAC NUMBERS)	75025

Figure 83. Detail of ranges on 1983 range map (*Reservation Land Use Map, Fort Huachuca DPW. Public Domain*).



By 1984, a new tank range had been created for firing large caliber weapons, and obsolete M-103 heavy tanks had been acquired to use as targets on the ranges.¹⁷² Range 3 was renamed and turned into the Skeet and Trap Range in 1985, and the new Obstacle Confidence Course was constructed in 1987 (Figure 84 and Figure 85).¹⁷³ The course had 24 obstacles, with a subsidiary 15 obstacle course as part of the facility.¹⁷⁴ Rifle qualification continued over the years at Ranges 2 and 13.¹⁷⁵ Ground combat training continued, as did weapons training, and both were ramped up for Operation Desert Shield in 1990–91 (Figure 86, Figure 87, and Figure 88). Fort Huachuca served as a staging platform for troop mobilization to support the operation.

Figure 84. “U.S. Marine Corps (USMC) STAFF Sergeant (SSGT) Kevin Hart, from Marine Wing Support Squadron 371 (MWSS- 371), Marine Corps Air Station (MCAS) Yuma, Arizona, demonstrates how to move through an obstacle on the confidence course at Fort Huachuca, Arizona,” 15 December 2002 (Photo courtesy of National Archives, photo no. 6638954, <https://catalog.archives.gov/id/6638954>. Public Domain).



¹⁷² “Ft. Huachuca History 1984,” Fort Huachuca Museum Collection, Fort Huachuca, Arizona, 53.

¹⁷³ “1985 Historical Review,” Fort Huachuca Museum Collection, Fort Huachuca, AZ, 7; “Ft. Huachuca History 1987,” Fort Huachuca Museum Collection, Fort Huachuca, AZ, 123.

¹⁷⁴ “The Modern Era, 1950–2000,” 119.

¹⁷⁵ “1985 Historical Review.”

Figure 85. "U.S. Marine Corps (USMC) Lance Corporal (LCPL) William Bigcrow, from Marine Wing Support Squadron 371 (MWSS-371), Marine Corps Air Station (MCAS) Yuma, Arizona, navigates the A-frame obstacle, on the confidence course at Fort Huachuca, Arizona," 16 December 2002 (Photo courtesy of National Archives, photo no. 6638957, <https://catalog.archives.gov/id/6638957>. Public Domain).



Figure 86. Tank training, 1986 (1986.00.00.16, Fort Huachuca Museum Collection. Public Domain).



Figure 87. Ground combat training, 1986 (1986.00.00.78, Fort Huachuca Museum Collection. Public Domain).



Figure 88. “A staff sergeant from the 222nd Transportation Company, Arizona National Guard, cleans a piece from an M-60 machine gun during weapons training at Range 13. The company is preparing for its deployment to Saudi Arabia for Operation Desert Shield,” 30 October 1991 (Photo courtesy of National Archives, photo no. 6459005, <https://catalog.archives.gov/id/6459005>. Public Domain).



Training continued at Fort Huachuca in the 1990s, including limited ground training (Figure 89), and weapons proficiency training (Figure 90), which continue to the present. While the general layout and location of the major training areas did not change, with many of the ranges still located south of the cantonment (Figure 91) several changes occurred during the 1990s altering how the ranges were used for training. For example, tank training at Fort Huachuca came to an end in the mid-1990s. By 1997 or 1998, nearly all the WWII buildings were gone; with no infrastructure left for the National Guard and Army Reserve to use for training, those programs officially ended.¹⁷⁶

¹⁷⁶ Stephen C. Gregory, Fort Huachuca Museum, conversations with Susan Ensore, 12–15 July 2016.

Figure 89. Ground training, 1994 (1994.18.00.04, Fort Huachuca Museum Collection. Public Domain).

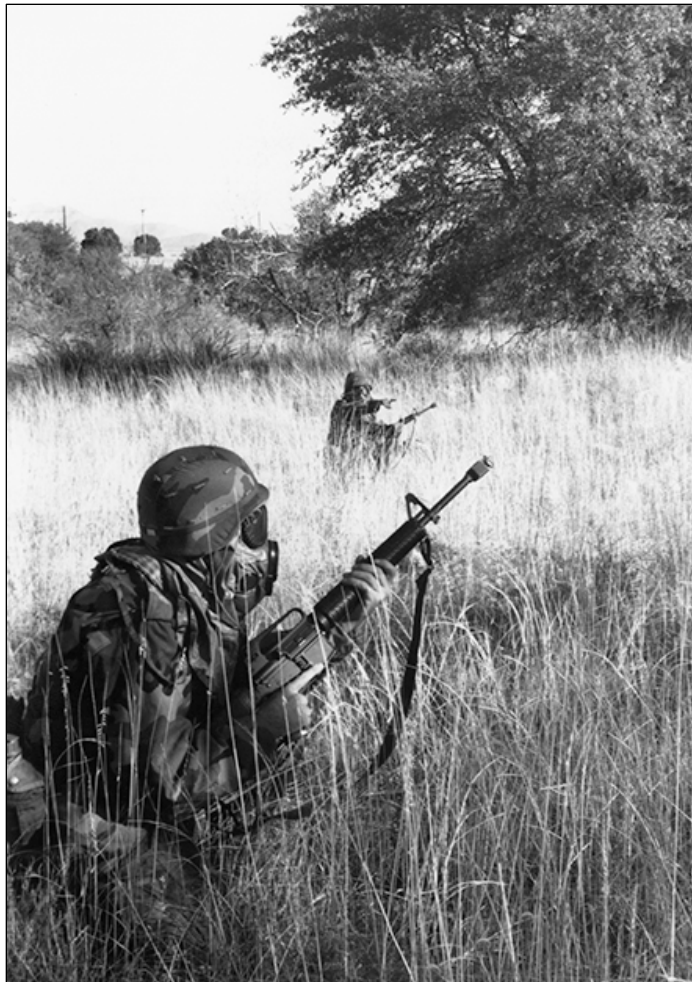
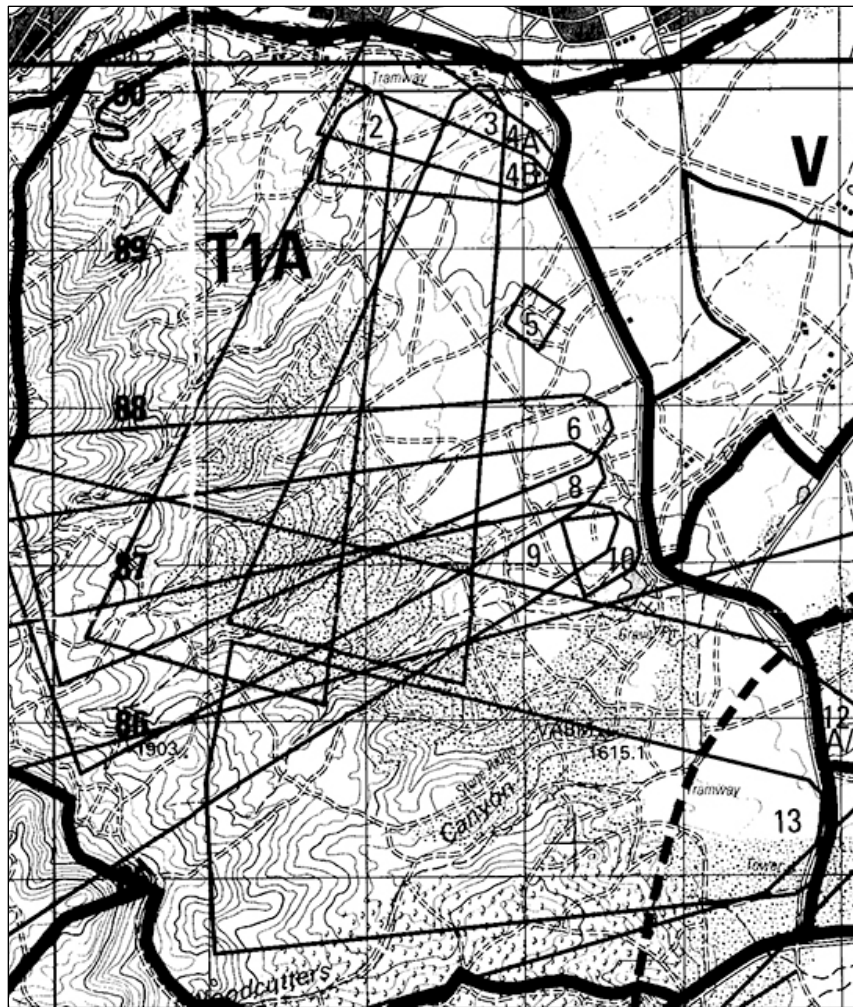


Figure 90. "U.S. Marine Corps (USMC) Corporal (CPL) Marine Wing Support Squadron Two Seven One (MWSS-271), fires an M1014 Joint Service Combat Shotgun at targets on the range, during a live-fire exercise held at Fort Huachuca, Arizona," 18 December 2002 (Photo courtesy of National Archives, photo no. 6666633. <https://catalog.archives.gov/id/6666633>. Public Domain).



Figure 91. Detail of installation map showing ranges, 1994 (*Fort Huachuca Military Installation Map*, Fort Huachuca DPW. Public Domain).



By the 1990s, the Known Distance Rifle Range (Range 5 in 1955) target butts and associated buildings were in disrepair and no longer needed. The wood buildings were demolished after 1998, leaving only the concrete target butt and concrete rooms (Figure 92, Figure 93, and Figure 94).

Figure 92. Looking west from firing points towards target butts, 1998 (AZ- -2, Box 15, Fort Huachuca DPW. Public Domain).



Figure 93. Building #15339 (*foreground*), target butt, Building #15335 (*middle*), and Building #15343 (*background*), 1998 (AZ- -1, Box 15, Fort Huachuca DPW. Public Domain).



Figure 94. Looking north towards Building #15335, 1998 (AZ- -3, Box 15, Fort Huachuca DPW. Public Domain).



3 Training Ranges Historical Data

Fort Huachuca is divided into two reservations. The West Reservation contains the built-up cantonment, the West Range (west of the cantonment), and the South Range (south of the cantonment); and the East Reservation contains the East Range (east of State Highway 90) (Figure 95). The fort is divided into 33 training areas on the three ranges that “support a variety of training activities, such as live firing, field exercises, bivouacs, driver’s training, and the full spectrum of intelligence and communications training and testing.”¹⁷⁷ There are 19 training areas on the South Range and 7 each on the East and West Ranges. In addition, the cantonment contains numerous training facilities (including at LAAF). One off-post training area (Charleston Maneuver Area), discussed above, was used by the fort in WWII and is no longer part of the fort.

A combination of historical maps, Real Property Office records, and archival research provided data on Fort Huachuca’s training ranges. These sources contain information about the location of the ranges, construction dates, changes in uses, types of associated facilities, and changes in identification. Table 2 compiles this information for the ranges with historical information. Table 3 provides a timeline summary of range construction and improvement activities. The sections following provide details for live-fire ranges, and other training sites and facilities located on Fort Huachuca. For most of Fort Huachuca’s history, ranges were given numeric designations. Range numbers, however, changed repeatedly over the years. Range designators were changed in 1979 to a letter and number code, but only a few years later were again being referred to simply by number.¹⁷⁸ For this report, the range number listed as of 2014 will be used to identify each range.

In this chapter, information is organized geographically, first by training range (South, West, East, cantonment) (Figure 95) and then by training area which are identified by a letter designation, ranging from “A” to “Z” (Figure 96). Table 4 lists the individual training facilities discussed in this

¹⁷⁷ Vanderpot and Graves, 1.

¹⁷⁸ Range facility identifiers followed this nomenclature: P—Permanent; F—Field; Z—Other than Housing; SAR—Small Arms Range; HGR—Hand Grenade Range; TNR—Tank Range; PRR—Projectile Range; Suffix 1&2—Range Number.

chapter organized by their training area and range.¹⁷⁹ In some instances, training areas are subdivided and given a letter and number designation (e.g., “T1”). These lettered training area designations appear on range maps starting in the late 1980s and, unlike training range numbers, have remained consistent over time. For each lettered training area, active ranges are listed using the current 2014 range number, while defunct ranges are listed using the last known description. For all ranges, historical information including prior range designations and uses, where known, is listed along with information provided by the Real Property Office and the historic context.

¹⁷⁹ Please note: the training area letter designations used in this report are those provided in the 2014 *Training Areas, Training Sites, and Training Ranges* map (see Figure 96); not the letter designations in the 2013 training range map (see Figure 95). The 2014 map does not use a letter designation for the cantonment and has area “T” in the South Range, whereas the 2013 map shows the cantonment as training area “T” and the area in the South Range as “T1” and “T1A”.

Figure 95. Map of Fort Huachuca showing ranges and training areas (Vanderpot and Graves 2013, 3. Public Domain).

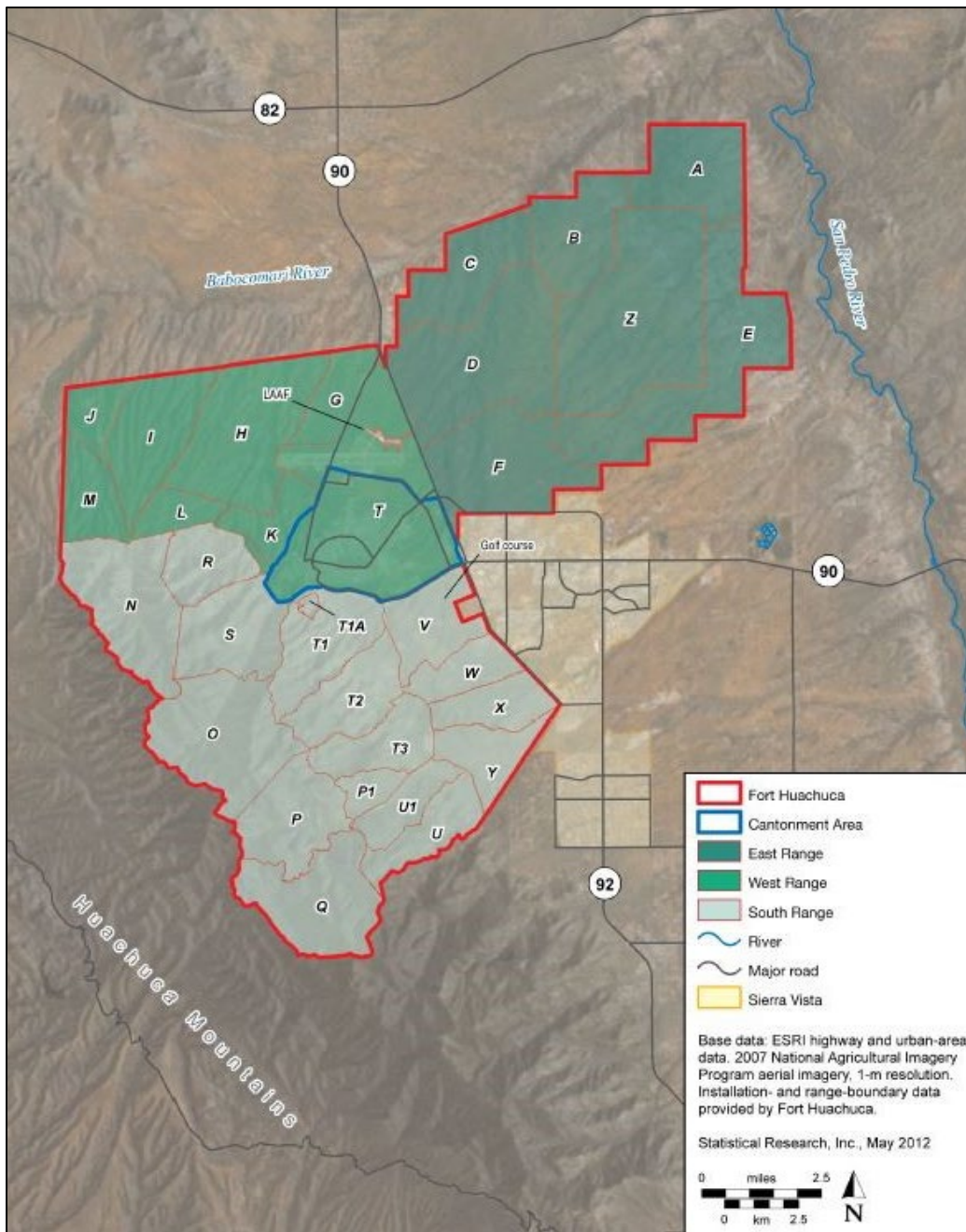


Table 2. List of ranges and uses in 1943, 1951, 1955, 1962, 1983, 1992, and 2016.

1943	1951	1955	1962	1983	1992	2016
(1) Field Target Range: Rifle and Light Machine Gun						
(2) Anti-Aircraft Range Miniature 3 Ranges						
						(1) Elevated Sniper Range
			TR*	(1) M60 Machine Gun	(2)	(2) Basic 10-meter/25-meter firing range
						(2B) Law Enforcement Range
(3) Machine Gun and Anti-Tank 1000' Range, 90 Tracks	1000" and 500" Range	(1) 1000" Machine Gun, M-1, and Carbine Range	1-A	(2) Rifle Marksmanship 25 meter		
(4) Landscape Target Range, 9 Targets, 3 Groups	Landscape Range	(2) Landscape Target	1-B	(4) Marksmanship Range	(3)	(3) Non-standard Small Arms Range
(5) Pistol Range, 25 Targets	Pistol Range	(3) Pistol Range	Pistol Range	(5A) Competition Pistol	(4A)	(4) Automated Combat Pistol/Military Police Firearms Qualification
				(5B) Standard Course, Pistol	(4B)	
				(5C) Standard Law Enforcement		
			Skeet Range	(7) Skeet Range		

1943	1951	1955	1962	1983	1992	2016
(12) 37 mm Anti-Tank Sub-Caliber Range 1000'						
	Hand Grenade Live	(4) Hand Grenade Live	Hand Grenade	(6) Hand Grenade Range	(5)	(5) Hand Grenade Familiarization Range
						(5A) Hand Grenade Qualification Course
(6) Rifle Range, 150 Targets—3 groups	Known Distance Range	(5) Known Distance Range (3 areas)	(5-A) Known Distance	(8) Known Distance Range	(6)	(6) Known Distance
			3.5 pt TR	(9) Rifle Marksmanship, Field Firing	(8)	(8) Modified Record Fire Range
			(5-B) Known Distance	(11) 106 Recoilless Rifle, 50 caliber machine gun	(9)	(9) Multipurpose Machine Gun Range
	Submachine Gun Range	(6) Submachine Gun	Submachine Gun			
					(10)	(10) Grenade Launcher
			(12) 40 mm Grenade Launcher, M203 Grenade Launcher			
(7) Moving Target Range, 50 Caliber Gravity Type						
	Rifle Grenade and 3.5 RL Range	(7 and 8) Rocket Launcher 3.5"	Rocket Launcher	(13) Mini Tank Tables I, II, III, IV		
		Technique of Fire Area	16 Point Record F. Range			

1943	1951	1955	1962	1983	1992	2016
				(14) Tank Tables V, VI, VII, VIII		
(8) Field Target Range, Machine Gun						
	Transition Range	(9) Field Target Range	Field Target Range	(15) Rifle Marksmanship Record Firing	(13)	(13) Modified Record Fire
	Transition Range	(10) Transition Range M-1 and Carbine Range	Transition Range			
				(16) Rifle Squad Attack Course		
	Infiltration Course	(11) Infiltration Course		(17) Close Combat Course		
				(18) Rifle Platoon Attack Course		
		(12) Close Combat Range				
	Combat in Cities Course	(13) Mock Village				
		(14) Demolition Area	Demolition Area			
	Demolition, Mines, and Booby Traps	(15) Mines and Booby Traps				
(9) Mortar Range, 60 and 81 mm						

*Acronyms and symbols are transcribed from the original maps. If not defined, their definite meaning is currently not known.

Table 3. Timeline of Fort Huachuca range construction and improvement activities.

Year	Description	Location
1883	Target butts built (visibility beyond 300 yards)	
1886	5 short, 1 long range, not permanent: 200, 300, 500, 600 yards	
1887	Stone and earth butts built	
1888	First permanent target range built, northeast of post, 400-foot-long trench with target butts and target house	Northeast of Old Post
1895	Target range improved: 600 yards, 1000 yards, target storage house	¼ mile northeast of Old Post, facing north
1899	Mounted drill ground in use	1 mile from barracks
1903	Target butts in use; firing direction 15 degrees east of north	¾ mile northeast of Old Post
1912	New target range constructed further from post	3 miles southeast of Old Post
1913	Range expanded from 4 to 10 troop capacity	
1916	Concrete wall, trench, butts, and small building constructed	
1917	Trench warfare training begins at post	
1920s	Cavalry training is focus for post	South Range
1923	Target range with permanent messing and bathing facilities built; used frame and concrete rifle butts, wooden mess hall, kitchen, and lavatory	3 miles from Post
1928	Range updated: added new targets and expanded current wall	
1933	First reference of Machine Gun Range made	
1934	Known Distance Range improved, 3 new range houses added for target storage	
1935	New Combat Range for field firing constructed	
1935–36	New CMTC training camp constructed	Next to existing CCC camp, east of main cantonment near “Knoxville”
1938	Latrine constructed at target range—rubble stone building (#377)	
1940	Target range size doubled	
1941	Plans drafted to add air field, artillery, aerial gunnery, and rifle ranges with new cantonment	
1942	Artillery range added—40,000 acres in Cochise County acquired as “East Range”; rifle and artillery ranges were built in the new area along with an artificial lake	East Range
1943	10 ranges on South and West Range available: Ranges 1, 2, 3, 4, 5, 6, 7, 8, 9, and 12	South Range and West Range
1944	Physical training courses constructed at edge of new cantonment	Edge of new cantonment

Year	Description	Location
WWII	Charleston Urban Assault Course and maneuver area; old, deserted town near post appropriated to become Charleston Urban Assault Course; abandoned after WWII	East of Fort
1946	Fort divided into 19 area sections; artillery range is area 19, firing ranges located on areas 17 and 18	
1947	18 ranges located more than 30 minutes marching time from post; 16 training areas located near the post	
1947 - 1951	Fort Huachuca deactivated	
1951	New mock village built, Combat in Cities training course	Near Garden Canyon
1952	EAUTC era training ranges and courses reopened; LAAF constructed	
1954	EPG established; East and part of West Range used for artillery to track trajectories	East and West Ranges
1967	Vietnam Village—Bau Don—built; POW Training Camp constructed nearby; H-21 helicopter “crashed” near Bau Don	Garden Canyon, South Range
1972	New range control building constructed	Corner of Garden Canyon and Winrow Roads
1973	Close Combat Course, 81 mm Mortar Range, 4.2 in. Mortar Range, and 105 mm Howitzer Ranges built	
1982	Modifications made: Burma Road Endurance Course refurbished, Range 14 expanded to full scale tank tables, Range 15 construction started	
1984	New tank range for large caliber weapons constructed	
1985	Range 3 turned into Skeet & Trap Range	
1987	New Obstacle Confidence Course constructed	
1990	Known Distance Range (Range 5) closed; wood buildings demolished in 1998; only butts and concrete rooms left.	South Range

Figure 96. Map of training areas, sites and facilities, Fort Huachuca, Arizona, 2014 (*Training Areas, Training Sites, and Training Ranges General Reference, Fort Huachuca Sustainable Range Program. Public Domain.*)

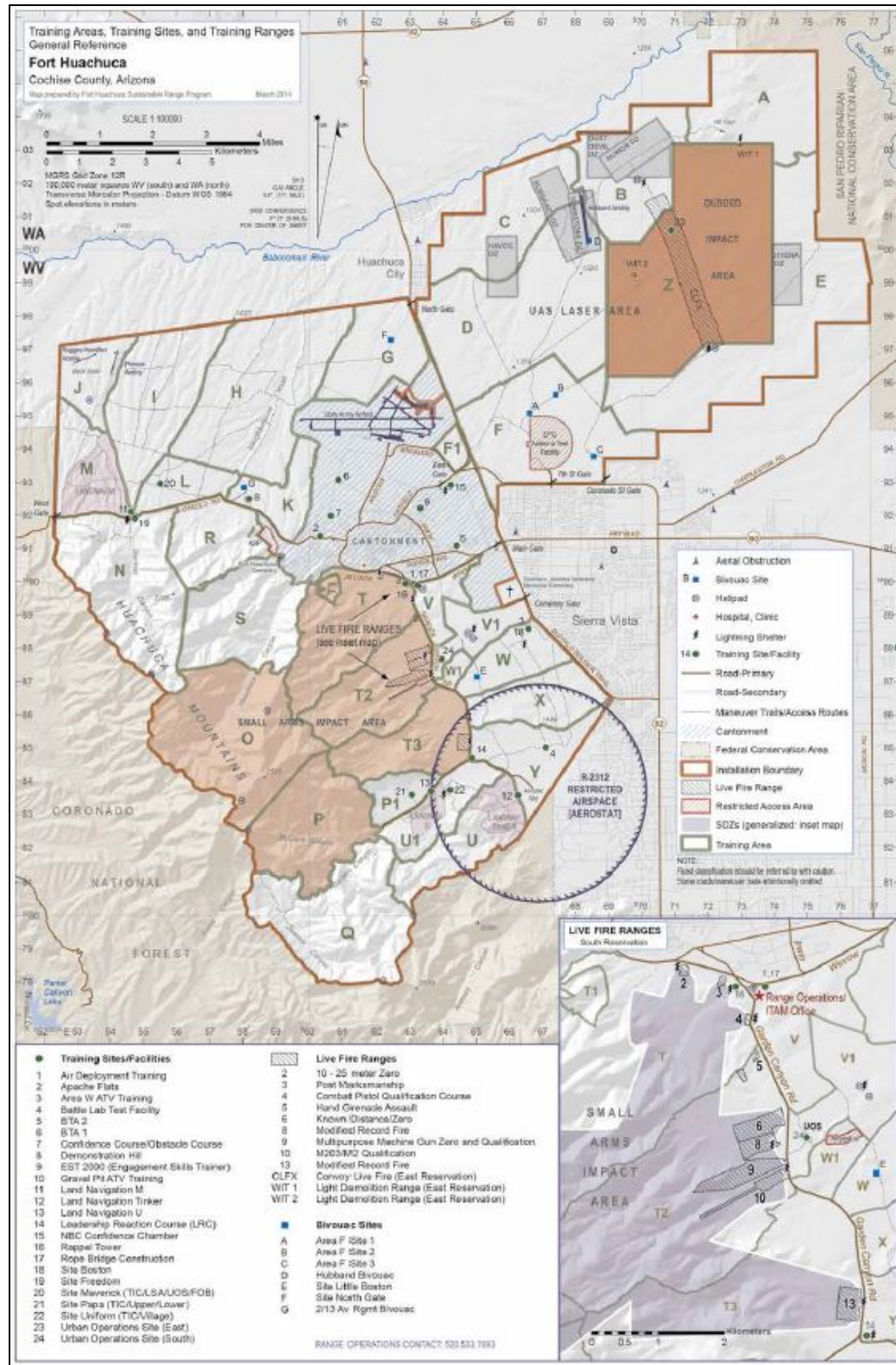


Table 4. List of training facilities organized by training range and area.

Training Range	Training Area	Training Facility
East	A	No named facilities
	B	Humor and Dust Devil Drop Zones
	C	Hubbard and Tombstone Drop Zones Hubbard Airstrip
	D	Havoc Drop Zone Hubbard Bivouac Site
	E	No named facilities
	F	EPG Antenna Test Facility Bivouac Site 1 Bivouac Site 2 Bivouac Site 3
	Z	Dudded Impact Area
West	G	Bivouac Site North Gate
	H	No named facilities
	I	No named facilities
	J	No named facilities
	K	Field Target Range Rifle and Light Machine Gun Demonstration Hill
	L	Site Maverick (TIC/LSA/UOS/FOB)* Site Freedom
	M	Site Freedom
Cantonment	Cantonment	Apache Flats BTA 1 [†] BTA 2 Confidence Course/Obstacle Course EST 2000 (Engagement Skills Trainer) NBC Confidence Chamber for CBRN WWII Obstacle and Bayonet Courses 25 th Infantry ("A") (removed) WWII Obstacle and Bayonet Courses 368 th Infantry ("B") (removed) WWII Obstacle and Bayonet Courses 369 th Infantry ("C") (removed) WWII Gas Chamber ("D") (Removed) Korean War EAUTC Schools (1952) Korean War Mine Warfare Site Korean War Rigging Area Korean War Camouflage Site Korean War Aircraft "Mock Up" Site Korean War Gas Chamber Korean War Obstacle Area Korean War Infiltration Site
South	N	Helipads
	O	Small Arms Impact Area Helipads

Training Range	Training Area	Training Facility
	P	Small Arms Impact Area Helipads
	P1	Close Combat Course Combat in Cities Course/Mock Village
	Q	No named facilities
	R	Underground Bunkers
	S	No named facilities
	T(T1)	Range 1—Elevated Sniper Range Range 1B—Small Arms Training Range Range 2—Rifle Marksmanship M-16 Zero Range Range 3—Small Bore Multi-Weapon Range Range 4—Combat Pistol Qualification Course Rappel Tower
	T1(T1a)	Map Reading Site (defunct)
	T2	Range 5—Combat Hand Grenade Course Range 6—Known Distance/Zero Range Range 8—Modified Record Fire Range Range 9—Multi-Purpose Machine Gun Range Range 10—M203/M320 Grenade Zero and Qualification Range Submachine Gun Range (defunct)
	T3	Range 13—M-16 Modified Record Fire and Zero Range Range 12—40 mm Grenade Launcher (defunct) Grenade/Rocket Launcher/Mini Tank Table Range (defunct) Tank Table Ranges
	U and U1	Field Target Range, Machine Gun Transition Range/Rifle Squad Attack Course/Close Combat Course Infiltration Course Rifle Platoon Attack Course
	V and V1	Skeet and Trap Range Urban Operations Site (South)
	W and W1	Bivouac Area E Area W ATV Training Site Boston Asbestos Landfill
	X and Y	Mortar Range, 60 and 81 mm Demolition, Mines and Booby Traps Range
Off Post	NA	Charleston Maneuver Area
<p>* The meaning of these acronyms are as follows: Tactical Interrogation Center (TIC), Logistical Support Area (LSA), Urban Operations Site (UOS), and Forward Operating Base (FOB).</p> <p>†“BTA” is an unknown acronym.</p>		

3.1 East Range

The East Range is located on the East Reservation, east of SR 90 and contains seven training areas including Areas A through F and Z (the Dudded Impact Area) (see Figure 95 and Table 4). The East Range was acquired in 1942 when the government purchased 40,000 acres in Cochise County to be used as an artillery range. Rifle and artillery ranges were subsequently built all over the new area, as well as an artificial lake. The EPG used the East Range for tracking artillery projectiles. This is evident from the significant Dudded Impact Area that comprises most of Training Area Z (see Figure 96).

3.1.1 Training Areas A, B, C, and E

Training Areas A, B, C, and E are located on the East Range and form the outer ring around Training Areas D, F, and Z (see Figure 96). In 2014, various drop zones were located throughout these Training Areas, including Humor and Dust Devil (Area B), Hubbard and Tombstone, including the Hubbard air strip (Area C), and Havoc (Area D). Historically, the areas have been labeled as training and maneuver areas and have been used to support the EPG.

3.1.2 Training Areas D and F

Training Areas D and F are located in the East Range of Fort Huachuca east of State Route 90. In 2014, Training Area F contained the EPG Antenna Test Facility and three bivouac sites: Area F Site 1, Area F Site 2, and Area F Site 3. In 2014, the Hubbard Bivouac Site was located in Training Area D, adjacent to the Tombstone Drop Zone and Hubbard Airstrip.

Historically, no labeled training ranges appear until the 1962 installation range map where the Environmental Antenna Range and other EPG test facilities for spatial resolution are located in Training Area F (Figure 97). The EPG test area was still present in the 1980s but was no longer labeled as a test facility in the 1990s (Figure 98 and Figure 99). Installation range maps from the 1940s and 1950s indicate several roads traversing throughout the East Range but do not label specific training ranges (Figure 100 and Figure 101).

Figure 97. Detail of East Range, 1962 (*General Site Plan, Fort Huachuca DPW. Public Domain*).

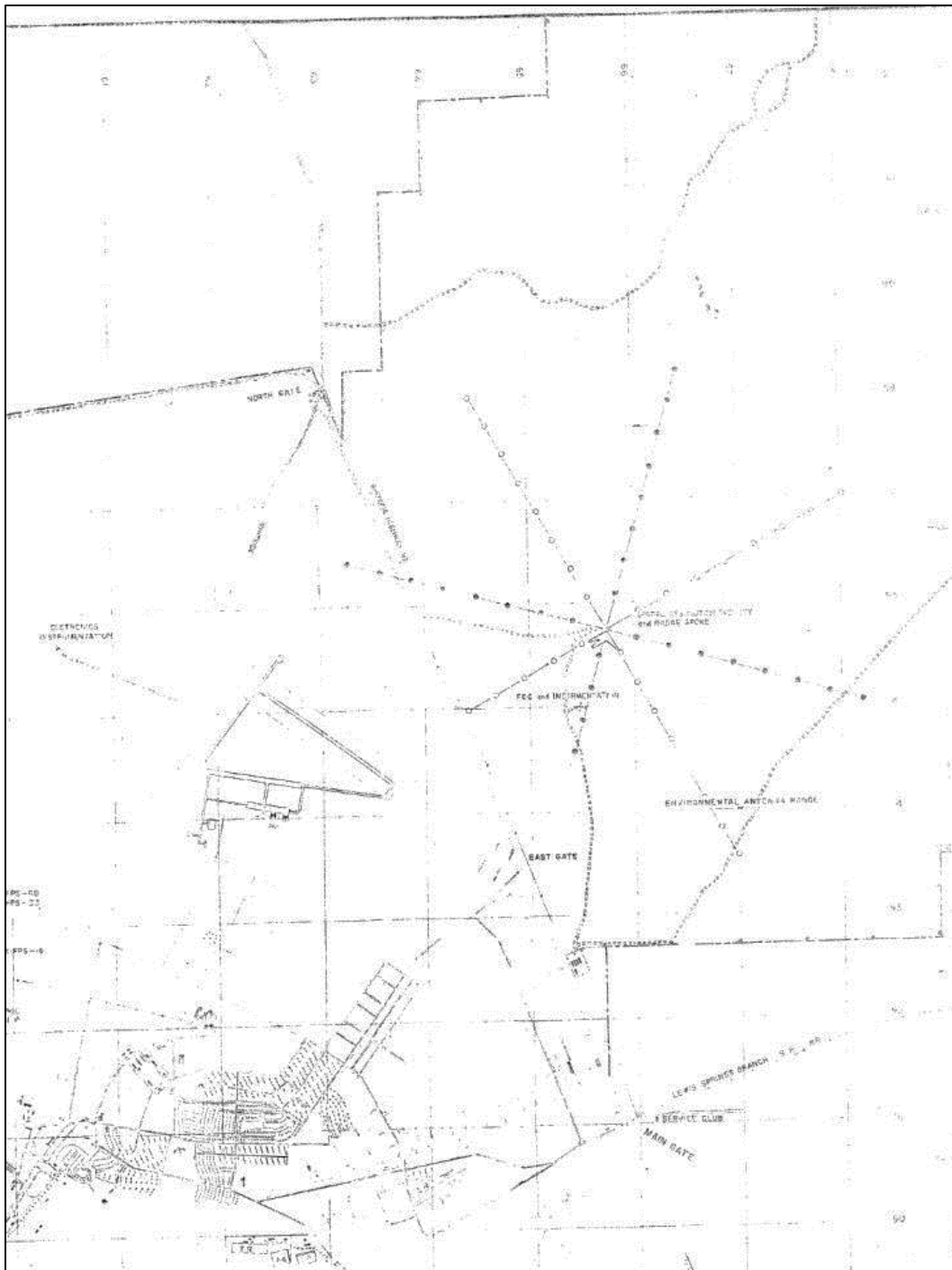


Figure 98. Detail of East Range, 1983 (*Reservation Land Use Map, Fort Huachuca DPW. Public Domain.*)

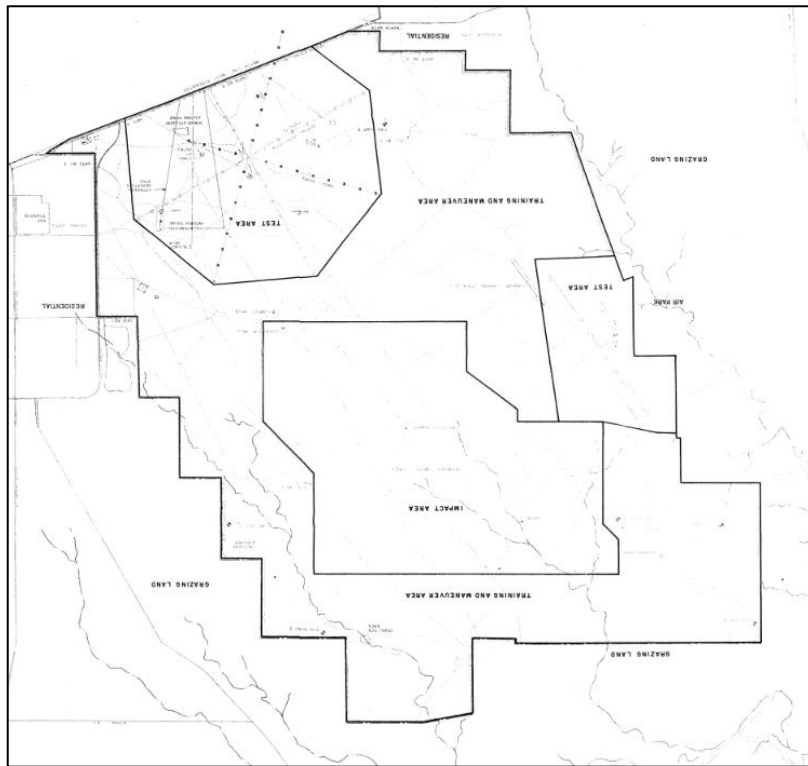


Figure 99. Detail of Training Area F and D, 1991 (*Existing Conditions Maps General Site Map, Fort Huachuca DPW. Public Domain.*)

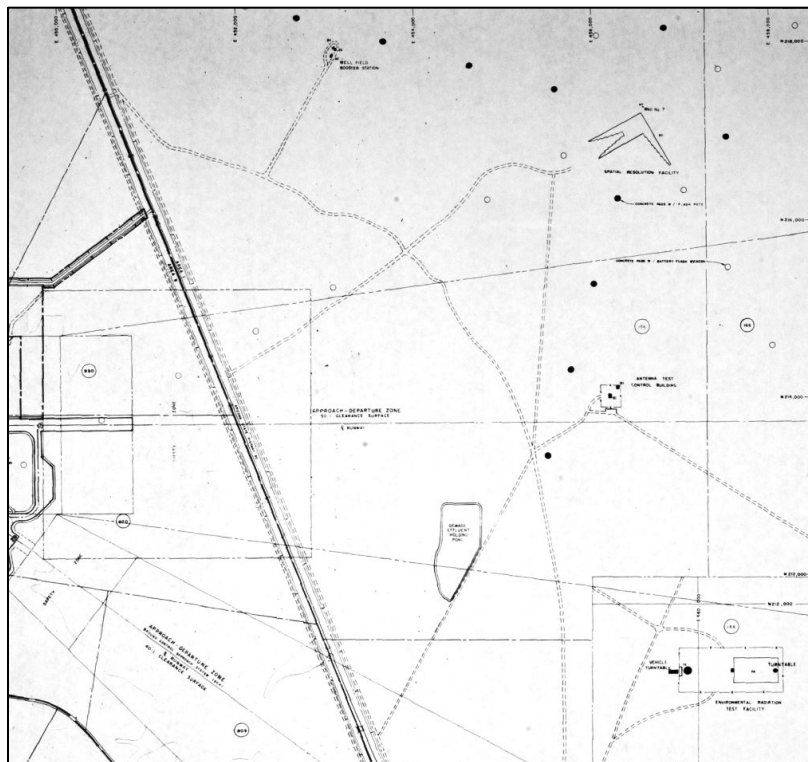
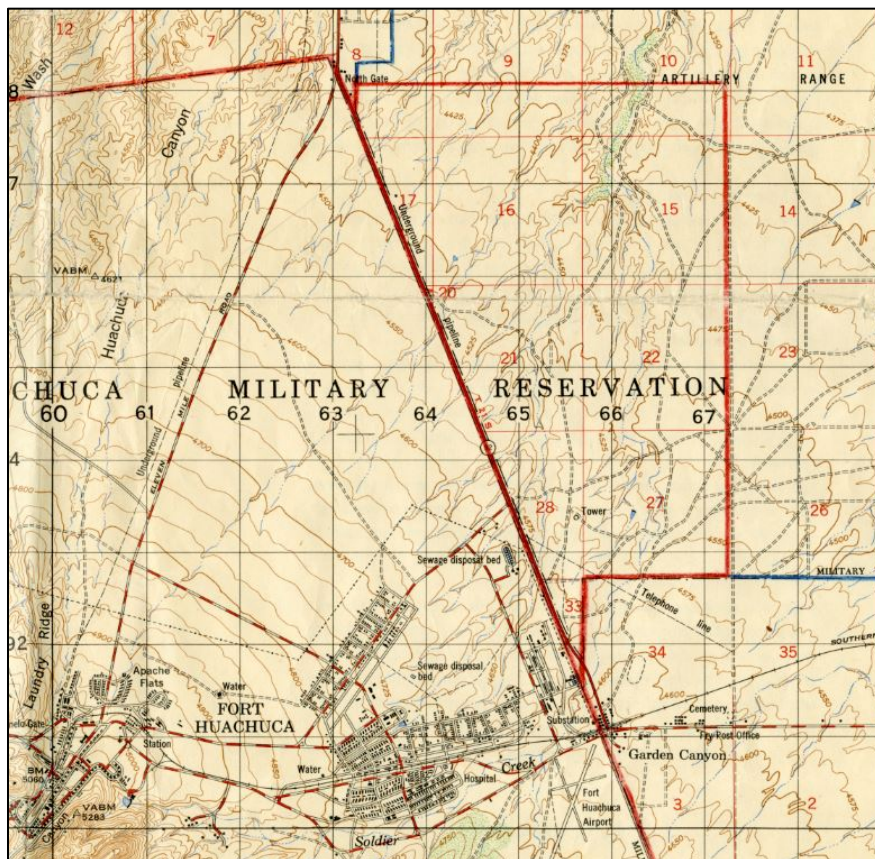


Figure 100. Detail of East Range, 1942 (*Artillery Range 93rd Division, Fort Huachuca DPW. Public Domain).*



Figure 101. Detail of East Range, 1951 (*Fort Huachuca Military Reservation, Fort Huachuca DPW. Public Domain).*



3.1.3 Training Area Z

Training Area Z is located on the East Range, northeast of Training Areas D and F (see Figure 96). In 2014, the entirety of Training Area Z was labeled as a Dudded Impact Area. Running vertically through the middle of the training area is the Convoy Live Fire (East Reservation) (CLFX)¹⁸⁰ training range. The CLFX is 3 miles long and used for 5.56 mm weapons. The Urban Operations Site (East) is located within the CLFX range. There are also two Light Demolition Ranges (WIT 1 and WIT 2), used for explosives and pyrotechnics high-risk training events, located in Training Area Z. There is a sniper range located on the East Range with the firing points located on Hill Four (northeast of the CLFX) and the targets located in Area Z (east of CLFX). Historically, Training Area Z, which is surrounded by training and maneuver areas (see Figure 98), was labeled an impact area as early as the 1980s (possibly earlier). Given its location on the East Range, no doubt that Training Area Z has also been used for a variety of EPG related training activities.

3.2 West Range

The West Range is located on the West Reservation, west of the cantonment and north of the Huachuca Mountains (see Figure 95 and Table 4). It contains seven training areas, including Areas G through M.

3.2.1 Training Area G

Training Area G is located on the far northeast quadrant of the West Range. It is located due north of LAAF (see Figure 96). In 2014, bivouac site North Gate was located in Training Area G. Historically, various EPG facilities are noted on the installation maps (see Figure 104).

3.2.2 Training Areas H, I, and J

Training Areas H, I, and J are located along the northern boundary of the installation in the West Range (see Figure 96). There currently are no training facilities listed in this area, although laser training by the 2nd Battalion of the 13th Aviation Regiment (2-13th AR) does occur in the area (but has no facilities associated with the training). Historically, various EPG facilities are noted on the installation maps (see Figure 104), and in 1943, Training Range 1 covered part of these training areas (see section 3.2.3.1).

¹⁸⁰ The acronym CLFX stands for "Convoy Life Fire Exercise."

Records also indicate that the West Range Artillery bunker (Facility #12624) is located in Training Area I; the bunker was part of the Electronic Warfare Test Facilities.¹⁸¹

3.2.3 Training Area K

Training Area K is located in the West Range, north of Canelo Road, and adjacent to the cantonment (see Figure 96). In 2014, the 2-13th Aviation Regiment (AR) Bivouac Area, and Demonstration Hill training site were located in Training Area K. Historically, the West Range has been where many of the EPG facilities were located. After the 1940s, there is no indication that any live-fire ranges were located on the West Range.

3.2.3.1 Field Target Range: Rifle and Light Machine Gun

In 1943, Range 1, Field Target Range: Rifle and Light Machine Gun, was located in the West Range, spanning several training areas (including most to all of Training Areas K, L, I, H), and crossed over into the South Range (Training Areas R, and N) (Figure 102). This training range does not appear on any subsequent maps (see Figure 103, Figure 104, and Figure 105).

¹⁸¹ Adam D. Smith, Caroline M. Wisler, Susan I. Ensore, and Sunny E. Adams, *Fort Huachuca Electronic Proving Ground: Historic Context, Inventory and Evaluation*, Fort Huachuca Cultural Resources Report FH-15-19, (Champaign, IL: Engineer Research and Development Center-Construction Engineering Research Lab, forthcoming).

Figure 102. Detail of West Range, 1943 (*Topographic Map and Reservation Boundary, Fort Huachuca DPW. Public Domain*).



Figure 103. Detail of West Range, 1951 (*Fort Huachuca Military Reservation, Fort Huachuca DPW. Public Domain*).

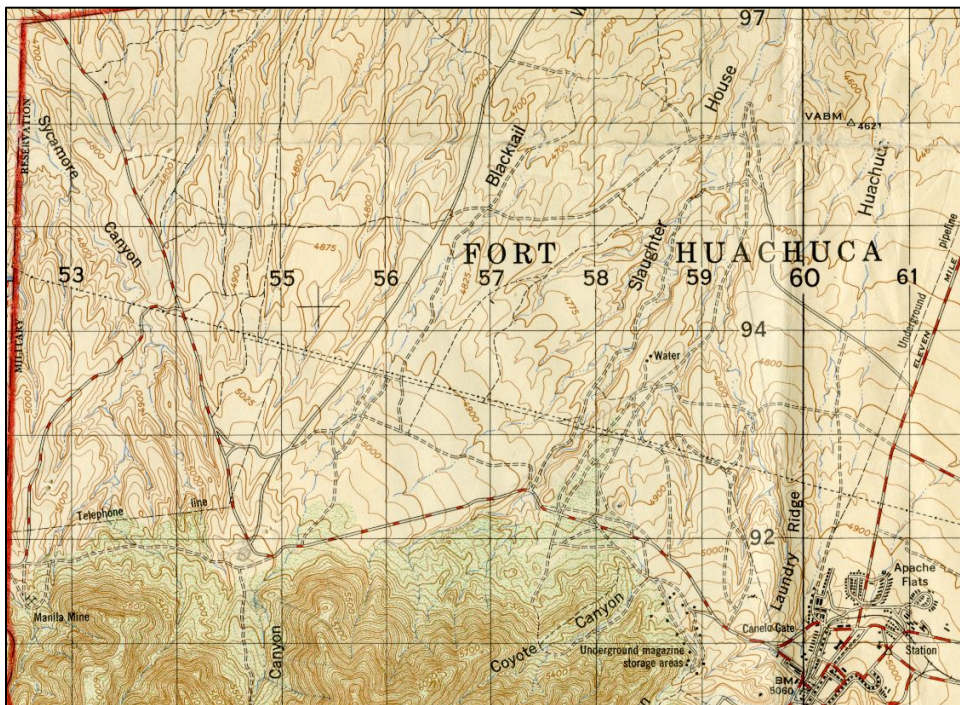


Figure 104. Detail of West Range, 1962 (*General Site Plan, Fort Huachuca DPW. Public Domain*).

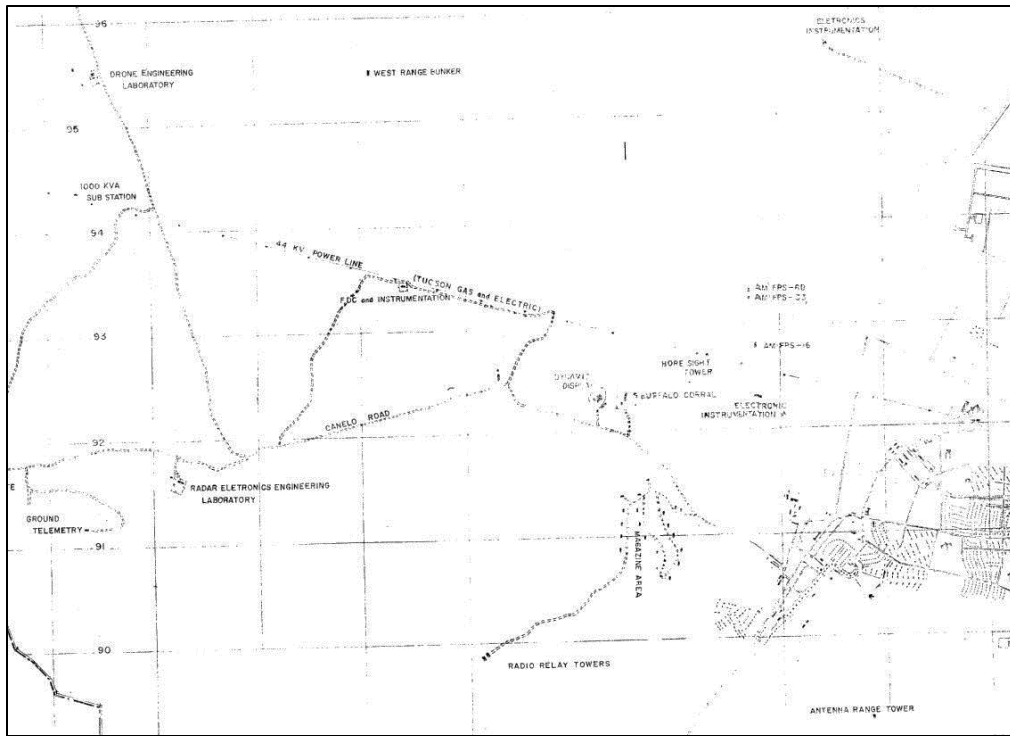
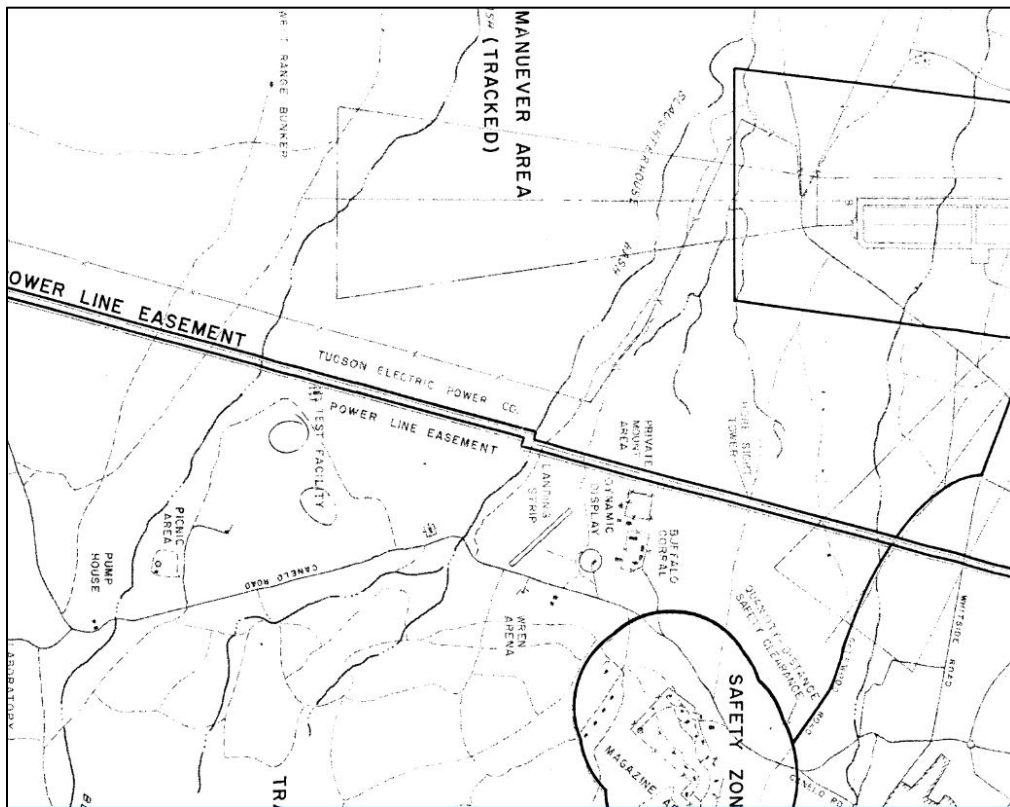


Figure 105. Detail of West Range, 1983 (*Reservation Land Use Map, Fort Huachuca DPW. Public Domain*).



3.2.3.2 Demonstration Hill

Demonstration Hill is located off of Canelo Road, adjacent to the Buffalo Corral Riding Stables. In 1943, the area was part of Training Range 1. No facilities are listed on installation range maps for 1951. In 1962, the Dynamic Display Control facility was located on Demonstration Hill (Figure 104). The Dynamic Display Control Building, built in 1957, was a grandstand built atop Demonstration Hill that overlooked a landing strip (Figure 106). It had two latrines that were demolished along with the grandstand superstructure at an unknown date, leaving only the concrete berms on top of the hill. The top of the hill also had a helicopter landing pad that allowed direct access to the grandstand for very important visitors. The landing strip below the hill now functions as an access road to Site Kilo, which functions as a bivouac area. The Dynamic Display Control facility is listed on the 1983 installation range map (see Figure 105).

Figure 106. Facility 13562, grandstand on top of Demonstration Hill, comparison between a historic photo from 1958 (*left*) and a photo from 2015 (*right*). The comparison shows all that *remains* is the concrete berm from the foundation (left: NARA, College Park, MD. Public Domain; right: ERDC-CERL 2015).



3.2.4 Training Area L

Training Area L is located in the West Range, north of Canelo Road and west of Training Area K (see Figure 96). In 2014, Site Maverick (Tactical Interrogation Center [TIC]/Logistical Support Area [LSA]/Urban Operations Sites [UOS]/Forward Operating Base [FOB] and an admin compound) was located in Training Area L, and Site Freedom was located at the junction of Training Areas L, M, and N. The UOS training facility at Site Maverick has 29 MILVAN buildings with a two-story maximum, as well as three facilities including two fenced facilities with structures and one mock village in an old playground surrounded by concertina wire. Site Maverick is currently used as an MI battalion training area. Site Freedom

is currently used as a bivouac area for MI battalion training, with a lightning shelter and a number of old ramadas of unknown origin. Historically, this area was part of Range 1 in 1943 (see Figure 102). After that time, although buildings are indicated as being present in the area, they are not labeled nor are any training facilities or ranges. It is likely that these buildings were associated with the EPG.

3.2.5 Training Area M

Training Area M is located in the West Range on the far western border of the installation. In 2014, the Land Navigation Course M (Land Nav Mike) was located in Training Area M. In 1983, a substation is listed as being present in the area (see Figure 105). Otherwise, no training ranges or facilities have historically been associated with this Training Area other than various training activities associated with the EPG. The 2-13th does conduct laser training in Area M, and adjacent Areas I and J, but has no facilities associated with the training).

3.3 Cantonment

The Fort Huachuca cantonment is located at the east-center of the West Reservation (see Figure 95 and Table 4). It includes both the Old Post, located at the west edge south of Apache Flats, and the more recently constructed cantonment covering much of what was the WWII New Cantonment. LAAF is at the north end of the cantonment. A variety of training occurred within the cantonment throughout the history of the fort. In 2014, the cantonment had several training facilities scattered throughout, including Apache Flats, BTA 1¹⁸², BTA 2, Confidence Course/Obstacle Course, EST 2000 (Engagement Skills Trainer), and NBC Confidence Chamber for CBRN mask confidence exercises (see Figure 96). Historically, obstacle and bayonet courses, as well as gas chambers have been located on the cantonment. In 1943, there were three obstacle and bayonet courses—for the 25th Infantry (“A”), 368th Infantry (“B”), and the 369th Infantry (“C”)—as well as a Gas Chamber (“D”) (Figure 107). By 1947, the three obstacle courses were still in same locations, but the gas chamber was not marked on the map (Figure 108). In 1952, several new training facilities were added to the cantonment, including the EAUTC Schools, a mine warfare site, rigging area, camouflage site, aircraft “mock up” site, gas chamber, and a new obstacle area; the prior obstacle and bayonet

¹⁸² “BTA” is an unknown acronym.

courses had been moved (Figure 109). Archaeological evidence also indicates the presence of a 1950s infiltration course (AZ EE:7:387 [ASM]) located northeast of the Old Post and southwest of LAAF, which itself was located on top of live-fire training ranges from the 1880s and 1890s.

Early accounts from the 1880s and 1890s indicate that live-fire training ranges were located roughly one quarter mile northeast of the Old Post, which would likely place these training ranges in the cantonment. As discussed in the historic context, both short and long nonpermanent range targets, using stone and earth butts, were set up in the early 1880s. In March 1888 the first permanent target range was constructed northeast of the Old Post, with butts, a 400-foot-long trench, and a target house. By 1903, the range had either been expanded or expanded and moved to three-quarters of a mile northeast of the post, with a firing direction of 15 degrees east of north. In 1912, Fort Huachuca began constructing live-fire training ranges on the South Range.

Figure 107. Detail of cantonment, 1943 (*Topographic Map and Reservation Boundary, Fort Huachuca DPW. Public Domain*).

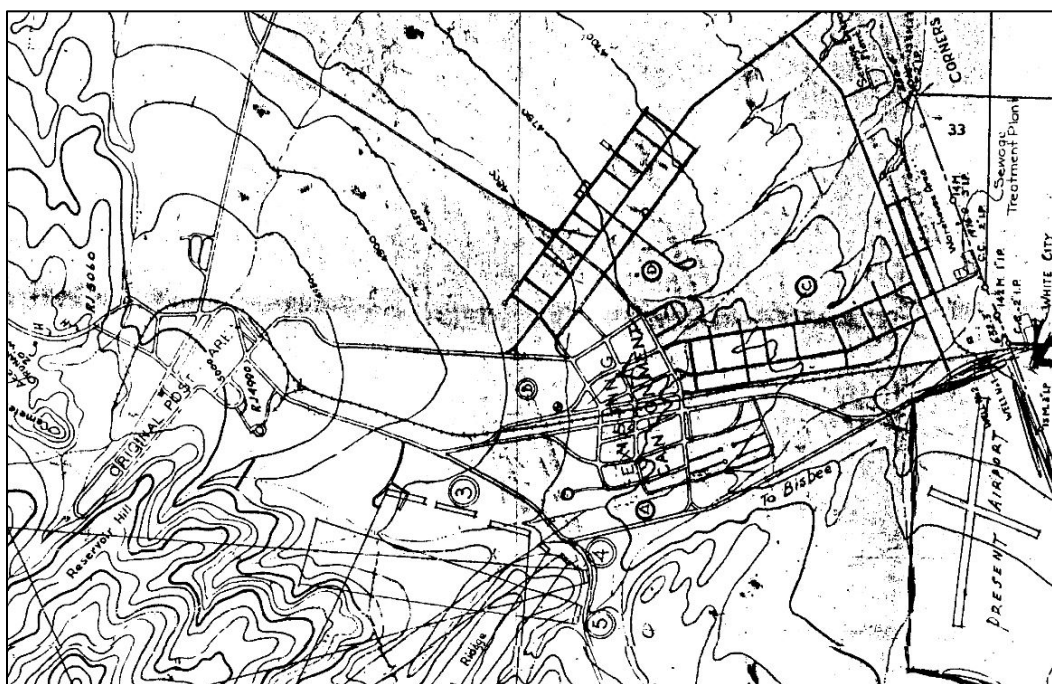


Figure 108. Detail of cantonment, 1947 (*Reservation Boundary Land Use Map, Fort Huachuca DPW. Public Domain*).

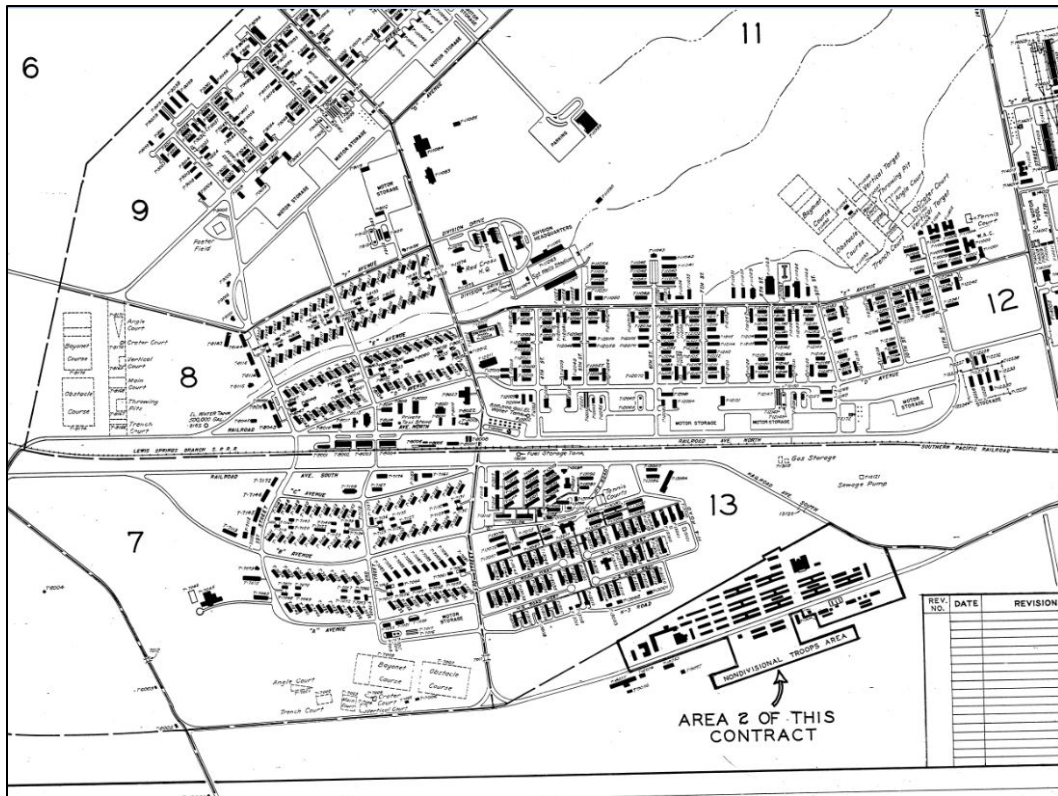


Figure 109. Detail of cantonment, 1952 (*Layout of Military Reservation, Fort Huachuca DPW. Public Domain*).



3.4 South Range

The South Range is located in the West Reservation, primarily south of the cantonment and east of the Huachuca Mountains (see Figure 95 and Table 4). Canelo Road is the boundary between the West and South Ranges, so some of the South Range is actually west of the cantonment. It contains 19 training areas including Areas N through Y, which also contain P1, T1, T2, T3, U1, V1, and W1. The vast majority of Fort Huachuca's training ranges have been located on the South Range (Figure 110).

Figure 110. Overlay of 1951 ranges onto 2016 aerial image (Map data: Google, 2016; red marks and annotations inserted by ERDC-CERL).



3.4.1 Training Areas N, O, P, and Q

Training Areas N, O, P, and Q are located along the far western edge of Fort Huachuca (see Figure 96). There are no training ranges currently present in any of these areas, although Training Areas N, O, and P have helipads. Training Areas O and P are labeled as small arms impact areas.

3.4.2 Training Area P1

Training Area P1 is wedged between Training Areas T3 to the north and U1 to the south; Garden Canyon Road forms its southern border. In 2014, only Site Papa (TIC/Upper/Lower), later renamed FOB Hinkley in dedication to a fallen soldier, was located in this training area. Historically, the Close Combat Course and Combat in Cities Course/Mock Village were located in this area; based on historic photos they were likely in the same location as FOB Hinkley (see Figure 63 and Figure 64). There are also a number of ammo bunkers in the vicinity of the FOB.

3.4.2.1 Close Combat Course

The Close Combat Course appears on the 1952 installation range map, located northeast along Garden Canyon Road from the Combat in Cities Course to the southwest (Figure 111 and Table 5). By 1955, the area was relabeled as Range 12, Close Combat Range with 2 lanes for training, and had a 66-foot tower, storage shed, latrine, and pumping station (not in use) located on or near the training facility (Figure 112).¹⁸³ In 1962 and again in 1983, there was no range or facility listed in the area, but the maps show buildings from 1955 in the general area of the Close Combat Course and Combat in Cities Course (Figure 113 and Figure 114). There is nothing listed in the area in 1991.

Table 5. Close Combat Course naming history.

Year	Historic Range Name	Function
1952	--	Close Combat Course
1955	Range 12	Close Combat Range
1962	--	--

3.4.2.2 Combat in Cities Course/Mock Village

The Combat in Cities Course appears on the 1952 installation range map further southwest along Garden Canyon Road from the Close Combat Course (Figure 111 and Table 6). By 1955, the area was relabeled as Range 13, Mock Village, and had a latrine, "Combat in Cities Course," a 40-foot tower, and two concrete bunkers (thought to be Facilities 15229 and 15330) located on or near the training facility (Figure 112).¹⁸⁴ The concrete bunkers were located southwest of FOB Hinkley and between FOB Hinkley

¹⁸³ Post Engineer Office, *Training Areas and Ranges*.

¹⁸⁴ *Ibid.*

and Site Uniform. Similar to the Close Combat Course, there was no range or facility listed in the area in 1962 and 1983, but the maps show buildings from 1955 in the general area of the Close Combat Course and Combat in Cities Course (Figure 113 and Figure 114). There is nothing listed in the area in 1991.

Table 6. Combat in Cities/Mock Village Course naming history.

Year	Historic Range Name	Function
1952	--	Combat in Cities Course
1955	Range 13	Mock Village
1962	--	--

Figure 111. Detail of Training Area P1, 1952 (*Layout of Military Reservation, Fort Huachuca Museum Collection. Public Domain*).

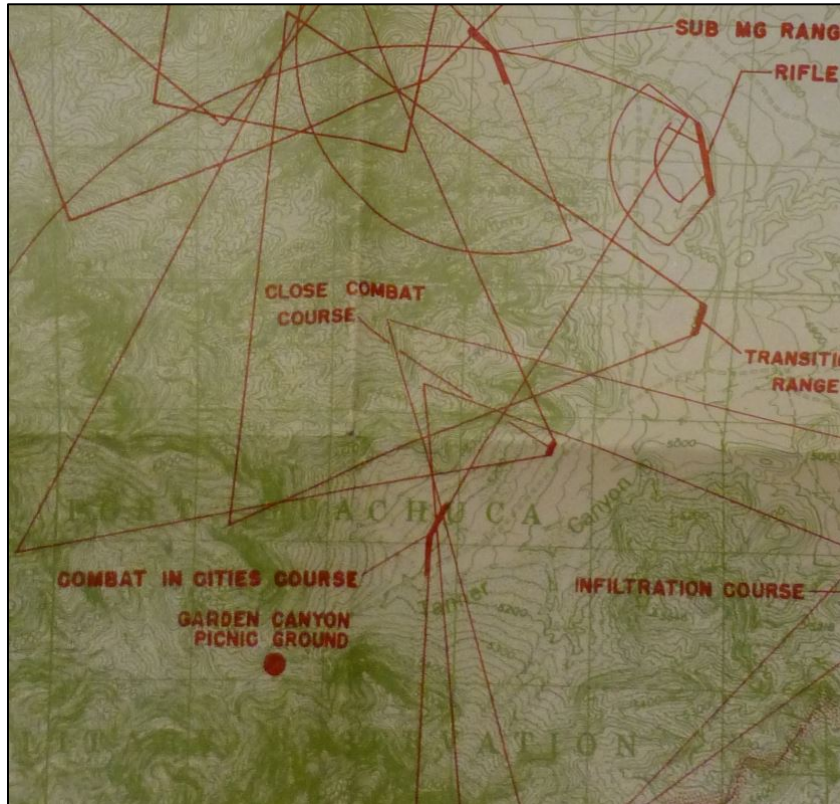


Figure 112. Detail of Training Area P1, 1955 (*Training Areas and Ranges*, Fort Huachuca Museum Collection. Public Domain).

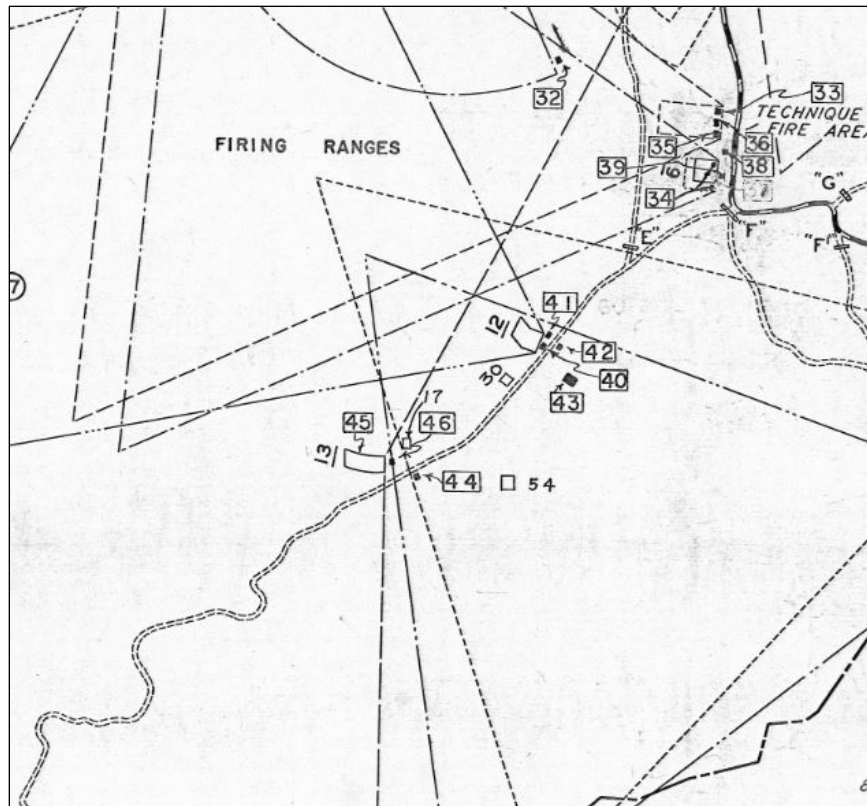


Figure 113. Detail of Training Area P1, 1962 (*General Site Plan*, Fort Huachuca DPW. Public Domain).

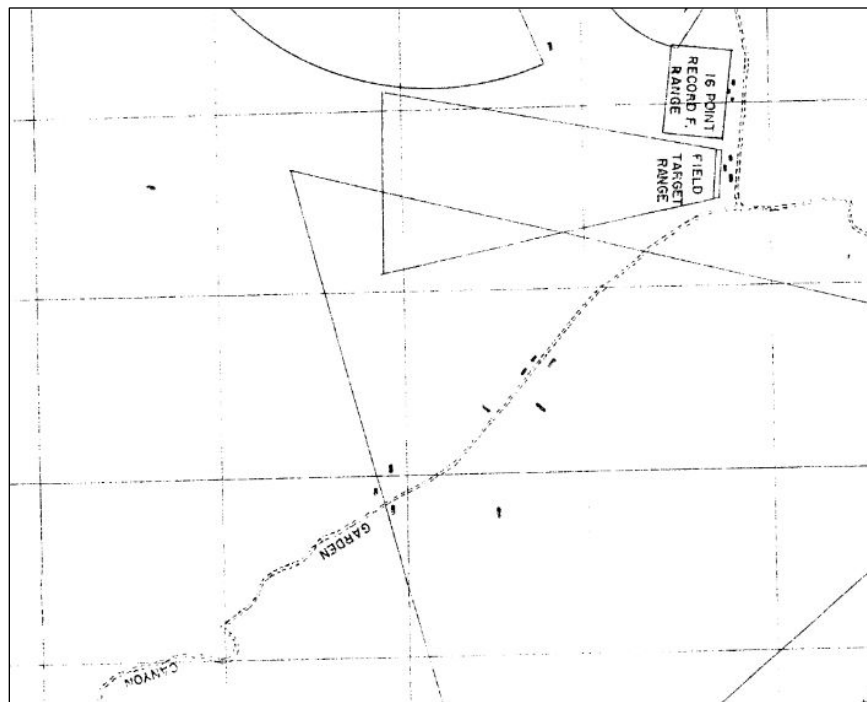
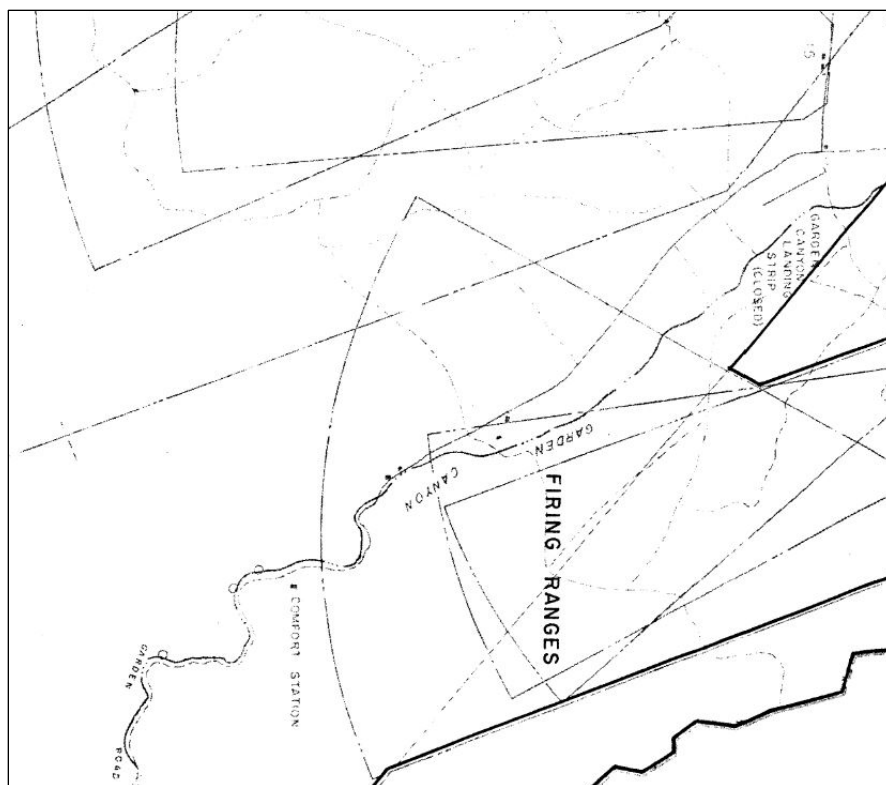


Figure 114. Detail of Training Area P1, 1983 (*Reservation Land Use Map, Fort Huachuca DPW. Public Domain*).



3.4.3 Training Areas R and S

Training Areas R and S are located in the West Range, just west of the cantonment and south of Training Areas L and K (see Figure 96). There are no training ranges currently present in either area; however, there are several subterranean bunkers located in Training Area R, recorded as archaeological sites (AZ EE:7:365 [ASM]; AZ EE:7:366 [ASM]; AZ EE:7:367 [ASM]; and AZ EE:7:368 [ASM]).¹⁸⁵

3.4.4 Area T/T1

Area T is located in the South Range, directly south of the cantonment and west of Garden Canyon Road. Active ranges in Area T include Ranges 1, 2, 3, 4, and the Rappel Tower facility.

¹⁸⁵ Gilpin, 17.

3.4.4.1 Range 1—Elevated Sniper Range

Range 1 is an Elevated Sniper Range. The area encompassing Range 1 and Range 1B currently includes the Huachuca Mountain Archers and Bowhunters Club.

3.4.4.2 Range 1B—Small Arms Range

In 2017, records indicate that a new Range 1B was added as a live-fire training range for small arms, and also served as a bivouac area for the 40th Expeditionary Signal Battalion's required quarterly training prior to deploying.¹⁸⁶ It is located just below the Elevated Sniper Range. The Range 1b targets were constructed in a series of existing target areas that consisted of U-shaped enclosures of concrete-filled sandbags with brackets for 2×4s to hold targets.

3.4.4.3 Range 2—Rifle Marksmanship M-16 Zero Range

Range 2 is currently the Rifle Marksmanship M-16 zero; it has 40 firing points and is a 300 m training range. It is also listed as 10–25-meter zero live-fire training range. This training range area has persistently been used for machine gun and rifle marksmanship training, although its firing field and range number have changed over time (Table 7). The first reference of a machine gun range being present on the post was in 1933. In 1943, the training range was labeled as Range 3 and was designated as a Machine Gun and Anti-Tank 1000' Range with 90 tracks (Figure 115). There were no range numbers assigned in 1952 (Figure 116), but the training range appeared to cover the same area as in 1955; it was labeled as the 1000" and 500" Range (Figure 117). In 1955, the area that is currently Range 2 appeared to encompass all of the area that would eventually be broken into Range 1 and Range 2 in the 1970s. It was designated as Range 1, the 1000" Machine Gun, M1 & Carbine Training Range and had 180 firing points. Two range houses and two latrines are listed as being associated with or located nearby this range.¹⁸⁷ In 1962, the area that is present day Range 2 was designated as "TR" and "1-A" (Figure 118).

¹⁸⁶ Alexis Ramanjulu. "Ft. Huachuca gets good use of new live fire range," *Herald/Review*, December 12, 2017, https://www.myheraldreview.com/news/ft-huachuca-gets-good-use-of-new-live-fire-range/article_ea4ff402-dede-11e7-9fee-d329f7b198f6.html.

¹⁸⁷ Post Engineer Office, *Training Areas and Ranges*.

In 1983, the present-day Range 2 was subdivided into two ranges: Range 1 and Range 2. Range 1 was designated the M60 Machine Gun Training Range,¹⁸⁸ and was mostly contained within the present-day Range 2; the firing range for the present-day Range 2 begins slightly south of the earlier Range 1's beginning point and extends further south than the extent of Range 1 (Figure 119). Range 1 was described in 1977 as Small Arms Range, Facility #14446. There was no construction date; it was assigned a building number and picked up on inventory on 23 September 1977. Facilities on Range 1 (M60 Machine Gun Range) on 25 August 1977 included:

- Observation tower #14447: concrete pier foundation, wood floor, wood walls, flat roof with roll paper surface on wood base
- Storage shed #14448: wood skid foundation, wood floor and walls, flat roof with roll paper surface on wood base
- Two sets of portable steel and wood bleachers with 12 rows of seats each
- One portable latrine
- Range had electricity and telephone.

The category code and facility number changed on 23 January 1979 to machine gun (MG) M60 & M2 Range; the facility number changed to PFZSAR 01. In 1983, it was designated as Range 2 and listed as a Rifle Marksmanship 25–75 Meter Range.¹⁸⁹ It was still labeled as Range 2 in 1994 (Figure 120).

Table 7. Range 2 naming history.

Year	Historic Range Name	Function
1943	Range 3	Machine Gun and Anti-Tank 1000' Range
1952	--	1000" and 500" Range
1955	Range 1	1000" Machine Gun, M1 & Carbine
1962	TR, 1-A	--
1983	Range 1	M60 Machine Gun
1994	Range 2	--
2014	Range 2	Rifle Marksmanship M-16 zero

¹⁸⁸ Real Property Records (Fort Huachuca Real Property Office).

¹⁸⁹ Ibid.

Figure 115. Detail of Training Area T, T1, and T2, 1943 (*Topographic Map and Reservation Boundary, Fort Huachuca DPW. Public Domain.*)



Figure 116. Detail of Training Area T, T1, and T2, 1952 (*Layout of Military Reservation, Fort Huachuca Museum Collection. Public Domain.*)

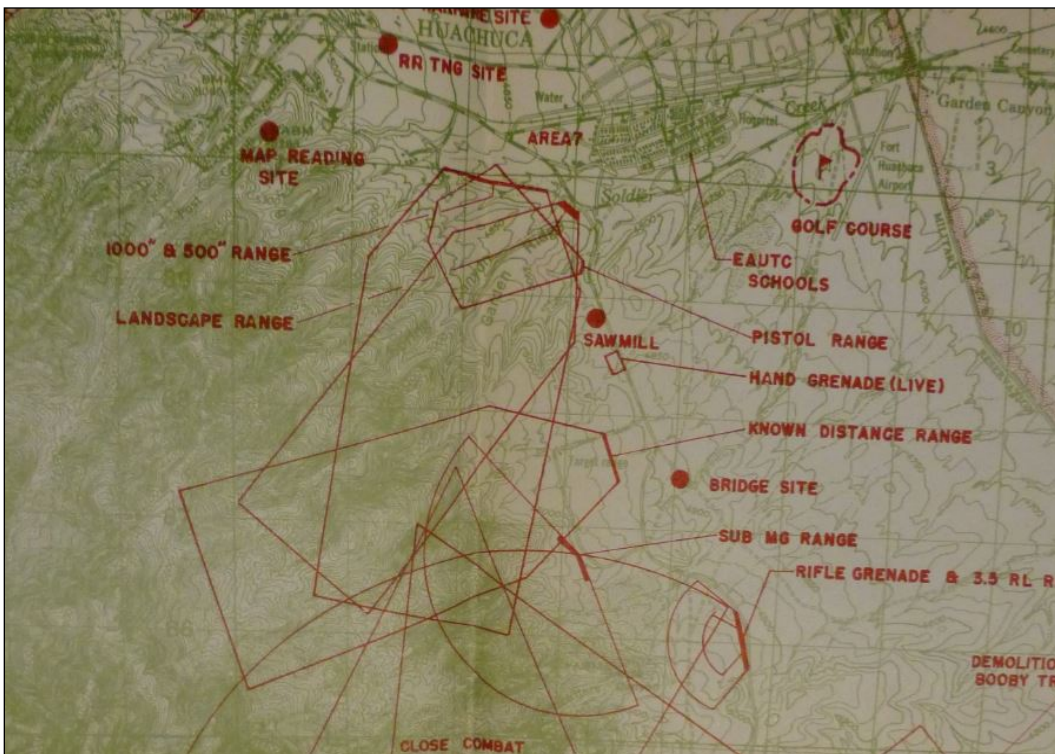


Figure 117. Detail of Training Area T, T1, and T2, 1955 (*Training Areas and Ranges, Fort Huachuca Museum Collection. Public Domain*).

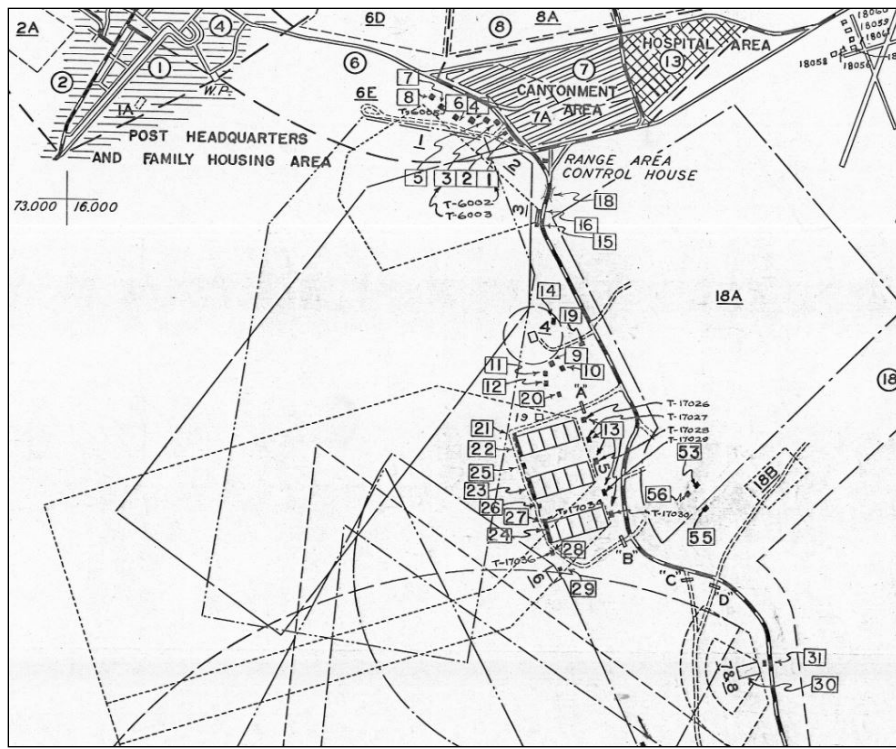


Figure 118. Detail of Training Area T, T1, and T2, 1962 (*General Site Plan, Fort Huachuca DPW. Public Domain*).

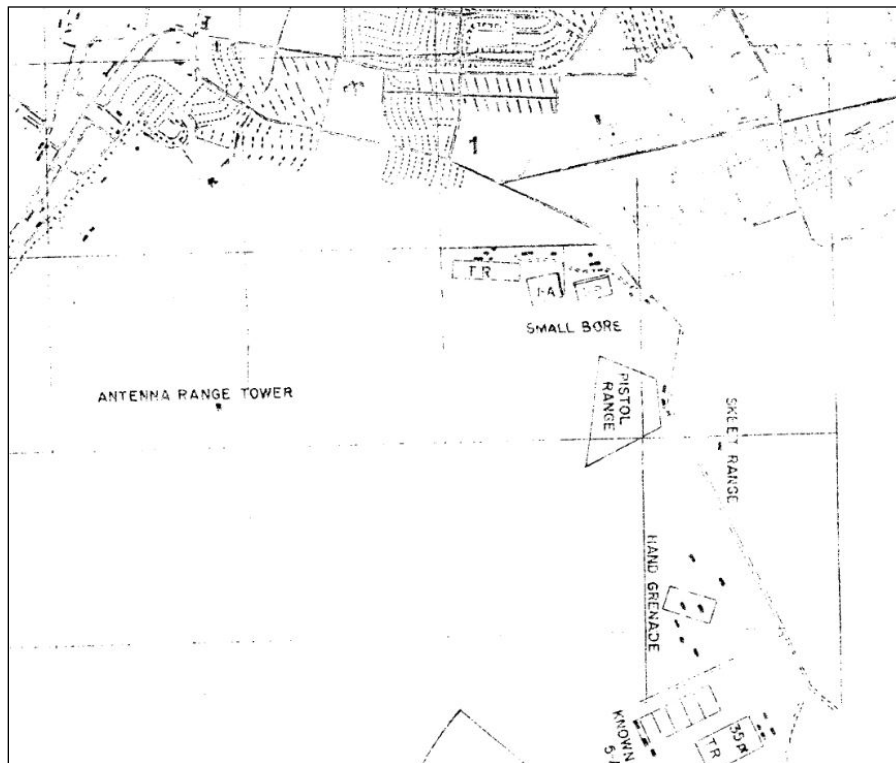


Figure 119. Detail of Training Area T, T1, and T2, 1983 (*Reservation Land Use Map, Fort Huachuca DPW. Public Domain.*)

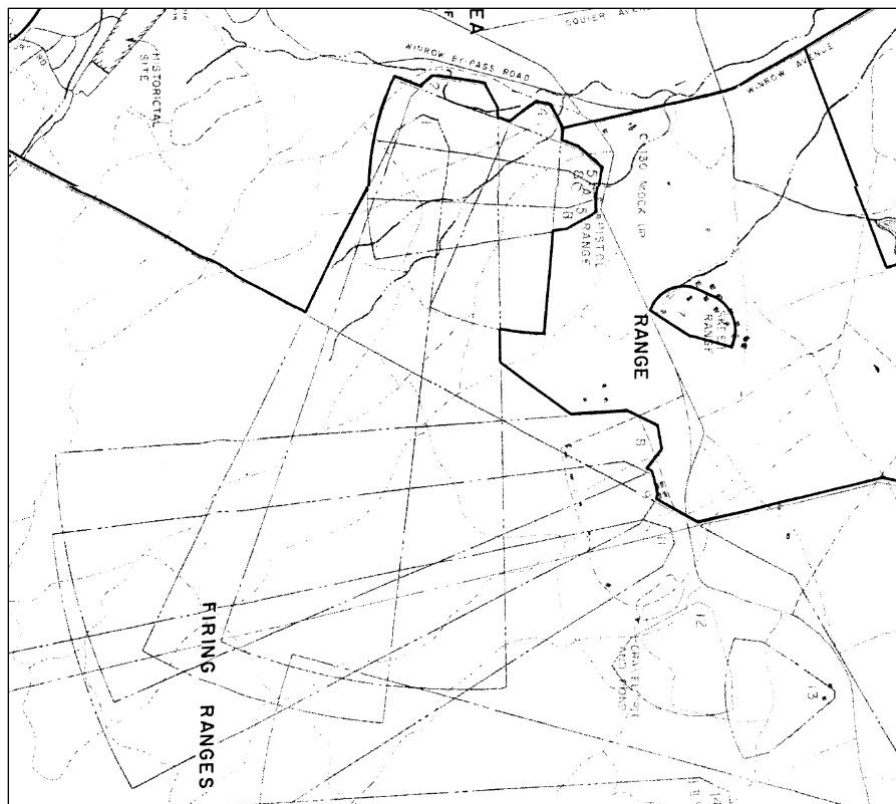
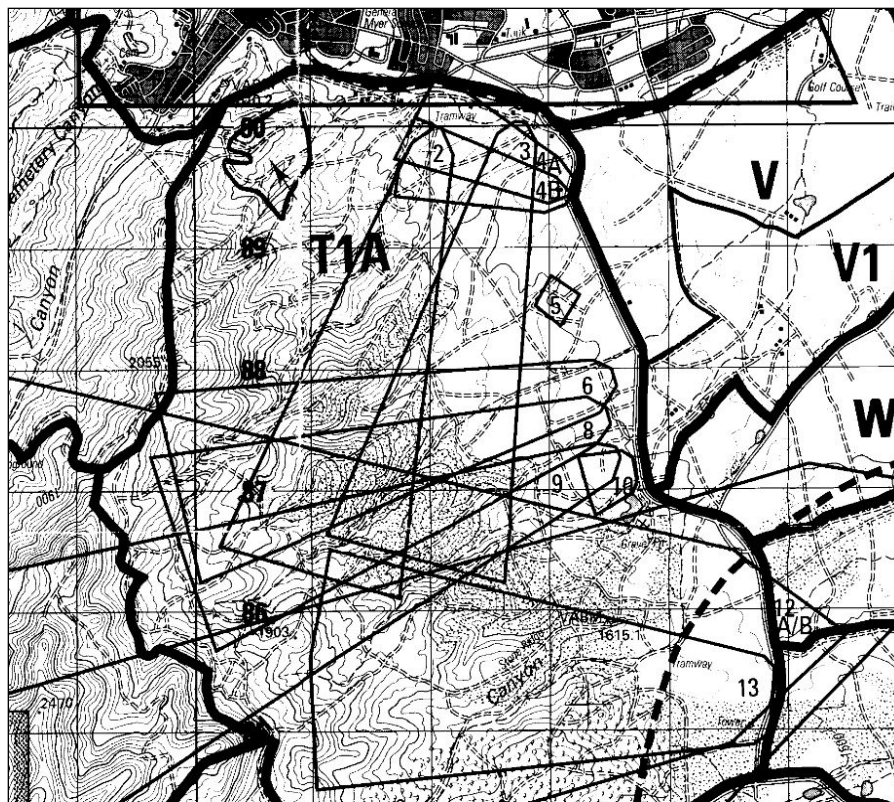


Figure 120. Detail of Training Area T, T1 and T2, 1994 (*Fort Huachuca Military Reservation Map, Fort Huachuca DPW. Public Domain*).



3.4.4.4 Range 3—Small Bore Multi-Weapon Range

Range 3 is the Small Bore Multi-Weapon Range, with 15 firing points and a 1000-meter range and is also listed as being for post marksmanship. It is located adjacent to Range 2. This training range has persistently been used for marksmanship and landscape targeting (Table 8). In 1943, the range was labeled as Range 4, the Landscape Target Range, and it had 9 targets in 3 groups (see Figure 115). In 1952, the range was simply listed as a Landscape Range (see Figure 116). In 1955, the range was labeled Range 2 and described as a Landscape Target Training Range with 18 25-foot targets (see Figure 117). The extent of the firing range once again approximated that of its adjacent Range 1; however the firing direction of the range had shifted to face a more southwesterly direction, indicating that at some point between 1955 and 1983, the range area was shifted. The range control building and three latrines were listed as being on or near the range.¹⁹⁰ In 1962, it was labeled as “1-B” with no extent or description provided (see Figure 118). In 1983, it was listed as Range 4 and described as

¹⁹⁰ Post Engineer Office, *Training Areas and Ranges*.

Junior Rifle Team, and its extent appeared much shorter than in the 1990s (see Figure 119). There was also a Range 3—Unit Marksmanship Range (Inactive)—listed on the 1983 real property records but not located on the map.¹⁹¹

Table 8. Range 3 naming history.

Year	Historic Range Name	Function
1943	Range 4	Landscape Target Range
1952	--	Landscape Range
1955	Range 2	Landscape Target Range
1962	1-B	--
1983	Range 4	Junior Rifle Team
2014	Range 3	Small Bore Multi-Weapon Range

3.4.4.5 Range 4—Combat Pistol Qualification Course

Range 4 is the Combat Pistol Qualification Course with 15 lanes and a length of 31 meters. It is located southeast and adjacent to Ranges 2 and 3 along Garden Canyon Road (see Figure 96). Throughout its history, it has consistently been used as a pistol range (Table 9). In 1943, it was labeled as Range 5, Pistol Range, with 25 targets (see Figure 115). It was described as a Pistol Range in 1952 (see Figure 116). In 1955, it was labeled as Range 3, Pistol Range, with 25 firing points; it had a latrine, a target shed, and a bridge located on or near the range (see Figure 117).¹⁹² In 1962, the range was labeled as the Pistol Range (see Figure 118). In 1983, the range was labeled Range 5 and subdivided into 5A, 5B, and 5C, all described as pistol ranges (see Figure 119). Range 5A was the Competition Pistol Course, Range 5B was the Standard Course and Range 5C was the Standard Law Enforcement Course.¹⁹³ In 1994, the range was shown as being subdivided into two overlapping ranges: 4A and 4B (see Figure 120).

Table 9. Range 4 naming history.

Year	Historic Range Name	Function
1943	Range 5	Pistol Range
1952	--	Pistol Range
1955	Range 3	Pistol Range
1962	--	Pistol Range

¹⁹¹ Real Property Records (Fort Huachuca Real Property Office).

¹⁹² Post Engineer Office, *Training Areas and Ranges*.

¹⁹³ Real Property Records (Fort Huachuca Real Property Office).

Year	Historic Range Name	Function
1983	Range 5 (5A, 5B, 5C)	Pistol Range
1994	Range 4A and 4B	--
2014	Range 4	Combat Pistol Qualification Course

3.4.4.6 Rappel Tower

The Rappel Tower is a training facility located in Area T between Range 3 and Range 4, due west from the range control building (see Figure 96). It has a four-level platform and facilitates wall rappelling. The cantonment map lists two facilities in this area: Rappel Training Area (1969; Facility #14473) and the COV¹⁹⁴ Training Area (1999; Facility #14474). It is unknown when this structure was built, and there is no mention of a training facility at this location on prior maps.

3.4.5 Area T1/T1A

Area T1 is contained within the larger training area T (see Figure 96). Note, the 2013 training range map (see Figure 95) labels this area as “T1A”. There are no current training ranges or facilities located within this area. In 1952, the area was labeled as the “Map Reading Site” (see Figure 116).

3.4.6 Area T2

Area T2 is located in the South Range, directly south of Area T and west of Garden Canyon Road (see Figure 96). Ranges in Area T2 include Ranges 5, 6, 8, 9, 10, and the defunct Submachine Gun Range.

3.4.6.1 Range 5—Combat Hand Grenade Course

Range 5 is the Combat Hand Grenade (inert) Course, also referred to as the Hand Grenade Assault Course. This range has been used for hand grenade training since at least the 1950s (Table 10). Prior to that time, it appears to have been used for anti-tank sub-caliber training. In 1943, the area where the Hand Grenade Training Range is presently located was designated as Range 12 and used for 37 mm anti-tank sub-caliber training, with a 1000’ range (see Figure 115). The 1952 range map indicated the range was used for hand grenade training (see Figure 116). It is possible that this range was repurposed to hand grenade training when Fort

¹⁹⁴ “COV” is an unknown acronym.

Huachuca was reactivated in 1952. In 1955, the range was labeled Range 4 and had 12 firing points (see Figure 117). In 1962, the hand grenade range had three latrines, old quarters, a storage building, and two target sheds associated with or located nearby the range (see Figure 118).¹⁹⁵ In 1983, the range was labeled Range 6 and described as a Hand Grenade Range (see Figure 119).¹⁹⁶

Table 10. Range 5 naming history.

Year	Historic Range Name	Function
1943	Range 12	37 mm anti-tank sub-caliber training
1952	--	hand grenade training
1955	Range 4	hand grenade training
1962	--	hand grenade training
1983	Range 6	Hand Grenade Range
2014	Range 5	Combat Hand Grenade Course

3.4.6.2 Range 6—Known Distance/Zero Range

Range 6 is the Known Distance/Zero Range; it has 50 firing points and extends 100 meters (see Figure 96). Although its label designation has changed over time, this training range has always been used as a known distance/target range (Table 11). Indeed, it appears that Range 6 is located on, or directly adjacent to, the site of the second permanent target range erected at Fort Huachuca. The first permanent target range was constructed northeast of the Old Post in 1888. The second recorded permanent target range was constructed in 1911 and located roughly 3 miles southeast of the Old Post; maps indicate that the location of this permanent target range is the same place as the present-day Range 6 (see Figure 6). The original target range was improved several times in the early 1920s and 1930s: permanent messing and bathing facilities were added in 1923; the wall was expanded, and new targets were added in 1928; three new target storage houses were added in 1934; a rubble-stone latrine building (Facility 15331; #377) was added in 1938; and in 1940, the size of the target range was doubled. In doubling the size of the target range in 1940, it appears that three additional firing “lanes” were added adjacent to the original range. The 1943 map indicates that the “existing rifle range” was located directly north and adjacent to the rifle range as it existed in 1943

¹⁹⁵ Post Engineer Office, *Training Areas and Ranges*.

¹⁹⁶ Real Property Records (Fort Huachuca Real Property Office).

(Figure 121). In 1943, the training area was labeled Range 6 and described as a rifle range with 150 targets in three groups.

In 1955, the range was labeled Range 5, Known Distance Rifle Range and was recorded as only having 100 firing points; additionally, the range had five latrines, five target sheds, three built-in butts, and (across the road) two “FR.” buildings and a latrine (see Figure 117).¹⁹⁷ In 1962, the three firing ranges that made up the Known Distance Range were broken into individual ranges and relabeled as Range 5A, 5B (Known Distances), and 35 point Transition Range (see Figure 118). By 1983, the three firing ranges were given their own range designations: Range 8-Known Distance, Range 9-Rifle Marksmanship/Field Firing, and Range 11-106 Recoilless Rifle/50 Caliber Machine Gun Range (see Figure 119).¹⁹⁸ By 1991, the Known Distance Range was relabeled as Range 6. In 1990, it was determined that not all of the Known Distance Range was needed, and the wood buildings were demolished in 1998, leaving only the butts and concrete rooms.¹⁹⁹

Table 11. Range 6 naming history.

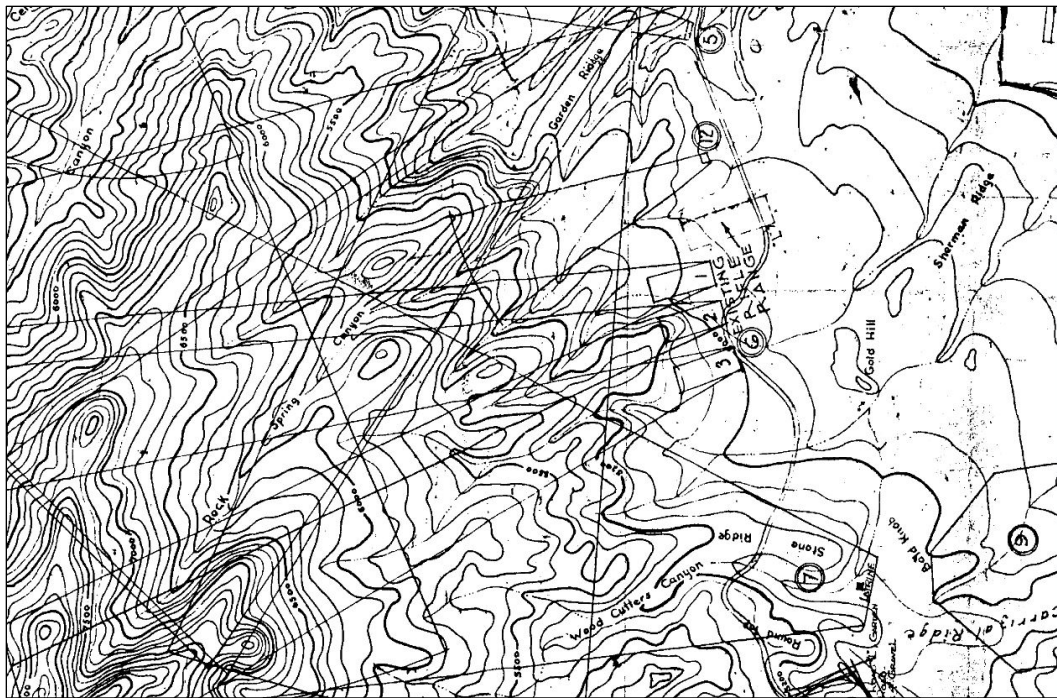
Year	Historic Range Name	Function
1911		Target Range
1943	Range 6	Rifle Range
1955	Range 5	Known Distance Rifle Range
1962	Range 5A, 5B and T.R.	Known Distance/Transition Range
1983	Range 8 Range 9 Range 11	Known Distance Rifle Marksmanship/Field Firing 106 Recoilless Rifle/50 Caliber Machine Gun Range
1992	Range 6	Known Distance Range
2014	Range 6	Known Distance/Zero Range

¹⁹⁷ “FR.” is an unknown acronym but may mean “Firing Range.” Post Engineer Office, *Training Areas and Ranges*.

¹⁹⁸ Real Property Records (Fort Huachuca Real Property Office).

¹⁹⁹ Herman Zillgens Associates, *Existing Conditions Maps Range & Training Area Map*, May 1991, scale not given (San Diego, CA: Fort Huachuca), Fort Huachuca DPW.

Figure 121. Detail of 1943 installation map with ranges (*Topographic Map and Reservation Boundary, Fort Huachuca DPW. Public Domain*).



3.4.6.3 Range 8—Modified Record Fire Range

Range 8 is the Modified Record Fire Range; it has 10 firing points with a range of 300 meters (see Figure 96.). Until the 1960s, Range 8 was included as part of the Known Distance Range (see Section 3.4.6.2; Table 12). In 1962, the range was labeled as the 35 point Transition Range, part of Range 5, Known Distance Range (see Figure 118). By 1983, the range was relabeled Range 9 and described as the Rifle Marksmanship/Field Firing Range (see Figure 119).²⁰⁰ In 1991, the range was relabeled to Range 8.²⁰¹

Table 12. Range 8 naming history.

Year	Historic Range Name	Function
1955	-	Known Distance Rifle Range
1962	Range 5-T.R.	35 point TR
1983	Range 9	Rifle Marksmanship/Field Firing
1992	Range 8	Known Distance Range
2014	Range 8	Modified Record Fire Range

²⁰⁰ Real Property Records (Fort Huachuca Real Property Office).

²⁰¹ Herman Zillgens Associates, *Existing Conditions Maps Range & Training Area Map*.

3.4.6.4 Range 9—Multi-Purpose Machine Gun Range

Range 9 is the Multi-Purpose Machine Gun Range with four firing points, and a range of 800 meters (see Figure 96). It is for training on MK-19 machine guns, but no high explosive (HE) rounds. It is also referred to as the Multipurpose Machine Gun Zero and Qualification Range. Until the 1960s, Range 9 was included as part of the Known Distance Range (see Section 3.4.6.2; Table 13). In 1962, the range was labeled as Range 5-B (part of the Known Distance Range) (see Figure 118). In 1983, the range was relabeled Range 11 and described as a “106 Recoilless Rifle, .50 caliber Machine Gun, 90 mm Anti-Tank Weapon Light Anti-Tank Weapon (LAW) and 3.5 Inch Rocket Launcher, Field Firing, Claymore Mine Range” (see Figure 119).²⁰² In 1991, the range was relabeled to Range 9.²⁰³

Table 13. Range 9 naming history.

Year	Historic Range Name	Function
1955	--	Known Distance Rifle Range
1962	Range 5-B	Known Distance Range
1983	Range 11	106 Recoilless Rifle, .50 caliber Machine Gun, 90 mm Anti-Tank Weapon (LAW) and 3.5 Inch Rocket Launcher, Field Firing, Claymore Mine Range
1992	Range 9	--
2014	Range 9	Multi-Purpose Machine Gun Range

3.4.6.5 Range 10—M203/M320 Grenade Zero and Qualification Range

Range 10 is the M203/M320 Grenade Zero and Qualification Range (see Figure 96). It has a 1500-meter range and can be used for .50 caliber qualifications (no HE). It is also referred to as the M203/M2 Qualification Range (Table 14). This appears to be a relatively new training range as it does not appear on range maps until 1992. In 1994, the installation map shows Range 10 as having a fairly small and limited firing range (see Figure 120) compared to the 2014 installation map (see Figure 96), which shows Range 10 as having a firing range as long as Range 9. In 1983, the area where the current Range 10 is located is identified as a gravel pit and pond (see Figure 119). The 1983 map also shows that then Range 12—40 mm Grenade Launcher Training Range was located directly south of and

²⁰² Real Property Records (Fort Huachuca Real Property Office).

²⁰³ Herman Zillgens Associates, *Existing Conditions Maps Range & Training Area Map*.

adjacent to the gravel pit and pond that would become Range 10 (see Section 3.4.7.1).

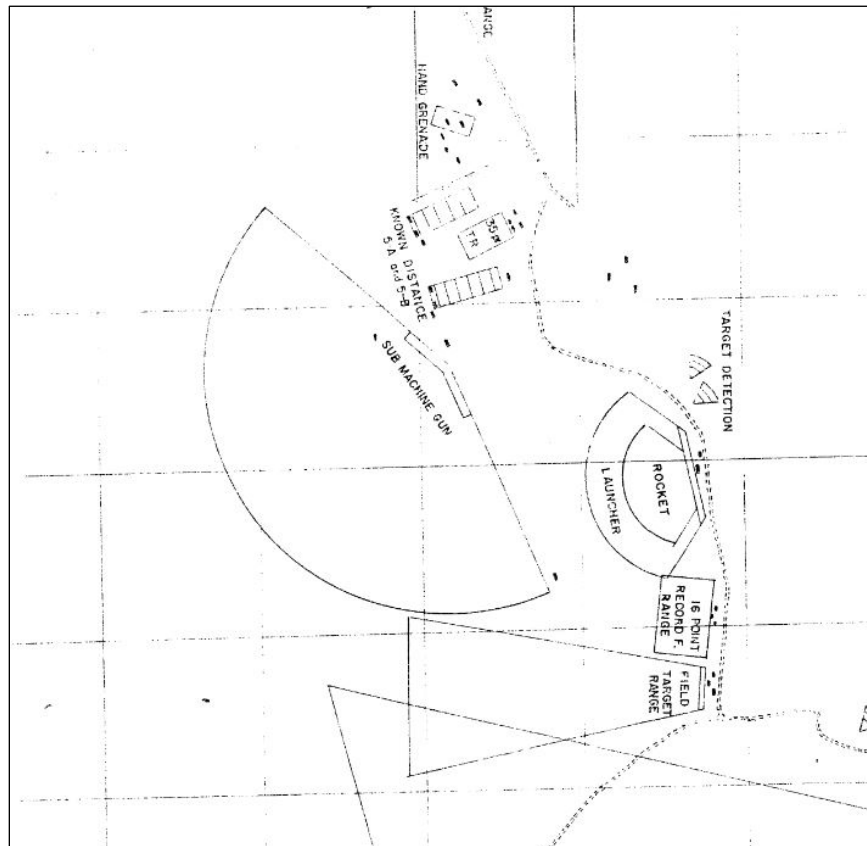
Table 14. Range 10 naming history.

Year	Historic Range Name	Function
1983	--	Gravel pit and pond
1992	Range 10	--
2014	Range 10	M203/M320 Grenade Zero and Qualification Range

3.4.6.6 Submachine Gun Range (defunct)

The Submachine Gun Range, labeled Range 6 in 1955, existed from 1951 through at least the early 1960s. It had two firing points. The range was located adjacent to and southwest of the Known Distance Range (Figure 122). In 1955, it had a building with control levers associated with the range.²⁰⁴ This range is not present on the 1983 installation map.

Figure 122. Detail of Submachine Gun Range, 1962 (*General Site Plan, Fort Huachuca DPW. Public Domain*).



²⁰⁴ Post Engineer Office, *Training Areas and Ranges*.

3.4.7 Area T3

Area T3 is located in the South Range, directly south of Area T2 and west of Garden Canyon Road (see Figure 96). Ranges in Area T3 include Range 13, and former—now defunct—Ranges 7 (1955), 7 and 8 (1943), 12 (1983) and 13 (1983).

3.4.7.1 Range 13—M-16 Modified Record Fire and Zero Range

Range 13 is the M-16 Modified Record Fire and Zero Range. It has 16 firing points with a range of 300 meters. It is also referred to as the Modified Record Fire Range (see Figure 96). It has been used as a point record firing range, or technique of fire area, since at least 1955 (Table 15). Prior to this, according to installation range maps, the area was labeled Range 7, Moving Target Range for .50 caliber gravity type guns (Figure 123), and by 1952, the training area was labeled as a Transition Range (Figure 124). By 1955, the area had been subdivided and possibly expanded to create two training ranges: the Technique of Fire Area and Range 9, the Field Target Range with six lanes. Range 9 also facilitated tank training with the M-1 Tank Table IX and Carbine Tank Tables IV and V (tank training tables would become their own ranges by the 1970s) (see Section 3.4.7.4; Figure 125). In 1955, this training area had two latrines, two towers, a tool shed, field target building, range building, and a facility for control levers located on the range.²⁰⁵ The 1962 installation range map indicates that area was still subdivided into two ranges described as a 16 Point Record Fire Range to the north, and a Field Target Range to the south (Figure 126).

Table 15. Range 13 naming history.

Year	Historic Range Name	Function
1943	Range 7	Moving Target Range
1952	--	Transition Range
1955	Range 9	Field Target Range Technique of Fire Area
1962	--	16 Point Record F. Range (north) Field Target Range (south)
1977	Range 15	Rifle Record Fire/Small Arms Range
1983	Range 15	Rifle Marksmanship, Record Fire Range
1992	Range 13	--
2014	Range 13	M-16 Modified Record Fire and Zero Range

²⁰⁵ Ibid.

Figure 123. Detail of Training Area T3, 1943 (*Topographic Map and Reservation Boundary, Fort Huachuca DPW. Public Domain.*)



Figure 124. Detail of Training Area T3, 1952 (*Layout of Military Reservation, Fort Huachuca Museum Collection. Public Domain.*)

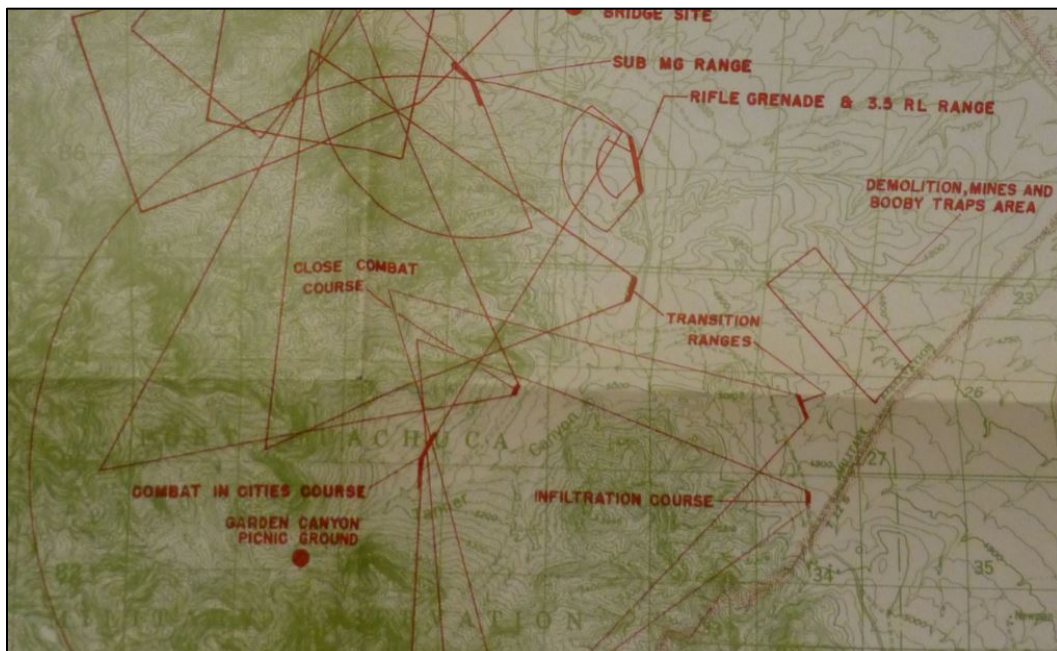


Figure 125. Detail of Training Area T3, 1955 (*Training Areas and Ranges, Fort Huachuca Museum Collection. Public Domain.*)

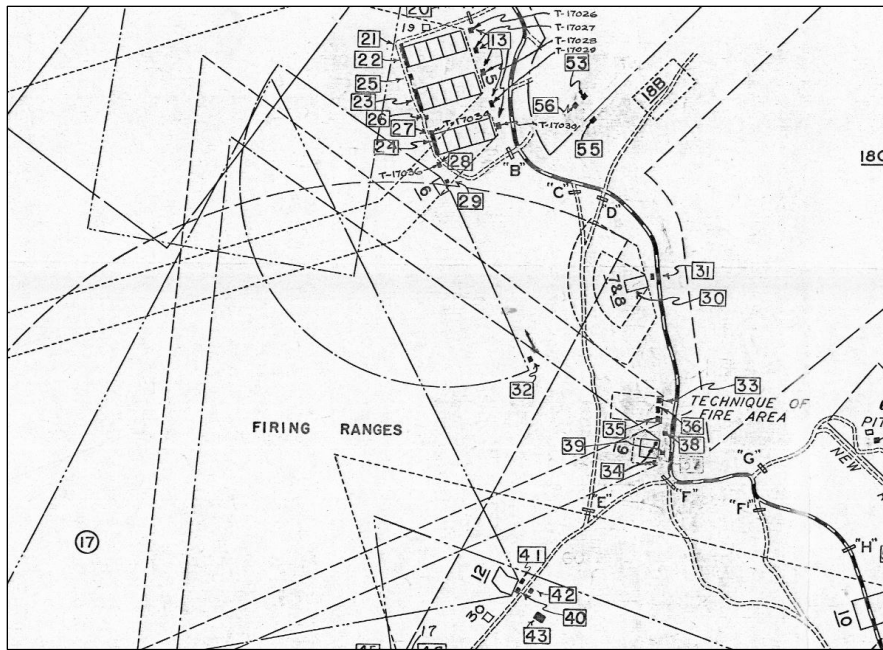
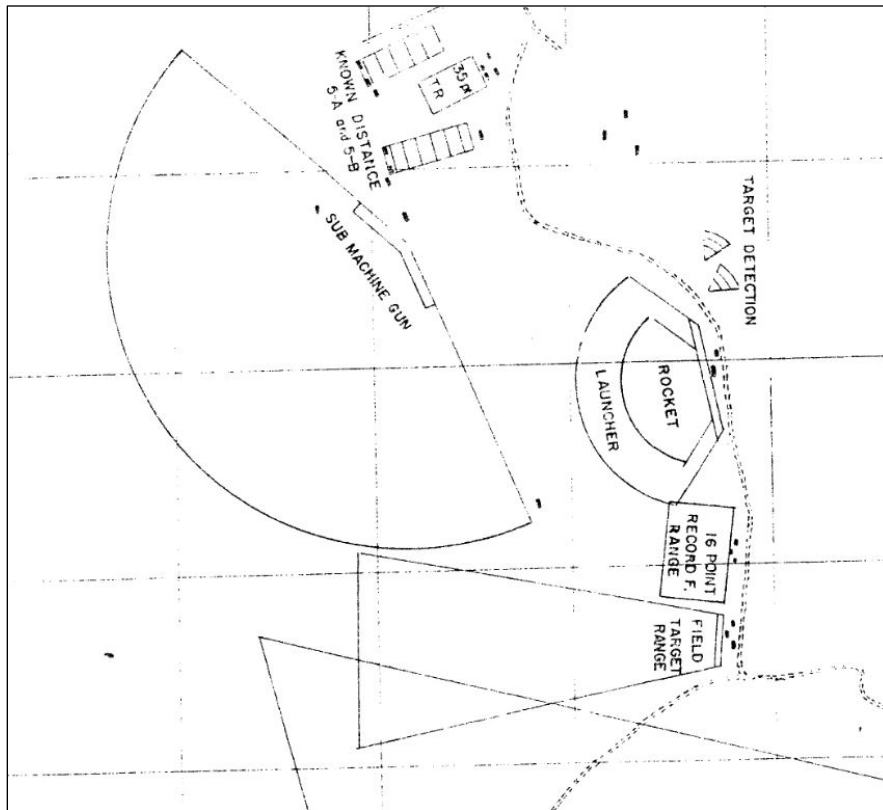


Figure 126. Detail of Training Area T3, 1962 (*General Site Plan, Fort Huachuca DPW. Public Domain.*)



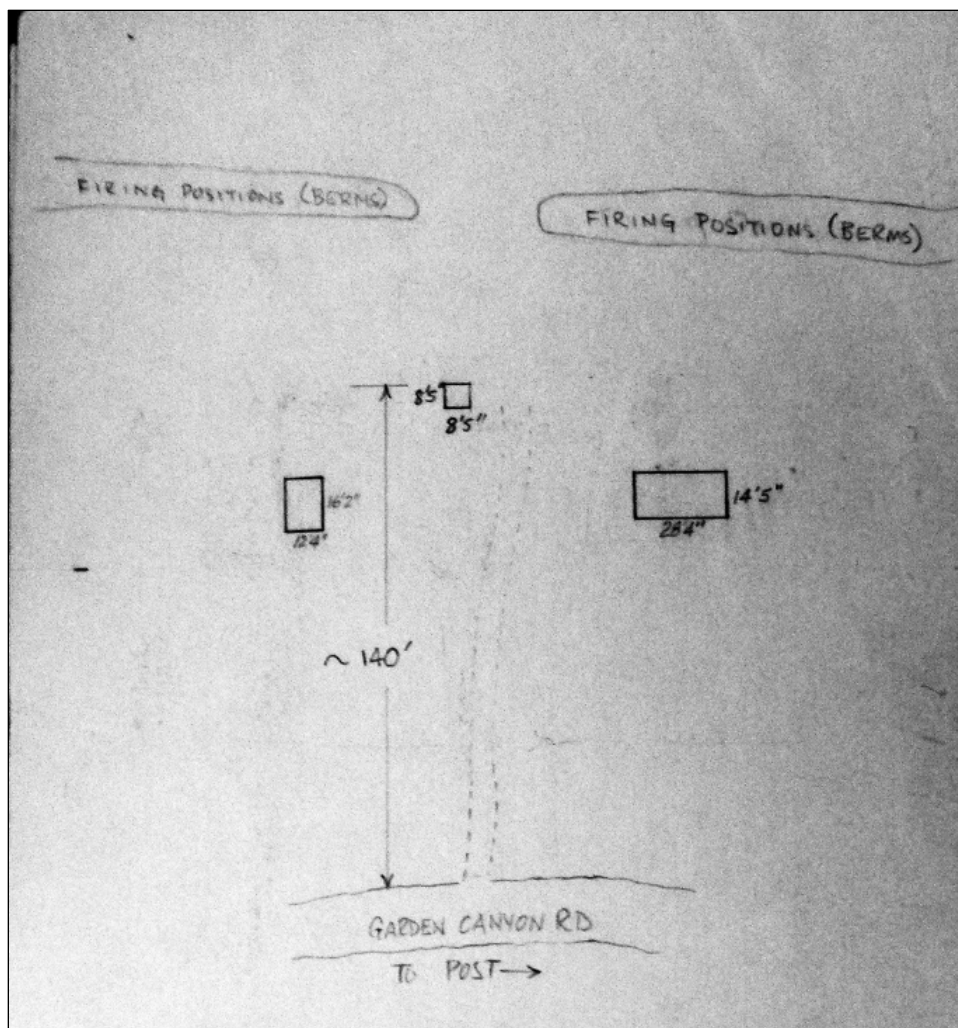
In 1977, this range was labeled as Range 15 and described on the 23 September 1977 real property inventory as a Rifle Record Fire/Small Arms Range, Facility #15370 (Figure 127). There was no known construction date, but the construction of 16 target holding devices for the 16 lanes at the range was completed by 25 October 1977 at a cost of \$41,300. Around this time, the facility became an automatic rifle range. It also appears that by the 1970s, this range had combined the two separate ranges that were in place in the 1950s and 1960s back into one large range complex. As of August 1977, the following facilities were affiliated with Range 15:

- Control tower #S-15371: concrete footing foundation, concrete floor and wood walls, flat roof covered with roll paper on a wood base, 8 ft, 5 in. × 8 ft, 5 in. The tower had electricity and telephone.
- Storage building #S-15372: concrete footing foundation, concrete floor and wood walls, flat roof covered with roll paper on a wood base, 12 ft, 4 in. × 16 ft, 2 in. The building had electricity.
- Storage building #15373: concrete footing foundation, concrete floor and wood walls, flat roof covered with roll paper on a wood base, 28 ft, 4 in. × 14 ft, 5 in. The building had electricity.
- Two linear firing positions (berms) were located on the range.

The category code and facility number changed on 23 January 1979 to PFZSAR 15. In 1983, the range was labeled as Range 15, the Rifle Marksmanship, Record Fire Range.²⁰⁶ By the 1990s, the range had been relabeled to the current Range 13.

²⁰⁶ Real Property Records (Fort Huachuca Real Property Office).

Figure 127. Range 13 (formerly Range 15) property record card (Fort Huachuca Real Property Office. Public Domain).



3.4.7.2 Range 12— 40 mm Grenade Launcher (defunct)

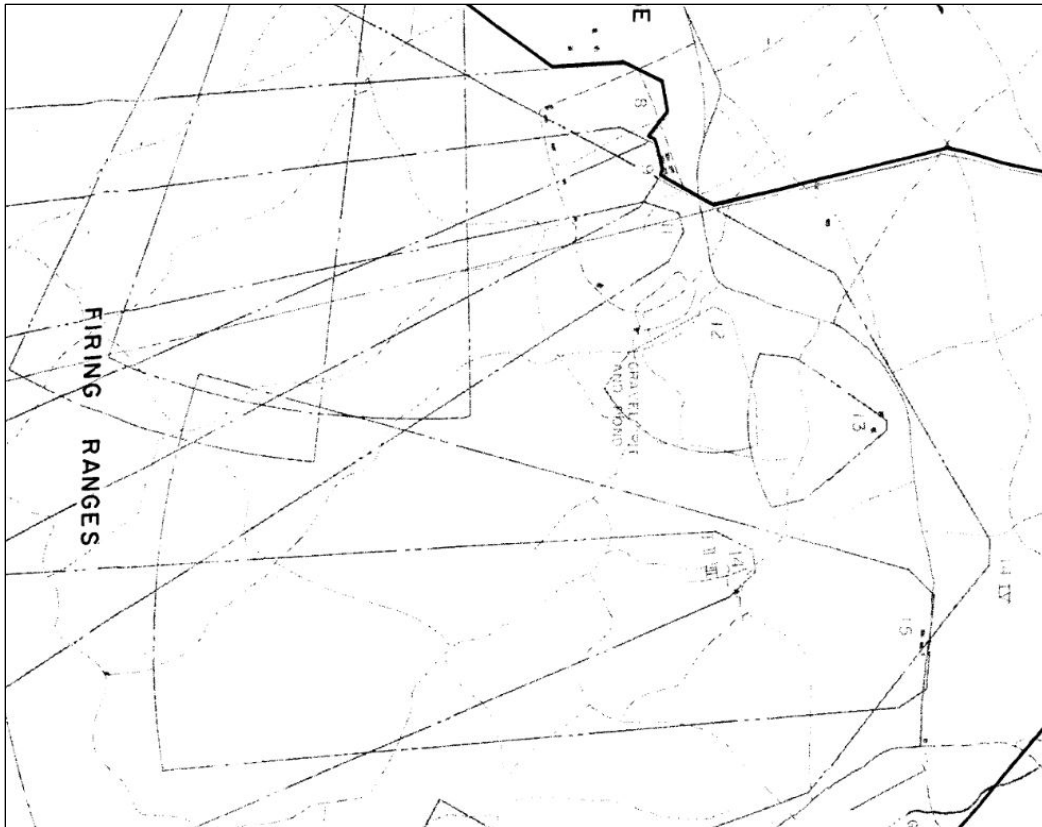
Range 12 (defunct), 40 mm Grenade Launcher Training Range, located directly south of and adjacent to the gravel pit and pond that would become Range 10 (see Section 3.4.6.5; Figure 128). Range 12 is listed in the real property inventory as of 7 October 1977, described as Small Arms Range, Facility #15360 (Figure 129). No construction date was given for the range, so it is unknown when it was built; however, it does not show up on the 1962 installation map. As of 30 September 1977, the range was listed as a 40 mm Grenade Launcher Range, with the following facilities:

- One Observation Tower, Portable: wood skid foundation, wood floor and walls, no roof, 5 ft, 8 in. × 5 ft, 8 in.
- Two sets of steel and wood portable bleachers

- Telephone line

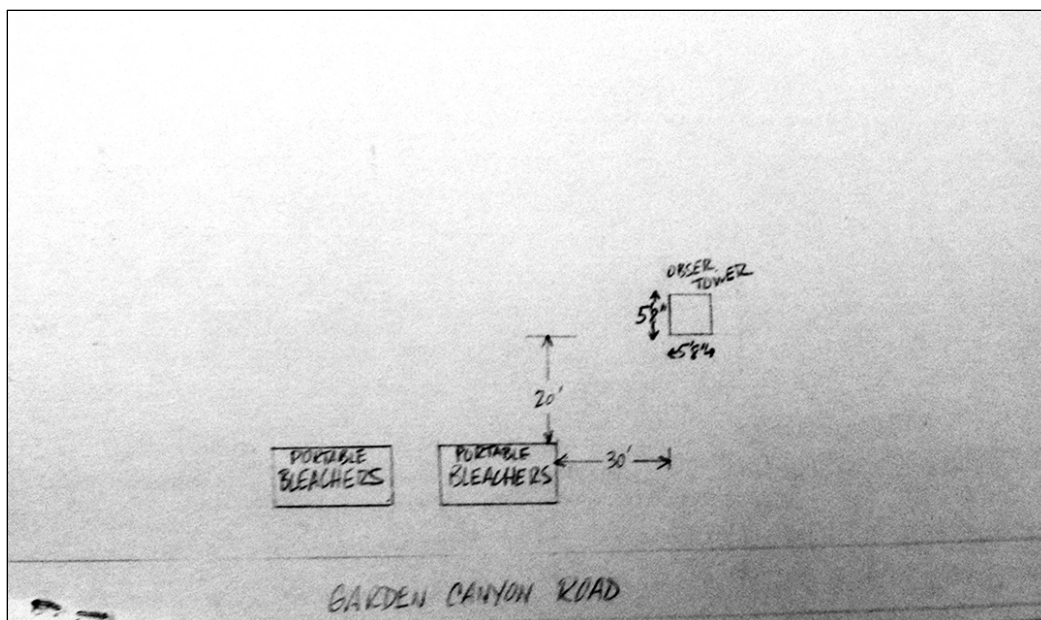
The category code and facility number were changed 23 January 1979 and the facility number changed to PFZSAR 12. In 1983, it was listed as a 40 mm Grenade Launcher, M203 Grenade Launcher Range.²⁰⁷

Figure 128. Detail of range map showing Area T3, 1983 (*Reservation Land Use Map, Fort Huachuca DPW. Public Domain*).



²⁰⁷ Real Property Records (Fort Huachuca Real Property Office).

Figure 129. Sketch of Range 12 from property record card (Fort Huachuca Real Property Office. Public Domain).



3.4.7.3 Grenade/Rocket Launcher/Mini Tank Table Range (defunct)

Located between the Known Distance Range on the north (slightly below the now defunct former Range 12) and the present-day Range 13 on the south, and on the west side of Garden Canyon Road is the former Grenade and Rocket Launcher Range and Mini Tank Table Range (Table 16). The range first appears on the 1952 range map as the Rifle Grenade & 3.5 RL Range (see Figure 124), making it likely that this range was constructed upon the reactivation of Fort Huachuca for the Korean War.²⁰⁸ By 1955, the range was subdivided into two ranges and relabeled: Range 7 was the Rifle Grenade Range with four firing points, and Range 8 was the Rocket Launcher 3.5" also with four firing points (see Figure 125). Facilities associated with the range in 1955 included a concrete bunker and a tower.²⁰⁹ The 1962 installation range map labels the area as the Rocket Launcher Range (see Figure 126). According to the 1977 real property inventory, the range was relabeled as Range 13 and was described as a Small Arms Range, Facility #15362; no construction date was provided. Facilities located on the range at that time included the following:²¹⁰

²⁰⁸ "RL" is an unknown acronym, though it likely means "Rocket Launcher."

²⁰⁹ Post Engineer Office, *Training Areas and Ranges*.

²¹⁰ Real Property Records (Fort Huachuca Real Property Office).

- Canopy #15364: dirt foundation and floor, no walls, flat roll surface roof on wood base, 12 ft × 14 ft, 168 ft², temporary construction, disposed of in 1983
- Tower #15363: concrete pier foundation, wood floor and walls, no roof, 7 ft, 5 in. × 7 ft, 8 in., 64 ft² temp construction, disposed of in 1983
- Tower #15310: moved to Range 13 from Range 14 on 14 October 1982
- One concrete firing shelter wall (#15362)

By January 1978, a Mini Tank Table Range (stationary) was constructed at this location at a cost of \$5,314.²¹¹ The category code and facility number for this range was changed in January 1979, and the facility number changed to PFZSAR 13 (Figure 130).²¹² By 1983, the Grenade Launcher Range had been moved north to then Range 12 (see Section 3.4.7.1), and then Range 13 became the Mini Tank Ranges, Tables I, II, III, IV (see Figure 128).²¹³ The range is no longer in use nor present on installation range maps by the 1990s.

Table 16. Grenade/Rocket Launcher/Mini Tank Table Range naming history.

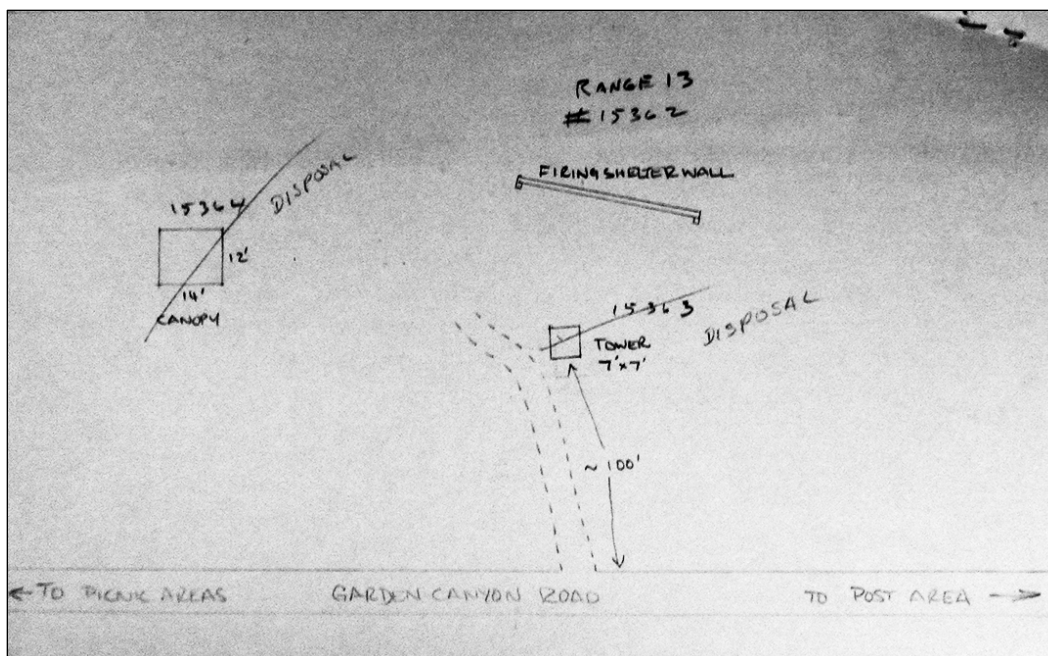
Year	Historic Range Name	Function
1952	--	Rifle Grenade and 3.5 RL Range
1955	Range 7 Range 8	Rifle Grenade Range Rocket Launcher 3.5"
1962	--	Rocket Launcher Range
1977	Range 13	Small Arms Range
1978	--	Mini Tank Table Range (stationary)
1983	Range 13	Mini Tank Ranges, Tables I, II, III, IV
1990s	Defunct	Defunct

²¹¹ Ibid.

²¹² Ibid.

²¹³ Ibid.

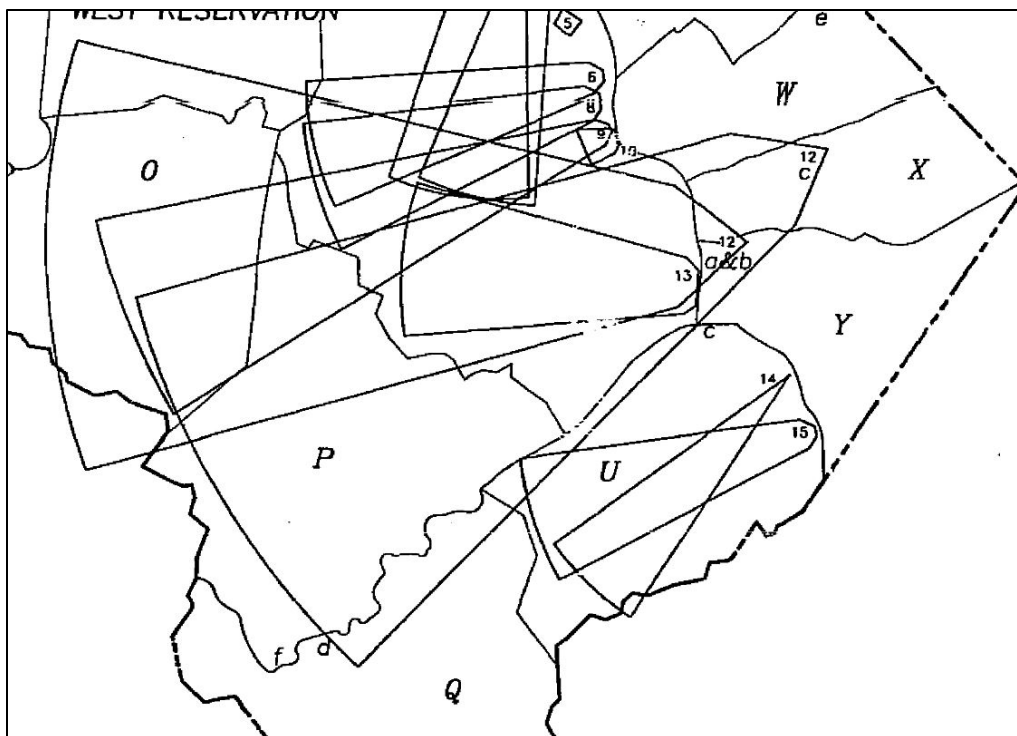
Figure 130. Sketch of Range 13 (1978–1990s) from property record card (Fort Huachuca Real Property Office. Public Domain).



3.4.7.4 Tank Table Ranges

The Tank Table Ranges IV through VIII were extensive and spanned several training areas in the South Range, including training areas W, X, Y, T2, T3, U1, P1, P, Q, S, and O (Figure 131). In 1943, the land that would become the Tank Table Ranges comprised parts of then Range 7—Moving Target Range, .50 caliber gravity type, Range 8—Field Target Range, Machine Gun (including numerous control pits and field target ranges scattered across the range), and Range 9—Mortar Range, 60 and 81 mm (see Figure 123). By 1952, the area encompassed the Transition Range, Close Combat Course and the Combat in Cities Course (see Figure 124). In 1955, the future Tank Table Range contained what was then-designated Range 9. The future Tank Table Range also included M-1 Tank Table IX and Carbine Tank Tables IV and V (see Figure 125, Table 17). Other 1955 training ranges that would become part of the Tank Tables included Ranges 7 and 8, the Technique of Fire Area, the Close Combat Range, the Mock Village, and some of the Field Training Areas. The 1962 training ranges that would become part of the Tank Tables included the Rocket Launcher, 16 Point Record F. range, Field Target Range, and part of the Transition Range. There were also Target Detection features located east of Garden Canyon Road across from the Rocket Launcher Range (see Figure 126).

Figure 131. Detail of Tank Table Ranges (Range 12), 1991 (*Existing Conditions Maps Range & Training Area Map, Fort Huachuca DPW. Public Domain.*)



In 1977, real property records indicate the presence of a Range 13—Projectile Range, Facility #15378, in the area (although, this is different from Range 13, Small Arms Range, Facility #15362, described in Section 3.4.7.3). By 1978, the facility was relabeled Range 14 and designated as a Tank Crew Combat Firing Range/Tank Tables. The existing berm was raised 2 ft that year (435 ft long) at a cost of \$12,401 (Figure 132). Facilities located on this range as of 1978 included the following: ²¹⁴

- Observation tower #15379: concrete pier foundation, wood walls and floor, flat roof covered with roll paper on a wood base, 7 ft, 2 in. × 7 ft, 4 in., 52 ft², telephone line
- Observation tower #15310: wood skid foundation, wood floor and walls, no roof, 8 ft × 8 ft, 64 ft², telephone line and electricity. Moved to Range 13 on 14 October 1982.
- Generator shed #15309: concrete footing foundation, concrete floor, wood and sandbags wall, a flat roof covered with sandbags on a wood base, approximately 10 ft × 16 ft, 160 ft²
- The following were added at an unknown date:
 - Track #15309y

²¹⁴ Ibid.

- Observation tower #16304 (old tower from Libby Air Field)
- Portable latrine

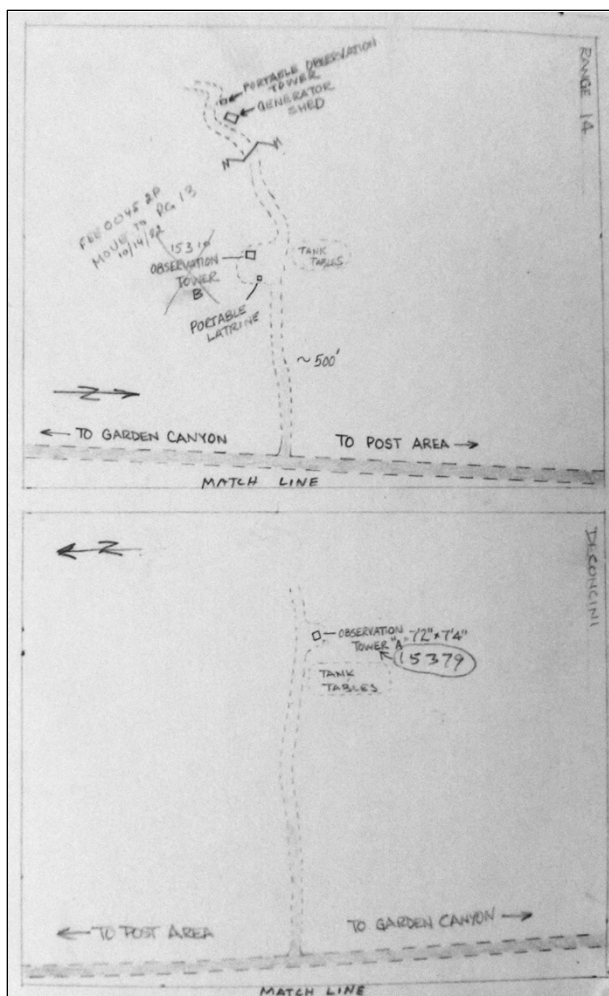
In January 1979, the category code and facility number changed to PFZSAR 14. Property cards for then Range 14 indicate undated improvements that may or may not have been completed. These included electrical distribution upgrades, a new observation tower, a debris pad, a kitchen pad, an ABS tower, a loading dock, and a transformer at a total cost of \$190,745.²¹⁵ In 1983, the Tank Tables were still labeled as Range 14 but were split into three different coverage areas; Range 14 Tables I, II, III—the Mini Tank Tables—were technically located within the impact area of Range 15 on the west side of Garden Canyon Road; Range 14 Table IV began on the west side of Garden Canyon Road and encompassed a vast area of rangeland; Range 14 Tables V, VI, VII, and VIII began on the border between Training Areas W and X east of Garden Canyon Road and had a vast training range that extended beyond the boundaries of Fort Huachuca (see Figure 128). By 1991, the Tank Tables Training Range was relabeled as Range 12 and was reduced to two different coverage areas (the Mini Tank Tables appear to have been rolled into the Tank Table IV area), and the extent of both ranges appears to have been reduced (see Figure 131). Then Range 12 also included a rappel tower, a “mock-up,” and the Leadership Reaction Course, still in use today, which includes a lightning shelter, Facility #15214, and shed, Facility #15215. The Tank Table Ranges are not currently listed on the installation range map; it is unclear when these ranges became defunct.

Table 17. Tank Table Range naming history.

Year	Historic Range Name	Function
1955	--	Tank Tables
1962	--	Tank Tables
1977	Range 13	Projectile Range
1978	Range 14	Tank Crew Combat Firing Range/Tank Tables
1983	Range 14	Tank Ranges, Tables I, II, III, IV
1991	Range 12	Tank Tables

²¹⁵ Ibid. The meaning of ABS is unknown.

Figure 132. Tank Table Range (known as Range 14 in 1978) property record card (Fort Huachuca Real Property Office. Public Domain).



3.4.8 Training Area U and U1

Training Areas U and U1 are located south of Training Area T3 and west of Training Area Y; Garden Canyon Road is the northern boundary, Antelope Way is the eastern boundary, the installation boundary is the southern edge, and the Huachuca Mountains are to the west (see Figure 96). In 2014, Area U Land Navigation, and Site Uniform (TIC/Village) are located in Area U1, while Land Navigation Area Tinker (Tinker Land Nav) is located in Area U. Site Uniform was renamed to FOB Corpuz in honor of a fallen soldier, and its mock village has been renamed Casey Training Site. Historically, several now defunct training ranges and facilities existed in the area, as described below. The Garden Canyon Landing Strip was also located in Training Area U1, just south of the junction of Garden Canyon

Road and Antelope Way; the landing strip was closed according to the 1983 installation range map (Figure 137).

Figure 133. Detail of Training Areas X, Y, U, and U1, 1943 (*Topographic Map and Reservation Boundary, Fort Huachuca DPW. Public Domain.*)

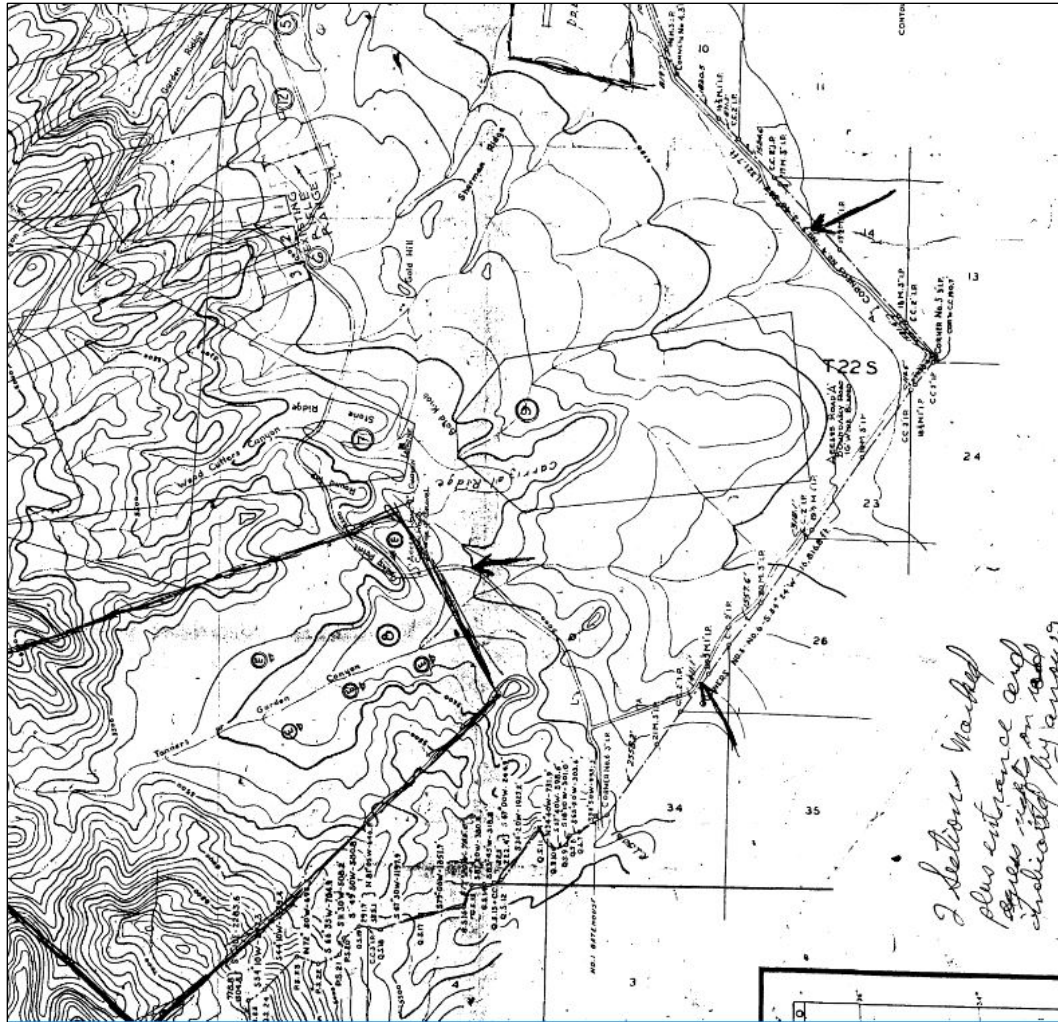


Figure 134. Detail of Training Areas X, Y, U, and U1, 1952 (*Layout of Military Reservation, Fort Huachuca Museum Collection. Public Domain*).

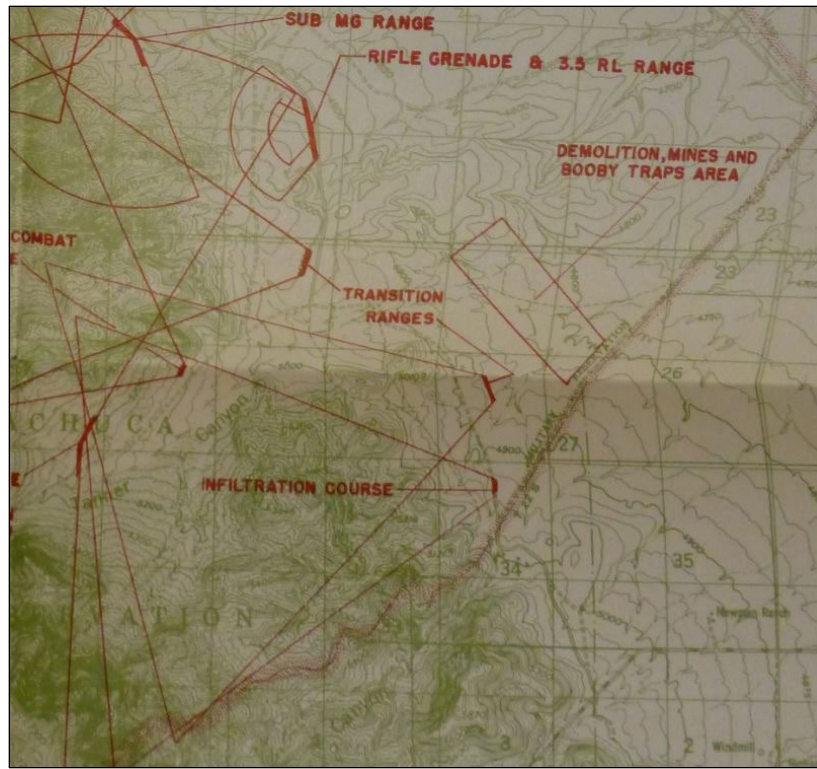


Figure 135. Detail of Training Areas X, Y, U, and U1, 1955 (*Training Areas and Ranges, Fort Huachuca Museum Collection. Public Domain*).

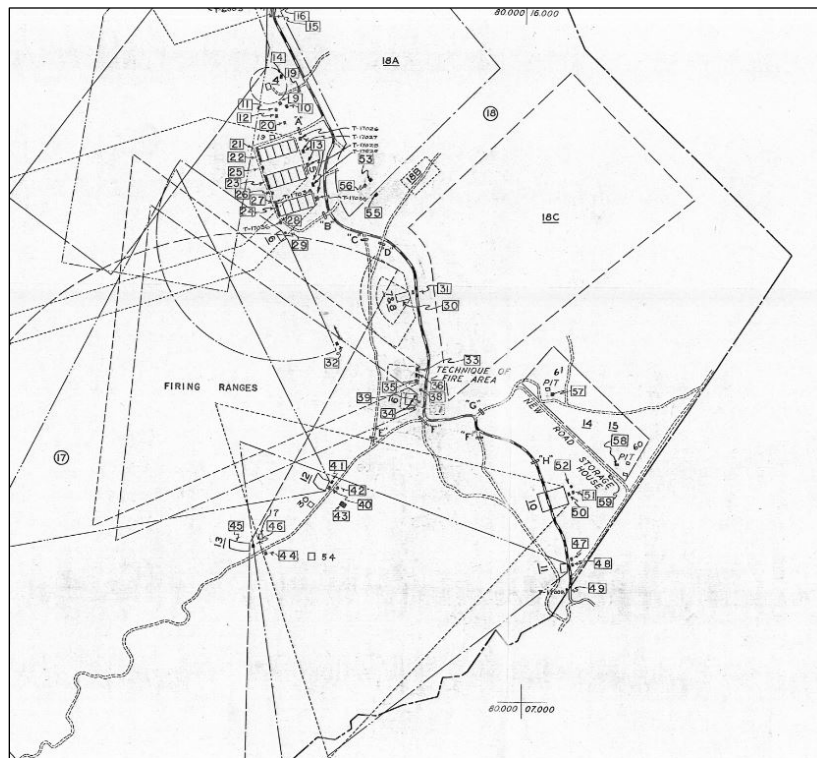


Figure 136. Detail of Training Areas X, Y, U, and U1, 1962 (*General Site Plan, Fort Huachuca DPW. Public Domain*).

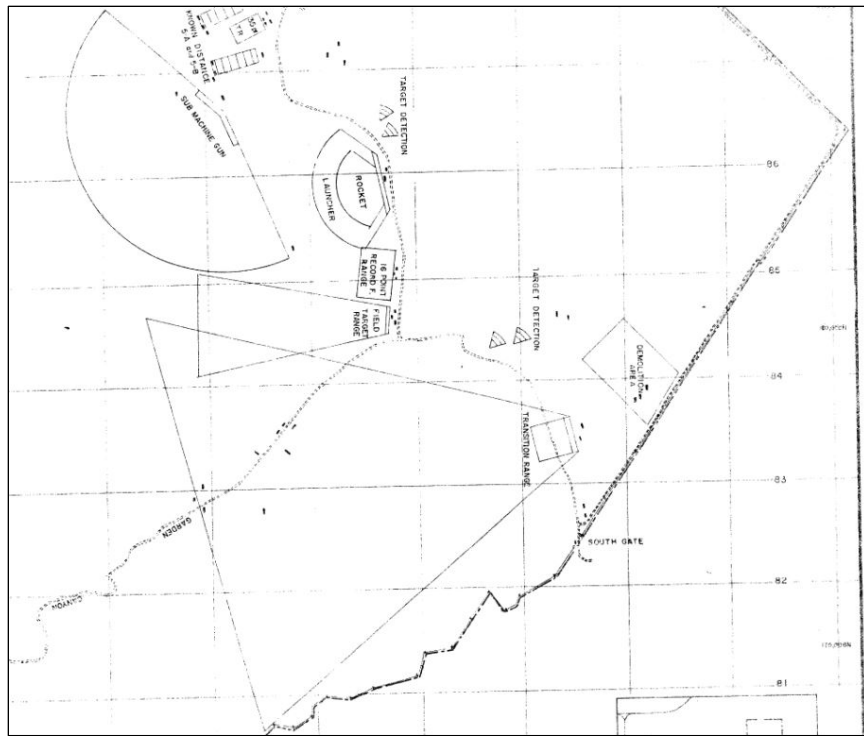
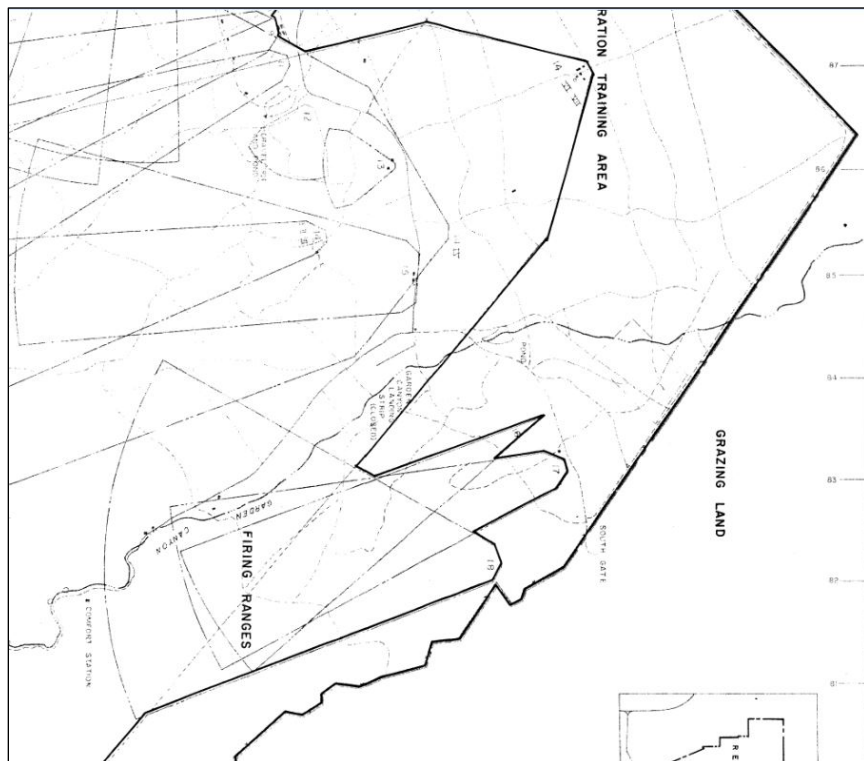


Figure 137. Detail of Training Areas X, Y, U, and U1, 1983 (*Reservation Land Use Map, Fort Huachuca DPW. Public Domain*).



3.4.8.1 *Field Target Range, Machine Gun*

The Field Target Range, Machine Gun was labeled as Range 8 in 1943 with several control pits scattered throughout the area (see Figure 133). This range took up most of Training Area U1 but overlapped into Training Area U. This training range does not appear on later maps, although the other training ranges in these Training Areas do use the same land. The 1943 Field Target Range however was oriented in a south to southwest direction, while the other ranges were oriented either to the northwest or in a more westerly direction.

3.4.8.2 *Transition Range/Rifle Squad Attack Course/Close Combat Course*

The 1952 installation range map shows a Transition Range located slightly south of where the 1943 Field Target Range was located in Training Area U, although its range extended across Areas U and U1 (see Figure 134). By 1955, the range had been relabeled as Range 10, Transition Range M-1 & Carbine, and its firing range overlapped with the adjacent Range 11, Infiltration Course (see Section 3.4.8.3; Table 18). Range 10 also crossed over Antelope Way Road into Training Area Y. Range 10 had a 40-foot tower, a latrine and a 9 ft × 12 ft target shed affiliated with it (see Figure 135).²¹⁶ In 1962, the Transition Range is still located in the same place (see Figure 136).

By the 1970s, the Transition Range was subdivided into two adjacent and overlapping ranges: the Rifle Squad Attack Course/Small Arms Range (Range 16) and the Close Combat Training Course (Range 17) (see Figure 137). Range 16, according to the 1977 real property inventory, was designated as Facility #15280 and had two sets of portable bleachers made of steel and wood construction, and an 8 ft × 8 ft, 64 ft² portable observation tower (no facility number found) made of wood skid foundation, wood walls and floor, a flat wood roof covered with roll paper, and no utilities.²¹⁷ In January 1979, the category code and facility number changed to PFZSAR 16. After a few years, the facility became an Infantry Squad Battle Course. In 1983, Range 16 was listed as a Rifle Squad Attack Course/Squad Assault Course (see Figure 137). In 1989, Fort Huachuca demolished the

²¹⁶ Post Engineer Office, *Training Areas and Ranges*.

²¹⁷ Real Property Records (Fort Huachuca Real Property Office).

observation tower located on the range and deactivated Range 16 on 7 August 1991.²¹⁸ Before its deactivation, the range was relabeled as Range 14.

Range 17 was described in September 1977 as a Close Combat Training Course, Facility #16225. The range was created in 1973 at a cost of \$52,864. In 1977, the real property inventory recorded the following facilities on the range:²¹⁹

- 55 target pits and control lines
- Control/observation tower #16224: concrete pier foundation, wood floor and walls, flat roof with wood base and roll paper surface, 7 ft, 8 in. × 6 ft, 8 in., electricity and telephone line
- Storage building #16223 (added by 1977): concrete footing foundation, concrete floor and wood walls, flat roof with wood base and roll paper surface, 31 ft, 10 in. × 12 ft, 4 in., electricity

By 1979, the training range was listed as a field firing range, and its category code and facility number were changed to PFZSAR 17. In 1983, Range 17 was listed as a Close Combat Course. Fort Huachuca deactivated the range prior to 1989.²²⁰ Although deactivated in 1989, the range is still listed on the 1991 installation range map as Range 15 (see Figure 131).

Table 18. Transition Range/Rifle Squad Attack Course/Close Combat Course naming history.

Year	Historic Range Name	Function
1952	–	Transition Range
1955	Range 10	Transition Range M-1 & Carbine
1962	–	Transition Range
1977	Range 16 Range 17	Rifle Squad Attack Course/Small Arms Range Close Combat Training Course
1983	Range 16 Range 17	Rifle Squad Attack Course/Squad Assault Course Close Combat Course
1989	Range 14 Range 15	Rifle Squad Attack Course/Squad Assault Course Deactivated Close Combat Course
1991	Range 14 Range 15	Deactivated Deactivated

²¹⁸ Ibid.

²¹⁹ Ibid.

²²⁰ Ibid.

3.4.8.3 Infiltration Course

The Infiltration Course, shown on the 1952 installation range map, is located along the southern border of the installation, near where the South Gate is located (see Figure 134). By 1955, the Infiltration Course was labeled as Range 11 (Table 19). It had its starting point in Area U, but the range area (which overlapped with Range 10) extended across Areas U and U1 (see Figure 135). Range 11 had a 12-foot tower, a latrine, and a gate house affiliated with it.²²¹ Also, according to the 1955 map, there was a concrete bunker located in the northwest section of Training Area U1, but it is unclear which training range the bunker is affiliated with (see Figure 135). By 1962, Range 11, the Infiltration Course, was no longer present (see Figure 136).

Table 19. Infiltration Course naming history.

Year	Historic Range Name	Function
1952	--	Infiltration Course
1955	Range 11	Infiltration Course
1962	--	--

3.4.8.4 Rifle Platoon Attack Course

The Rifle Platoon Attack Course, labeled Range 18 by 1974, was constructed sometime after 1962 (the construction date is unknown). In 1974, Range 18 was described as a Small Arms Range, Facility #16210 (Table 20). Facilities located on the range included an observation tower (#16211); no information was available about the tower.²²² In 1979, six pairs of concrete target boots were installed, and the range was listed as a Tank Crew Combat Fire Range. The category code and facility number were also changed in January 1979 to PFZSAR 18. In 1983, it was still labeled as Range 18 but was described as a Tank Range/Rifle Platoon Attack Course (see Figure 137). Fort Huachuca deactivated this range prior to 1991.²²³

Table 20. Rifle Platoon Attack Course naming history.

Year	Historic Range Name	Function
1960s	--	Rifle Platoon Attack Course
1974	Range 18	Small Arms Range

²²¹ Post Engineer Office, *Training Areas and Ranges*.

²²² Real Property Records (Fort Huachuca Real Property Office).

²²³ Ibid.

Year	Historic Range Name	Function
1979	--	Tank Crew Combat Fire Range
1983	Range 18	Tank Range/Rifle Platoon Attack Course
1991	Range 18	Deactivated

3.4.9 Training Areas V and V1

Training Areas V and V1 are located just south of the cantonment and to the east of Garden Canyon Road and Training Areas T and T2; its eastern border is the installation boundary (see Figure 96). In 2014, the Air Deployment Training Facility, Rope Bridge Construction Training Facility, Integrated Training Area Management (ITAM) Office/Range Operations Building, and Urban Operations Site (UOS) (South) were all located in the northwest corner of Training Area V. According to the 1952 and 1955 installation range maps, the Bridge Site (1952) and Fixed Bridge Site (Area 18B in 1955) were located further south in Training Area V1 across from the Known Distance Range along Garden Canyon Road (Figure 138 and Figure 139). In addition to the Bridge Site and Fixed Bridge Site, installation personnel report there are a number of other sites in Training Areas V and V1 that may be associated with tank training and bridge building, including trenches with Marsten mats. No Bridge training facilities are noted on the 1962 and 1983 maps. Also, in 1955, most of Training Area V was labeled as Field Training Area 18A. The Skeet and Trap Range is also located in Training Area V.

Figure 138. Detail of Training Area V and W, 1952 (*Layout of Military Reservation, Fort Huachuca Museum Collection. Public Domain*).

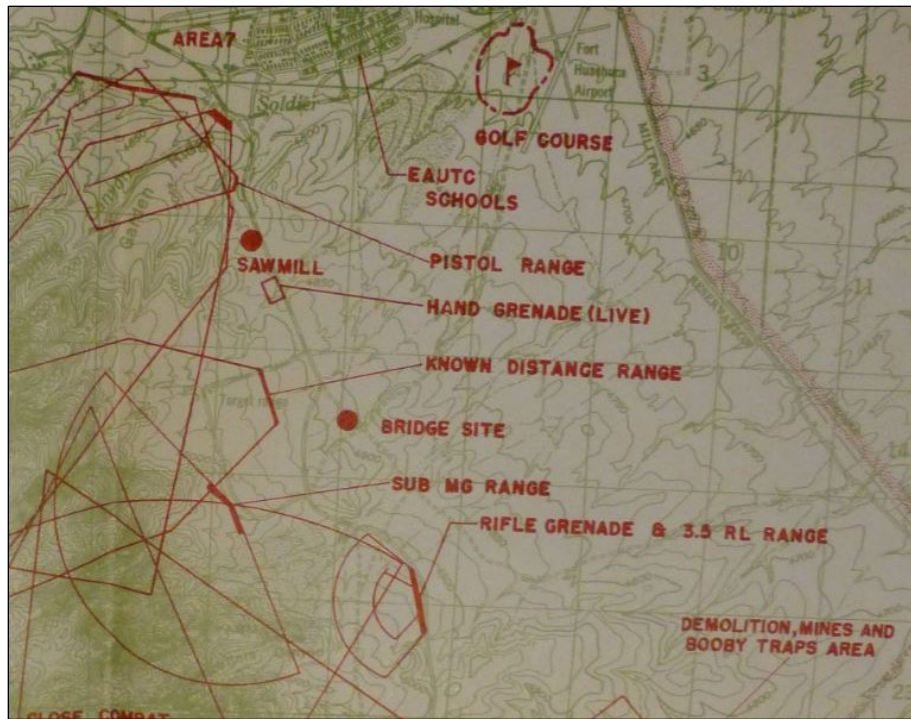
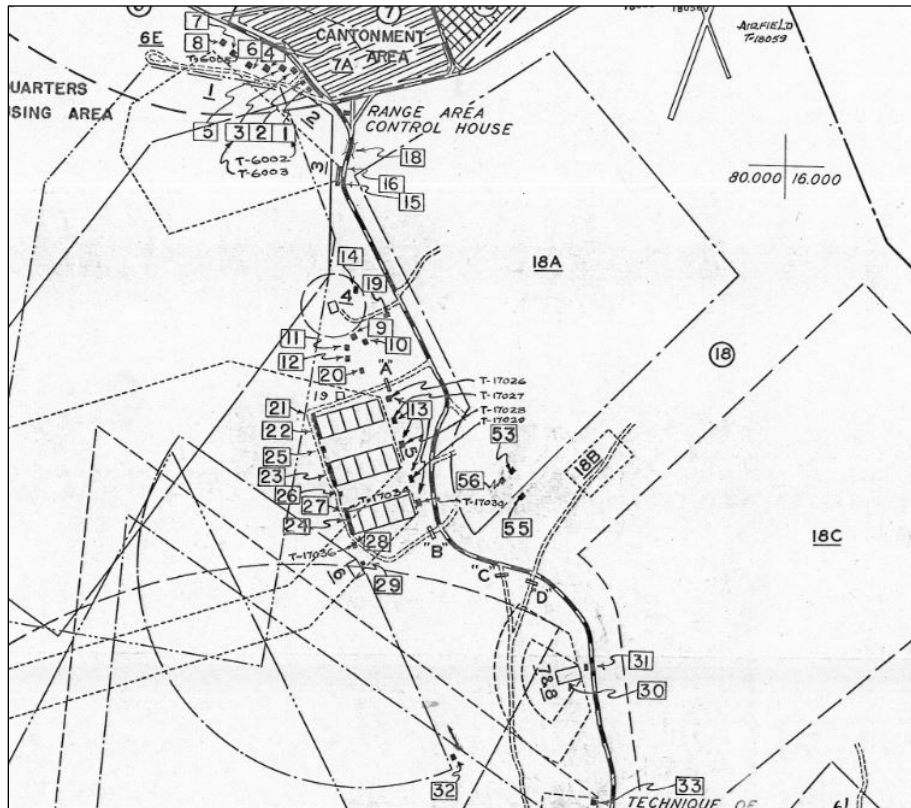


Figure 139. Detail of Training Area V and W, 1955 (*Training Areas and Ranges, Fort Huachuca DPW. Public Domain*).



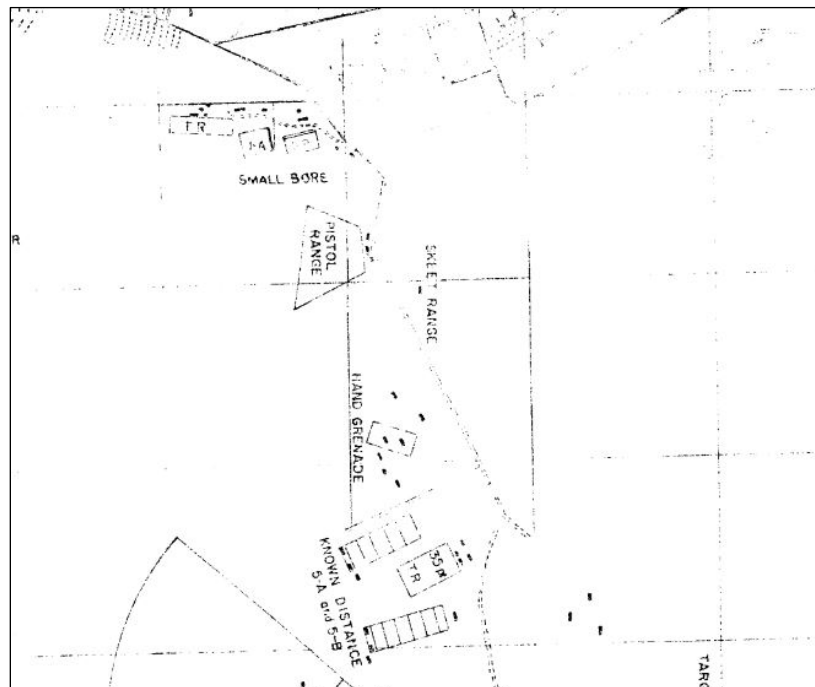
3.4.9.1 Skeet and Trap Range

The Skeet and Trap Range first appears on the 1962 installation range map (Figure 140; Table 21). It is located on the east side of Garden Canyon Road. In 1983, it was relabeled as Range 7 and described as the Skeet and Trap Range (Figure 141).²²⁴ Today, it is still called the Skeet and Trap Range but is part of the Fort Huachuca Sportsman’s Center, a recreational facility offering archery, skeet and trap, paintball and other pastimes. There are several facilities associated with this range, including the skeet tower, constructed in 1957 (Facility #15410) and a shed, constructed in 1957 (Facility #15414).²²⁵

Table 21. Skeet and Trap Range naming history.

Year	Historic Range Name	Function
1962	--	Skeet and Trap Range
1983	Range 7	Skeet and Trap Range
2014	--	Skeet and Trap Range/Fort Huachuca Sportsman’s Center

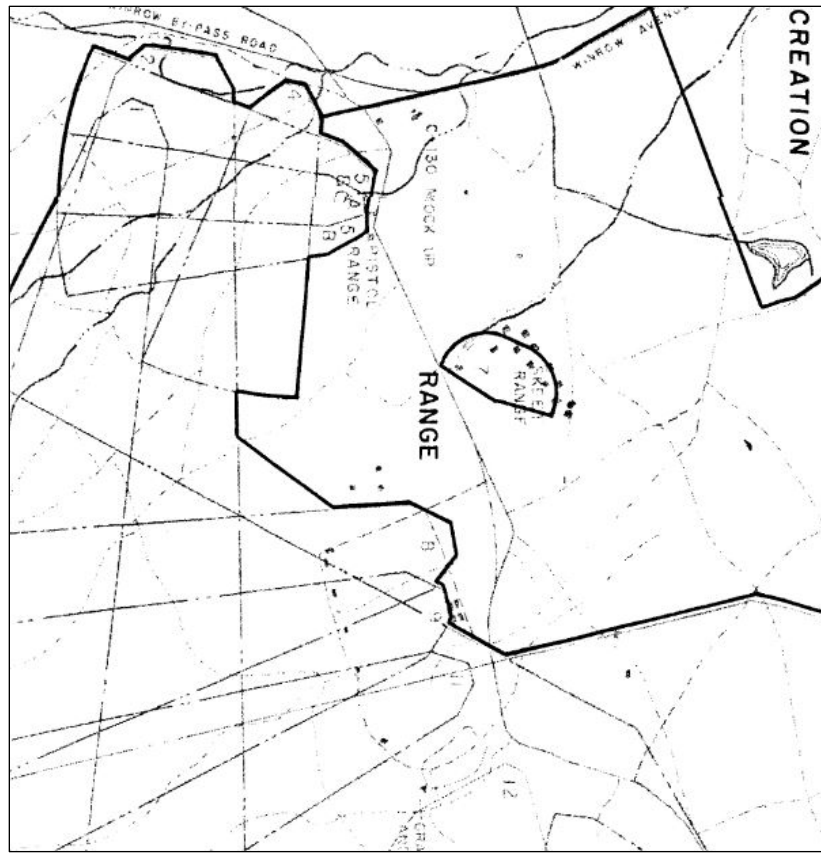
Figure 140. Detail of Skeet and Trap Range, 1962 (*General Site Plan, Fort Huachuca DPW, Public Domain*).



²²⁴ Ibid.

²²⁵ Angel Tomes, *Architectural Survey, Documentation, and Evaluation of 110 Buildings and Structures at Fort Huachuca, Arizona*, Fort Huachuca Cultural Resources Report FH-12-6, (Tucson, AZ: Statistical Research, 2013).

Figure 141. Detail of Skeet and Trap Range, 1983 (*Reservation Land Use Map, Fort Huachuca DPW. Public Domain*).



3.4.9.2 Urban Operations Site (South)

In 2014, the UOS (South) and two helipads were located in Training Area V1 (Figure 142). On the 1962 and 1983 installation range maps, there are buildings indicated in the same area as the 2014 UOS, but they are not labeled, and no training facility is indicated as being present at the site (see Figure 140 and Figure 141). There are no training facilities indicated in this area on prior maps.

Figure 142. Detail of UOS in Training Area V1, 2018 (Map data: Google, 2018).



3.4.10 Training Area W and W1

In 2014, Bivouac Area E, Area W All-Terrain Vehicle (ATV) Training, and Site Boston were located in Training Area W (see Figure 96). Training Area W1 has an area marked as a restricted access area, labeled “Asbestos,” and is the Asbestos Landfill (see Figure 96). Other than part of Training Area 18C in 1955, and part of Range 14 (1983)/12 (1991) overlapping into the area, no other training ranges or facilities are historically located in this area. There are several fighting positions located on these ranges, including depressions and rock features that may be associated with these former training activities.

3.4.11 Training Areas X and Y

Training Areas X and Y are located in the far southeast corner of Fort Huachuca; their western borders end at Garden Canyon Road and Antelope Way (see Figure 96). In 2014, only the Battle Lab Test Facility (a Military Operations on Urban Terrain [MOUT] facility) and the Leadership Reaction Course (LRC) are located in Area Y. Historically, the former Mortar Range, 60 and 81 mm (Range 9 in 1943) straddled both Areas X and Y,

and the Demolition, Mines, and Booby Traps Range was located in Area Y (see Figure 133). Also, part of the Transition Range (Range 10 in 1952 and 1955) is in Area Y (but most of it is in Area U) (see Figure 134); part of Field Training Area 18c (1955) is in Area X and Y (see Figure 135); two target detection features are located in Area Y in 1962 (see Figure 136); and the top part of the Tank Tables IV, V, VI, VII, VIII (Range 14 in 1983 and Range 12 in 1991) are located in Training Areas X and Y (see Figure 137 and Figure 131).

3.4.11.1 Mortar Range, 60 & 81mm

In 1943, then Range 9, the Mortar Range, 60 & 81 mm, straddled Training Areas X and Y (see Figure 133; Table 22). In 1955, Field Training Area 18c overlapped part of the area that had in 1943 been Range 9 (see Figure 135). Beginning in the 1970s, the Tank Training Tables also overlapped the area that used to be both Range 9 and Field Training Area 18c (see Figure 137). According to the 1977 real property inventory, Range 19 and Range 20 were located in this area, and both were described as Projectile Ranges, Facilities #18940 (Range 19) and #18920 (Range 20). No construction date was provided, nor facilities listed, on the property cards for either range. However, the historic record suggests that these ranges were built in 1973 to support the MI Officers Basic Course conducted by the U.S. Army Intelligence Center and School.²²⁶ In 1979, Range 19 was designated as a 181 mm Mortar Range and its category code and facility number were changed to PFZPRR 19. Range 20 was also redesignated in 1979 as a 4.2 mm Mortar Range with a new category code and facility number, PFZPRR 20. In 1983, both ranges were listed as Mortar Ranges. In 1983, another range, Range 21, was listed in this area as a 105 mm Howitzer Range; according to the historic record, Range 21 was also built in 1973 to support the MI Officers Basic Course. Range 19 was deactivated prior to 1989, and Range 20 was deactivated prior to 1991 (no information is provided for Range 21).²²⁷

Table 22. Mortar Range naming history.

Year	Historic Range Name	Function
1943	Range 9	Mortar Range, 60 & 81 mm
1955	--	Field Training Area 18c

²²⁶ "1973 Annual History: 'Plans, Training, Security.'"

²²⁷ Real Property Records (Fort Huachuca Real Property Office).

Year	Historic Range Name	Function
1977	Range 19 Range 20	Projectile Range
1979	Range 19 Range 20	181 mm Mortar Range 4.2 mm Mortar Range
1983	Range 19 and 20 Range 21	Mortar Range 105 mm Howitzer Range
1989	Range 19	Deactivated
1991	Range 20	Deactivated

3.4.11.2 Demolition, Mines and Booby Traps Ranges

In 1952, the Demolition, Mines and Booby Traps Area is located in Area Y (see Figure 134; Table 23). By 1955, the area had been subdivided into two ranges: Range 14 was the Demolition Area, and Range 15, the Mines & Booby Traps, both of which were capable of concurrently training two companies (see Figure 135). Range 14 had a latrine and concrete bunker (Facility #16249) affiliated with it, and Range 15 had a latrine, storage house, and concrete bunker (Facility #16241) affiliated with it.²²⁸ In 1962, the two ranges were once again combined and labeled as the Demolition Area (see Figure 136). In 1983, there is an unlabeled dashed-line box in the area of the prior Demolition Area (see Figure 137). No ranges are listed in the area by 1991 (see Figure 131).

Table 23. Demolition, Mines and Booby Traps Range naming history.

Year	Historic Range Name	Function
1952	--	Demolition, Mines and Booby Traps Area
1955	Range 14 Range 15	Demolition Area Mines & Booby Traps
1962	--	Demolition Area
1983	--	--

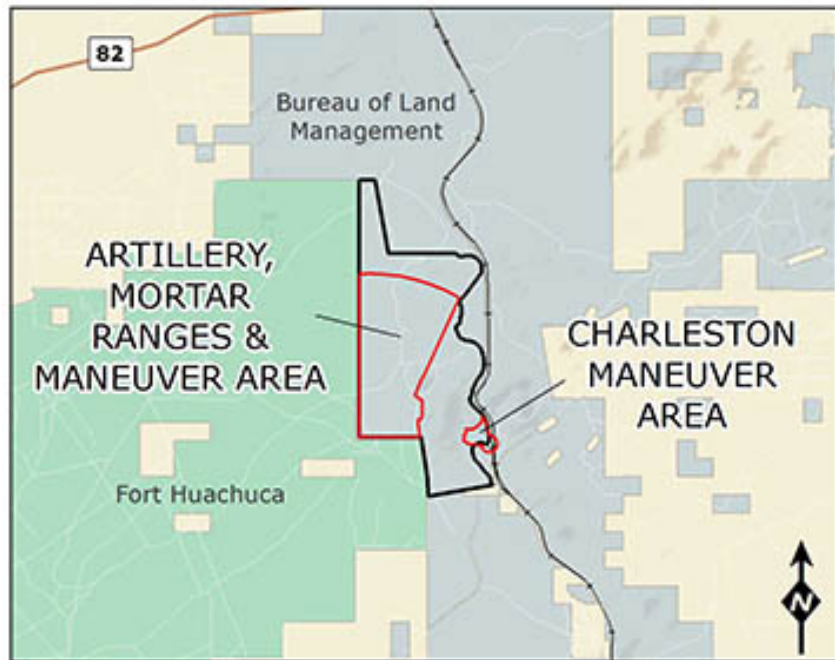
3.5 Charleston Maneuver Area and off-post training areas

The Charleston Maneuver Area is located off-post to the east of Fort Huachuca on the west bank of the San Pedro River (see Section 2.4.2). It is discussed here because the Army conducted training there during WWII. The town was mostly abandoned by 1888, and during WWII, the government appropriated the town for field training in urban assault, street fighting, and close combat. The government also leased land on the far eastern border of Fort Huachuca between the fort and Charleston. This

²²⁸ Post Engineer Office, *Training Areas and Ranges*.

land was used as an artillery, mortar range, and maneuver area (Figure 143). Charleston was abandoned again at the end of WWII. The lease on the far eastern portion of Fort Huachuca along the San Pedro River was terminated in June 1947.²²⁹ In 1951, 3,220 acres of the acquired land was returned to the State of Arizona, including the Charleston Town Site.²³⁰

Figure 143. Map showing location of Charleston Maneuver Area marked in black with Charleston town site in the *lower right area*, undated (Jackson Research Associates, Public Domain).



²²⁹ Real Estate Map.

²³⁰ Information from map and material located in the Phoenix Corps of Engineers office.

4 Historic Range Features

Various historic training range features—structures, fragments, and items left over from previous activities—are located across the ranges of Fort Huachuca. The purpose of this report is to assist Fort Huachuca personnel in identifying the likely history and provenance of these historic range features. In this chapter, the features are identified within their appropriate training range and training area, and based on geospatial location, are associated within a historic training range context. Not every training area contains historic range features. Figure 144 and Table 24 provide a map and index of the location of 41 known sites and facilities, representing a select group of the varied types of resources, and lists the Feature ID numbers which are referenced throughout this chapter. The 41 resources include 28 on the South Range, 6 on the West Range, 4 in the cantonment, 2 off-post, and 1 on the East Range.

Figure 144. Historic range features, Fort Huachuca. An index to range features is provided in Table 24 (Narup 2020. Public Domain).

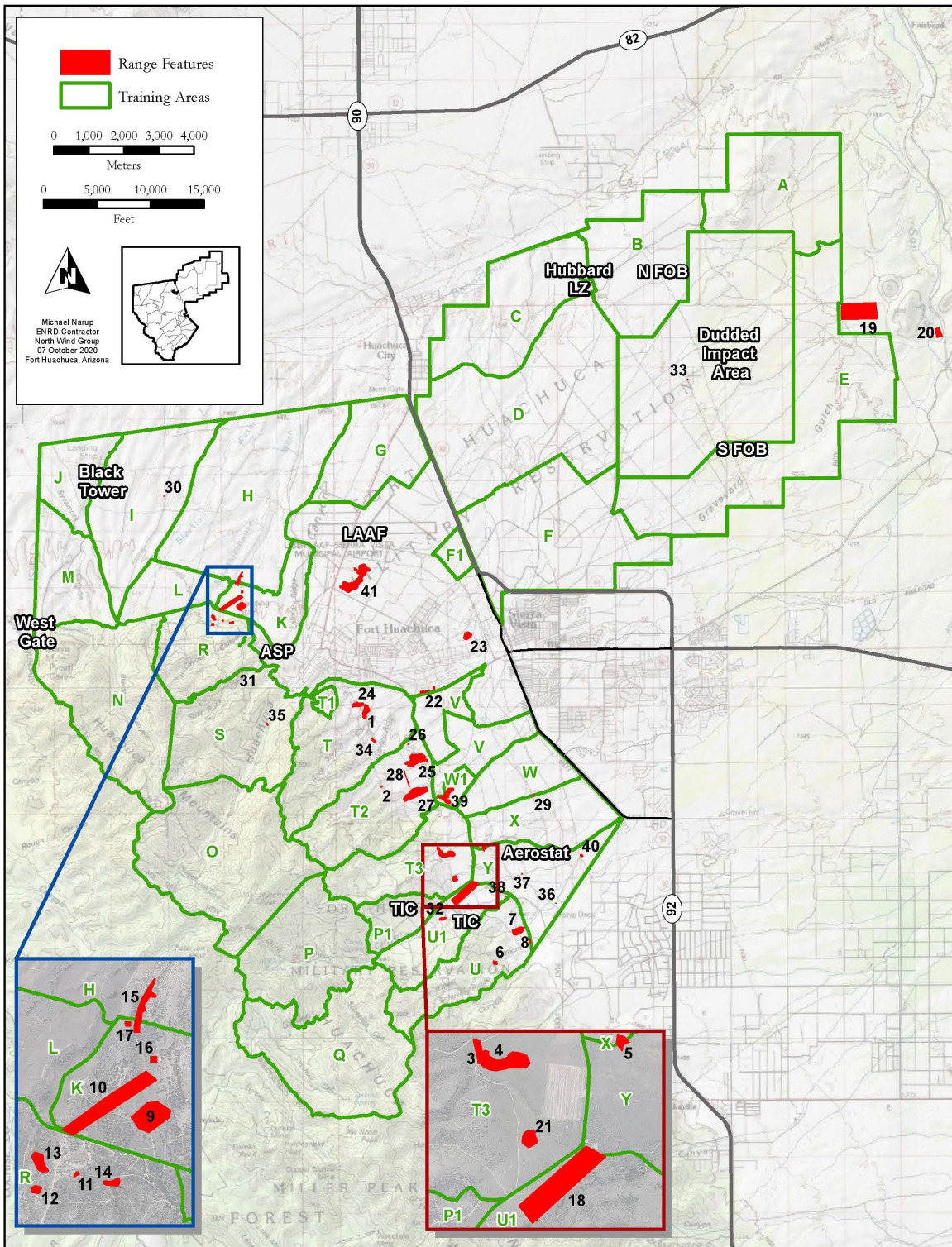


Table 24. Index to range features shown on historic range feature map (see Figure 144).

ID	Feature Description	Location	Range Area	Designation
1	Range 1 bunkers	South Range	T	
2	Pig-tail posts and WWII barbed wire	South Range	T2	AZ EE:7:380 (ASM)
3	Range 12 - 15309	South Range	T3	Facility #15309
4	Tank bunkers	South Range	T3	
5	DiConcini Hill	South Range	X	AZ EE:7:376 (ASM); includes Facility #15310
6	Comm bunker	South Range	U	AZ EE:11:81 (ASM)
7	Pop up targets	South Range	U	
8	T-stands	South Range	U	
9	Demonstration Hill	West Range	K	
10	Old Unmanned Aerial Vehicle (UAV) runway	West Range	K	
11	Bunkers	South Range	R	AZ EE:7:367 (ASM)
12	Bunkers	South Range	R	AZ EE:7:365 (ASM)
13	Bunkers	South Range	R	AZ EE:7:366 (ASM)
14	Bunkers	South Range	R	AZ EE:7:368 (ASM)
15	WWII concrete structures	West Range	H	AZ EE:7:400 (ASM)
16	Bunker	West Range	K	
17	Bunker	West Range	K	
18	Garden Canyon Airfield	South Range	U1	AZ EE:11:13 (ASM)
19	Concrete structures	Off-Post		
20	Charleston	Off-Post		
21	Poles	South Range	T3	AZ EE:11:76 (ASM)
22	Obstacle course	Cantonment		AZ EE:7:410 (ASM)
23	Obstacle course	Cantonment		AZ EE:7:408 (ASM)
24	WWI firing range	South Range	T	EE:7:FH007
25	CMTC camp	South Range	T2	Facility #15331; AZ EE:7:53 (ASM)

ID	Feature Description	Location	Range Area	Designation
26	Combat Hand Grenade Course structures	South Range	T2	
27	Pop up targets Range 9	South Range	T2	
28	Target butt	South Range	T2	Includes Facility #15343
29	Concrete stairs and pad, metal stairs	South Range	X	Includes Facility #16303
30	West Range artillery bunker	West Range	I	Facility #12624
31	Concrete walls by cemetery	Cantonment	Borders S	
32	Vietnam village	South Range	U1	AZ EE:11:82 (ASM)
33	East Range bunker	East Range	Z	Facility 17752
34	Alpha Break WWII pulley target site	South Range	T	AZ EE:7:395 (ASM)
35	Huachuca Cyn pulley target site	South Range	S	AZ EE:7:371 (ASM)
36	Bunker in Area Y	South Range	Y	Facility #16249
37	Bunker in Area Y	South Range	Y	Facility #16241
38	Fighting positions	South Range	U1	AZ EE:11:150 (ASM)
39	Fighting positions	South Range	W1	AZ EE:7:421 (ASM)
40	Misc. features in Area Y	South Range	Y	AZ EE:7:431 (ASM)
41	1880s-1950s infiltration course	Cantonment		AZ EE:7:387 (ASM)

4.1 East Range—East Range bunker (ID #33)

The East Range historically featured numerous EPG test sites, notably the East Range bunker (#33).²³¹ The bunker is located in the middle of the Dudded Impact Area, also referred to as Training Area Z. The East Range

²³¹ See Adam D. Smith, Caroline M. Wisler, Susan I. Ensore, and Sunny E. Adams, *Fort Huachuca Electronic Proving Ground: Historic Context, Inventory and Evaluation*, Fort Huachuca Cultural Resources Report FH-15-19, June 2016 (Champaign, IL: Engineer Research and Development Center-Construction Engineering Research Lab, forthcoming); and Tomes, *Architectural Survey, Documentation, and Evaluation of 110 Buildings and Structures at Fort Huachuca, Arizona*.

artillery bunker (Facility #17752), similar to the West Range artillery bunker (Facility #12624), was part of the Electronic Warfare Test Facilities affiliated with the EPG.²³²

4.2 West Range

4.2.1 Training Area H—WWII concrete structure (ID #15)

Six range sites and features on the West Range are discussed (see Figure 144). There are several WWII concrete structures (ID #15) (Figure 145, Figure 146, and Figure 147) beginning at the border between Training Areas H and K, north of Demonstration Hill, and following a northerly path into Training Area H (see Figure 144). The WWII concrete structures are part of a larger training complex in Training Area K, and collectively are documented as an archaeological site (AZ EE:7:400 [ASM]).²³³ The concrete structures in Training Area H include a row of stone features fronted by depressions interpreted as foxholes, which may have been used as bivouac facilities. There are WWII inscriptions in the concrete along with WWII cartridge casings found in the area that support this being a WWII training facility.

These historic range features are likely associated with the WWII Field Target Range: Rifle and Light Machine Gun, which spanned several training areas, including most to all of Training Areas K, L, I, and H and crossed over into the South Range, Training Areas R, and N. The layout and characteristics of ID #15 also approximates the layout of WWII grenade ranges as described in the 1944 War Department Basic FM 23-30, *Field Manual: Hand and Rifle Grenades, Rocket, AT, HE, 2.36 inch*, which shows sandbag positions with foxholes in front of the Live Grenade Practice Course.²³⁴ As such, it is also possible that these historic range features were associated with the activities at Demonstration Hill located to

²³² See Adam D. Smith, Caroline M. Wisler, Susan I. Ensore, and Sunny E. Adams, *Fort Huachuca Electronic Proving Ground: Historic Context, Inventory and Evaluation*, Fort Huachuca Cultural Resources Report FH-15-19, (Champaign, IL: Engineer Research and Development Center-Construction Engineering Research Lab, forthcoming); and Tomes, *Architectural Survey, Documentation, and Evaluation of 110 Buildings and Structures at Fort Huachuca, Arizona*.

²³³ Catherine Carbone, "Buffalo Corral Wildfire Cultural Resources Assessment," unpublished manuscript, 2019, Cultural Resources Report FH-19-9, Fort Huachuca, AZ; Martyn D. Tagg, "Monument Fire Cultural Resources Assessment," unpublished manuscript, 2013, Cultural Resources Report FH-11-15. Fort Huachuca, AZ.

²³⁴ "AT" is an acronym for "anti-tank" and "HE" is an acronym for "high explosive." U.S. War Department, *Field Manual: Hand and Rifle Grenades, Rocket, AT, HE, 2.36 Inch*, (Washington, DC: U.S. Government Printing Office, 2013).

the south in Training Area K, or with the EAUTC who trained in this area in the 1950s (see Figure 61).

Figure 145. Location of WWI concrete walls (ID #15) north of Demonstration Hill (Map data: Google, 2016).



Figure 146. Looking southeast at corner detail of WWII concrete structures (ID #15) (ERDC-CERL 2016. Public Domain).



Figure 147. Looking southeast at WWII concrete structures (ID #15) (ERDC-CERL 2016).



Figure 148. View to the south-southeast of stone structures (ID #15) north of Demonstration Hill (ERDC-CERL 2016).



Figure 149. View to the east of stone structure (ID #15) north of Demonstration Hill (ERDC-CERL 2016).



4.2.2 Training Area I—West Range Bunker (ID #30)

The West Range Artillery bunker (Facility #12624) is located in Training Area I, a little over 2 miles north of Demonstration Hill (see Figure 144). The bunker was part of the Electronic Warfare Test Facilities.²³⁵

4.2.3 Training Area K—Demonstration Hill (ID #9), UAV runway (ID #10), stone bunkers (ID #16 and ID #17)

Training Area K contains several historic range features, including two subterranean bunkers (ID #16 and #17) (see Figure 148 and Figure 149). These bunkers are similar to the bunkers (ID #11, ID #12, ID #13, and ID #14) around Wren Arena in Training Area R discussed below. The functions of these bunkers are unknown but presumed to be training features. Demonstration Hill (ID #9) and the old unmanned aerial vehicle (UAV) runway (ID #10) are also located in Training Area K (see Figure 144). Features located on Demonstration Hill and the old UAV runway (Figure 150) are most likely associated with the activities conducted at Demonstration Hill during the EPG era.²³⁶ Also located in this area at one point was a defunct helicopter (Figure 151 and Figure 152) at the northwest corner of the UAV runway, which may have been used for EAUTC training during the 1950s. The helicopter has been removed in recent years.

²³⁵ See Adam D. Smith, Caroline M. Wisler, Susan I. Enscoe, and Sunny E. Adams, *Fort Huachuca Electronic Proving Ground: Historic Context, Inventory and Evaluation*, Fort Huachuca Cultural Resources Report FH-15-19, (Champaign, IL: Engineer Research and Development Center-Construction Engineering Research Lab, forthcoming); and Elizabeth Valenzuela, *FY12 SRM Facilities and Demolition Projects: Documentation and National Register Evaluation of 29 Buildings on Fort Huachuca, Arizona*, (Fort Huachuca, AZ: Environmental and Natural Resources Division [ENRD], Directorate of Public Works, U.S. Army Garrison Fort Huachuca, 2011, [FH-11-18]).

²³⁶ See Adam D. Smith, Caroline M. Wisler, Susan I. Enscoe, and Sunny E. Adams, *Fort Huachuca Electronic Proving Ground: Historic Context, Inventory and Evaluation*, Fort Huachuca Cultural Resources Report FH-15-19, (Champaign, IL: Engineer Research and Development Center-Construction Engineering Research Lab, forthcoming).

Figure 150. View to the south of old UAV Runway near Demonstration Hill (ID #10) (ERDC-CERL 2016).

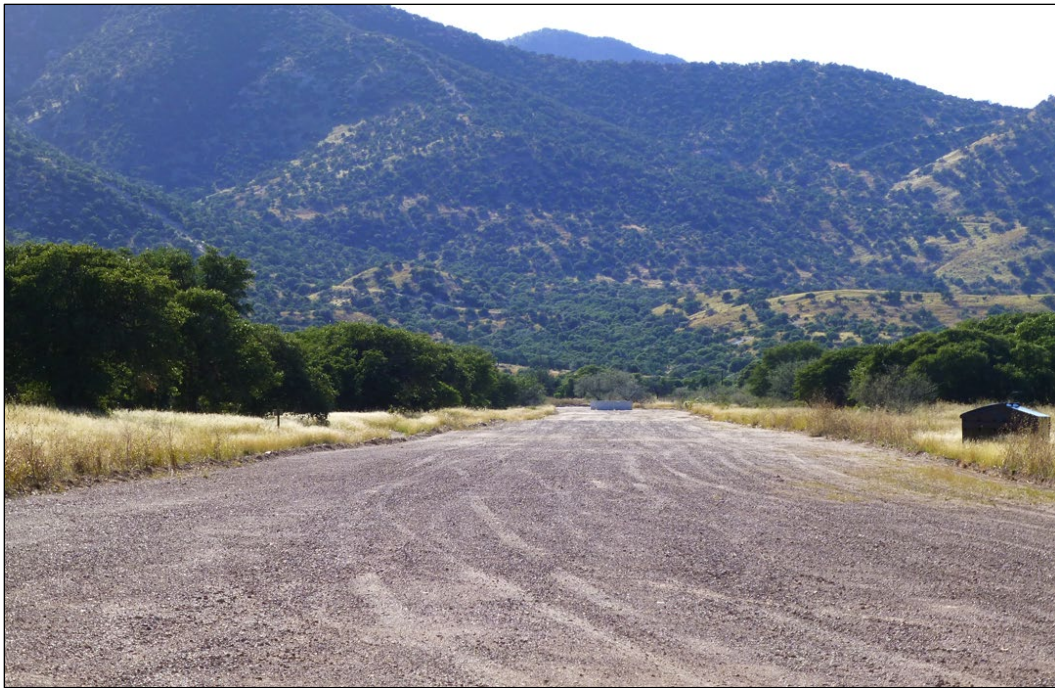


Figure 151. Location of training helicopter (Map data: Google, 2016).



Figure 152. View southwest of training helicopter (ERDC-CERL 2016).



4.3 Cantonment

Four historic range sites or features within the cantonment are discussed here (see Figure 144).

4.3.1 Obstacle Courses (ID #22 and ID #23)

Two historic range features (ID #22 and #23; Figure 144), labeled as obstacle courses, are located in the cantonment. These range features represent two out of three obstacle courses constructed in the cantonment during WWII. ID #22 is documented as archaeological site AZ EE:7:410 (ASM)²³⁷ and ID #23 is documented as archaeological site AZ EE:7:408 (ASM).²³⁸

²³⁷ Martyn D. Tagg, "FY14 Prescribed Burn Site Relocations Cultural Resources Assessment," unpublished manuscript, 2014, Cultural Resources Report FH-14-7. Fort Huachuca, AZ.

²³⁸ Martyn D. Tagg, Kimberley A. Ryan, and John S. Langan (eds.), *A Cultural Resources Assessment of Approximately 374 Acres for a Proposed Solar Array Development at Fort Huachuca, Arizona*, (Tucson, AZ: Vos Heritage, 2020), [FH-13-7].

4.3.2 1880s–1950s Infiltration Course (ID #41)

Archaeological evidence indicates the presence of an extensive military training site interpreted as a 1950s infiltration course (ID #41) (AZ EE:7:387 [ASM]) located northeast of the Old Post and southwest of LAAF (see Figure 144).²³⁹ There is also evidence in the form of numerous horse-shoes, a horse hobble, and .45-70 and .30-40 Krag cartridge casings with 1890s–early 1900s dates to indicate that the infiltration course may have been constructed on top of the first live-fire training ranges erected at Fort Huachuca in the 1880s and 1890s (see Section 2.2). Early accounts from the 1880s and 1890s indicate that live-fire training ranges were located roughly one quarter mile northeast of the Old Post. As discussed in the historic context, both short and long nonpermanent range targets, using stone and earth butts, were set up in the early 1880s. In March 1888, the first permanent target range was constructed northeast of the Old Post with butts, a 400-foot-long trench, and a target house. By 1903, the range had been expanded and/or moved to three-quarters of a mile northeast of the post, with a firing direction of 15 degrees east of north.

4.3.3 Concrete walls by cemetery (ID #31)

ID #31 includes two clusters of concrete walls located on the border between the cantonment and Training Area S, one west of the Fort Huachuca Cemetery (Figure 153) and the other further up the canyon. The cemetery, although located in Training Area S, is considered part of the cantonment. Originally, there were three walls in each cluster, but one wall was demolished in the cluster by the cemetery. There were no training range facilities located in this area given its close proximity to the cemetery. However, this area is included as part of the safety zone around the magazine storage bunkers located northwest of the cemetery in Training Range R. It may be possible that the walls, which appear to be blast walls, are affiliated with the magazine storage bunkers. The walls have been documented but do not appear to have facility numbers and have not been given an archaeological designation due to a lack of information.

²³⁹ Vanderpot and Graves; Martyn D. Tagg (ed.), “EPG/IEWTD Vehicle Maintenance Facility Cultural Resources Assessment,” (unpublished manuscript, 2018), Cultural Resources Report FH-17-13, Fort Huachuca, AZ

Figure 153. View to the northeast of concrete wall (ID #31) by Fort Huachuca Cemetery (ERDC-CERL 2016).



4.4 South Range

Twenty-eight historic sites or features on the South Range are discussed (see Figure 142).

4.4.1 Training Area R—bunkers (ID #11, ID #12, ID #13, ID #14)

There are four historic subterranean range bunkers located in Training Area R (ID #11, 12, 13, and 14) (see Figure 144 and Figure 154) that comprise a series of small, underground bunkers or vaults south and west of Wren Arena, with at least two other such bunkers west of Buffalo Corral on the West Range (ID #16 and ID # 17). The functions of these bunkers are unknown but presumed to be training features. ID #11 (AZ EE:7:367 [ASM]), #12 (AZ EE:7:365 [ASM]), and #13 (AZ EE:7:366 [ASM]) each have one underground bunker present, and ID #14 (AZ EE:7:368 [ASM]) has two bunkers present. All of these bunkers have been documented as archaeological sites.²⁴⁰

²⁴⁰ Gilpin, 17.

Figure 154. Underground bunkers (ID #11, 12, 13, and 14). *Top left* is from EE:7:365; *top right* is from EE:7:366; *bottom left* and *right* are from EE:7:368. (Gilpin 2009, 94, 98, 105, 107. Public Domain).



4.4.2 Training Area S

Training Area S contains two historic range features, including the concrete walls by the cemetery (ID #31) and the Huachuca Canyon pulley target site (ID #35) (see Figure 144).

4.4.2.1 Huachuca Canyon pulley target site (ID #35)

Historic feature #35, the Huachuca Canyon pulley target site, is documented as an archaeological site (AZ EE:7:371 [ASM]) and includes one wooden pulley and a pulley pole (Figure 155, Figure 156, and Figure 157).²⁴¹ While the exact date of the site is unknown, it is believed to be a WWII training site.

²⁴¹ Ibid.

Figure 155. Wooden pulley at Huachuca Canyon pulley target site (ID #35), view to the northwest (Gilpin 2009, 119. Public Domain).



Figure 156. Wooden pulley at Huachuca Canyon pulley target site (ID #35), view to the south (Gilpin 2009, 120. Public Domain).



Figure 157. Wooden pulley pole at Huachuca Canyon pulley target site (ID #35), view to the north (Gilpin 2009, 120. Public Domain).



4.4.3 Training Area T

Training Area T contains three historic range features, including the Range 1 bunkers (ID #1), the WWI firing range (ID #24), and the Alpha Break WWII pulley target site (ID #34) (see Figure 144).

4.4.3.1 Range 1 bunkers (ID #1)

Historic range feature #1 is a series of concrete sandbag target emplacements located just below the elevated sniper range (see Figure 144, Figure 158, Figure 159, and Figure 160). The features located in this area are likely connected to Range 3, which was used for marksmanship and landscape targeting (see Section 3.4.4.4). Given the cantonment-facing direction of the sandbag emplacements, they likely had a southwest firing point and protected the targeting equipment. Fort Huachuca personnel believe that the metal sleeves found at the site supported 2 ft × 4 ft targets. A number of olive drab human silhouette targets were also found around the sandbag emplacements (riddled with bullet holes). New targets for Range 1b are now set in some of these with a bivouac area and firing points to the northeast.

Figure 158. View looking northeast at remnants of concrete sandbag target bunker (ID #1) (ERDC-CERL 2016).



Figure 159. Looking down at remnants of concrete sandbag target bunker and target stand (ID #1) (ERDC-CERL 2016).



Figure 160. View looking east at remnants of concrete sandbag target bunkers (ID #1) (ERDC-CERL 2016).



4.4.3.2 WWI firing range (ID #24)

Historic range feature #24 is a collection of features associated with a WWI firing range (EE:7:FH007) that was historically located in the present-day Range 4. These historic features include barbed wire, posts, earthen berms, and old target stands (Figure 161 through Figure 167). The target frame stands (Figure 162 through Figure 167) are set in a ditch with a berm in front and are associated with two berm firing lines to the east that have been identified as typical for a 100 and 300 yard known distance range.²⁴² En blocs and .30-06 casings, which date back to 1918, have been found in the berms, which supports its historical use during WWI.²⁴³

²⁴² Martyn D. Tagg, "DeConcini Hill Communication Tower Cultural Resources Inventory," (unpublished manuscript, 2010), Cultural Resources Report FH-10-5, Fort Huachuca, AZ.

²⁴³ Robert D. Pitroff, "Range 1b Wildfire Cultural Resources Assessment," (unpublished manuscript, 2017), Cultural Resources Report FH-17-19, Fort Huachuca, AZ.

Figure 161. View looking down at barbed wire at WWI firing range (ID #24) (ERDC-CERL 2016).



Figure 162. View looking west at old target frame holders at WWI firing range (ID #24) (ERDC-CERL 2016).



Figure 163. Barbed wire post at WWI firing range (ID #24) (ERDC-CERL 2016).



Figure 164. View looking south at old target stands in ditch at WWI firing range (ID #24) (ERDC-CERL 2016).



Figure 165. View looking south at old target stand at WWI firing range (ID #24) (ERDC-CERL 2016).



Figure 166. View looking north at old target stands in ditch at WWI firing range (ID #24) (ERDC-CERL 2016).



Figure 167. View looking north at old target stands and wood post in ditch at WWI firing range (ID #24) (ERDC-CERL 2016).



4.4.3.3 Alpha Break WWII pulley target site (ID #34)

Historic range feature #34 is a collection of features associated with the Alpha Break WWII pulley target site (AZ EE:7:395 [ASM]).²⁴⁴ The site includes two wooden wheels or pulleys with crank handles and cut-off telephone poles (Figure 168 and Figure 169). One of the wooden pulley systems is protected by a stone wall with a WWII inscription (Figure 169). The location of the pulley target site places it within the targeting fields of both Range 2, the 1000' and 500' Machine Gun/Rifle Marksmanship M-16 Training Range, and Range 3, the Landscape Target and Small Bore Multi-Weapon Training Range.

²⁴⁴ Vanderpot and Graves.

Figure 168. Alpha Break WWII wooden target pulley (ID #34), view to the southwest (ENRD FH-12-7 project files. Public Domain).



Figure 169. Alpha Break WWII target pulley with stone protective wall (ID #34), view to the east (Vanderpot and Graves 2013: 144. Public Domain).



4.4.4 Training Area T2

4.4.4.1 Pig-tail posts and WWII barbed wire (ID #2)

The historic range features located in Training Area T2 include pig tail posts and barbed wire believed to be from WWII based on other archaeological artifacts, including grenade canister lids dating to WWII, found at the site (ID #2) (see Figure 144). These features have been recorded as archaeological site AZ EE:7:380 (ASM).²⁴⁵ The pig tail posts and barbed wire (Figure 170 and Figure 171) are located on, or very near, to where the now defunct Submachine Gun Range was located in the early 1950s and may be associated with that former range activity.

Figure 170. Pig tail posts and barbed wire believed to be from WWII (ID #2) (ERDC-CERL 2016).



²⁴⁵ Ibid.

Figure 171. View looking west at pig tail posts and barbed wire (ID #2) (ERDC-CERL 2016).



4.4.4.2 *Combat Hand Grenade Course structures (ID #26)*

Historic range feature #26 is comprised of two parallel concrete structures located southwest of the present-day Combat Hand Grenade Course (Figure 172, Figure 173, and Figure 174). There are elevated viewing platforms attached to the back of these structures, and in front are a series of enclosures elevated slightly above ground level, which may have been used as throwing platforms. There are embedded vehicle tires that may have served as targets located about 100 to 150 feet to the south with an earthen berm behind them. This feature is most likely associated with the hand grenade course which has been located in this area since the 1940s.

Figure 172. Location of concrete structure on Combat Hand Grenade Course (ID #26) (Map data: Google, 2019).

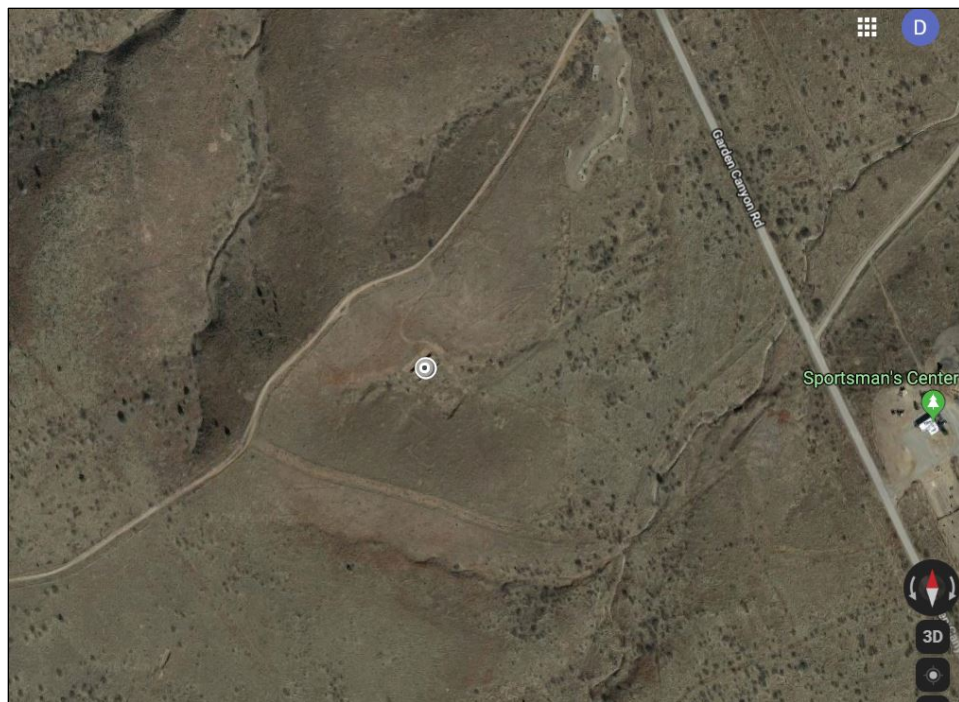


Figure 173. View looking west at concrete structures by Combat Hand Grenade Course (ID #26) (ERDC-CERL 2016).



Figure 174. View looking west at concrete structures by Combat Hand Grenade Course (ID #26) (ERDC-CERL 2016).



4.4.4.3 CMTC camp (ID #25)

A stone building, Facility #15331, is located directly north of the Known Distance Range (Figure 175 and Figure 176). This feature is a latrine building believed to have been built by the WPA and associated with the original CMTC camp located on the South Range (see Figure 16). The feature is part of the documented CMTC camp, which is archaeological site AZ EE:7:53 (ASM).²⁴⁶ As discussed in Section 2.3, the historic record indicates that a rubble-stone latrine building (#377) was added to the Known Distance Range in 1938, and 1955 records indicate that a latrine was still present “across the road” from the range (see Section 3.4.6.2). Based on the historic photo (Figure 14), this stone building is the rubble-stone latrine built to support the Known Distance Range. There is also at least one concrete foundation located south of the stone latrine that may be the foundation to wooden buildings associated with the Known Distance Range that were demolished in 1998.

²⁴⁶ Ibid.

Figure 175. Location of stone latrine (Facility #15331) north of the Known Distance Range (ID #25) (ERDC-CERL 2016).

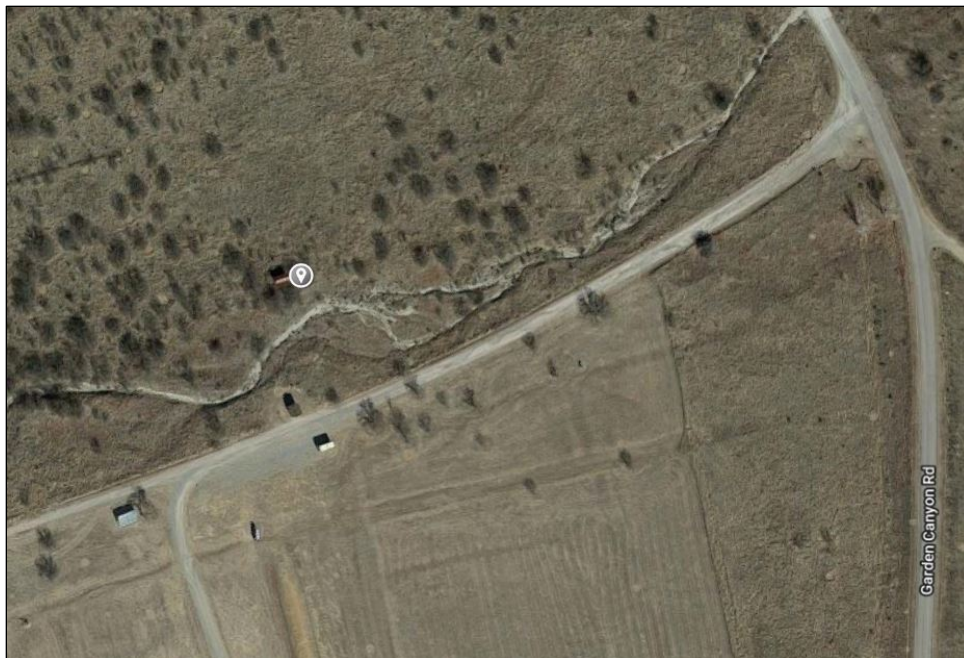


Figure 176. View looking northwest at stone latrine building (Facility #15331) north of the Known Distance Range (ID #25) (ERDC-CERL 2016).



4.4.4.4 Pop-up targets at Range 9 (ID #27)

Historic range feature #27 includes pop-up targets located in Training Area T2 near present day Range 9 (Figure 177, Figure 178, and Figure 179). These historic range features are most likely associated with the 1951 Sub-machine Gun Range and the 1983 106 recoilless rifle range.

Figure 177. Location of pop-up targets on Range 9 (ID #27) (Map data: Google, 2016; ENRD 2020. Public Domain).

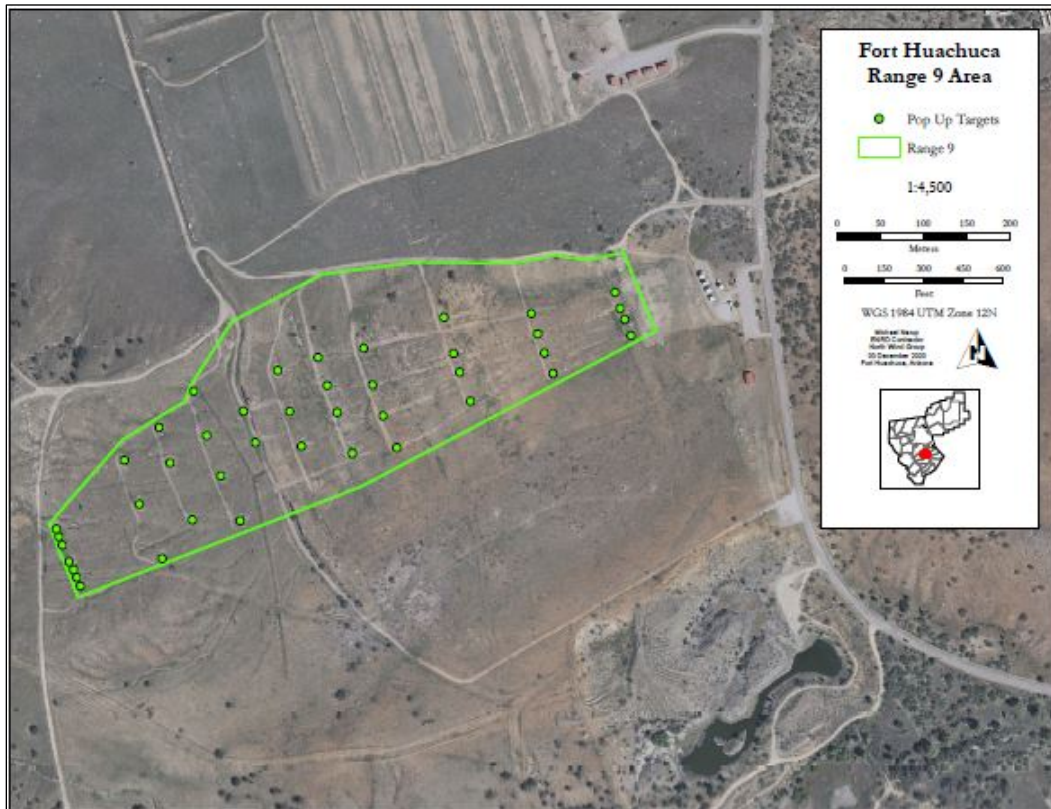


Figure 178. View looking east at pop-up target (ID #27) (ERDC-CERL 2016).



Figure 179. Remnants of target at Range 9 (ID #27) (ERDC-CERL 2016).



4.4.4.5 Target butt (ID #28)

Also located in Training Area T2, near present day Ranges 6, 8, and 9, are target butts (Figure 180). The target butts are in three segments of long, linear concrete walls with built-in structures. They appear to date to either the 1920s or 1930s during the CMTC era (see Figure 9) and are no longer used, with portions of them being demolished circa 2000 (Figure 183 through Figure 197). The last remaining wood storage shed affiliated with the target butts, Facility #15343, burned down in 2013 (Figure 181 and Figure 182).²⁴⁷ These features are most likely associated with the Known Distance Range that has historically occupied this area and is one of the oldest training ranges on Fort Huachuca. It is unknown when the metal target frames found on Range 6 were added (Figure 190 through Figure 192).

²⁴⁷ Martyn D. Tagg, "2013 Prescribed Burns Cultural Resources Records Check," (unpublished manuscript, 2013), Cultural Resources Report FH-13-1, Fort Huachuca, AZ; Jennifer Levstik, Historic Building Documentation for 11 Buildings at Fort Huachuca, Cochise County, Arizona, Cultural Resources Report 2007-321, (Tucson, AZ: SWCA Environmental Consultants, 2007), [FH-07-4]; Tomes, Architectural Survey, Documentation, and Evaluation of 110 Buildings and Structures at Fort Huachuca, Arizona; Janus Associates, Inc., and Jim Wood, Technical Synthesis Report: Fort Huachuca Architectural/Historical Resource Survey, (Phoenix, AZ: Joint Venture Group, 1988), [FH-88-7]; Jackson Research Associates, Fort Huachuca: An Evaluation of Architectural/Historical Resources, (Los Angeles: CA: U.S. Army Corps of Engineers, Los Angeles District, 1989), [FH-89-6].

Figure 180. Location of target butts on Ranges 6, 8, and 9 (ID #28) (Map data: Google, 2020).



Figure 181. View to the southeast of last remaining wooden storage building at the north end of the target butt at Range 6 (Facility #15343) (ID #28) before it burned down in 2013 (Chattey and Abraham 1998. Public Domain).



Figure 182. View northeast of foundation of last remaining wooden storage building at the north end of the target butt at Range 6 (Facility #15343) (ID #28) (ERDC-CERL 2016).



Figure 183. Looking to the northeast over the concrete target butt of Range 8 (ID #28) (ERDC-CERL 2016).



Figure 184. Close-up view to the northeast of the concrete target butt on Range 8 (ID #28) (ERDC-CERL 2016).



Figure 185. View to the east-northeast of target storage area at end of target on Range 8 (ID #28) (ERDC-CERL 2016).



Figure 186. View north along target butt of Range 8 (ID #28) (ERDC-CERL 2016).



Figure 187. View north along target butt of Range 8 (ID #28) (ERDC-CERL 2016).



Figure 188. View to the northeast of storage area at Range 8 (ID #28) (ERDC-CERL 2016).



Figure 189. View to the east of target storage area at south end of target on Range 6 (ID #28) (ERDC-CERL 2016).



Figure 190. View north along target butt of Range 6 with metal target frames (ID #28) (ERDC-CERL 2016).



Figure 191. View to the east of a detail of target holders on target butt on Range 6 (ID #28) (ERDC-CERL 2016).



Figure 192. Detail of pulley on target holders on target butt on Range 6 (ID #28) (ERDC-CERL 2016).



Figure 193. View of target storage area at north end of target on Range 6 (ID #28) (ERDC-CERL 2016).



Figure 194. Looking to the southeast over the concrete target butt of Range 9 (ID #28) (ERDC-CERL 2016).



Figure 195. View to the southeast of storage area (*left*) and target storage (*right*) at Range 9 (ID #28) (ERDC-CERL 2016).



Figure 196. View to the east of storage area at Range 9 (ID #28) (1983) (ERDC-CERL 2016).



Figure 197. View to the west of a target on hillside at Range 9 (ID #28) (1983) (ERDC-CERL 2016).



4.4.5 Training Area T3

4.4.5.1 Range 12—Facility #15309 (ID #3)

A Range 12 target bunker (Facility #15309; ID #3) appears to be located in the same area as the 1955 latrines for the Submachine Gun Range and the Field Target Range for the M-1 Table IX and Carbine Tables IV and V (Figure 198). Prior to this, according to installation range maps, the area was labeled Range 7, Moving Target Range for .50 caliber gravity type guns, and so the feature may be connected to this particular purpose. The target bunker had railroad tracks just behind the bunker that facilitated a moving target using a pulley system. The ties burned during a back burn for Monument Fire presuppression in 2011.²⁴⁸

²⁴⁸ Tagg, "Monument Fire Cultural Resources Assessment."

Figure 198. View to the northwest of a Range 12 target bunker (ID #3) (Facility #15309) (ERDC-CERL 2016).



4.4.5.1 Tank bunkers (ID #4)

There are a series of tank bunkers (ID #4) east of the target bunker. They are located on the site of the former Tank Table Ranges and are likely affiliated with that training activity (Figure 199 and Figure 200). They are U-shaped earthen mounds overgrown with vegetation. The 1955 Grenade/Rocket Launcher/Mini Tank Table Range also included a concrete bunker.

Figure 199. Location of tank bunkers (ID #4) (Map data: Google, 2016).

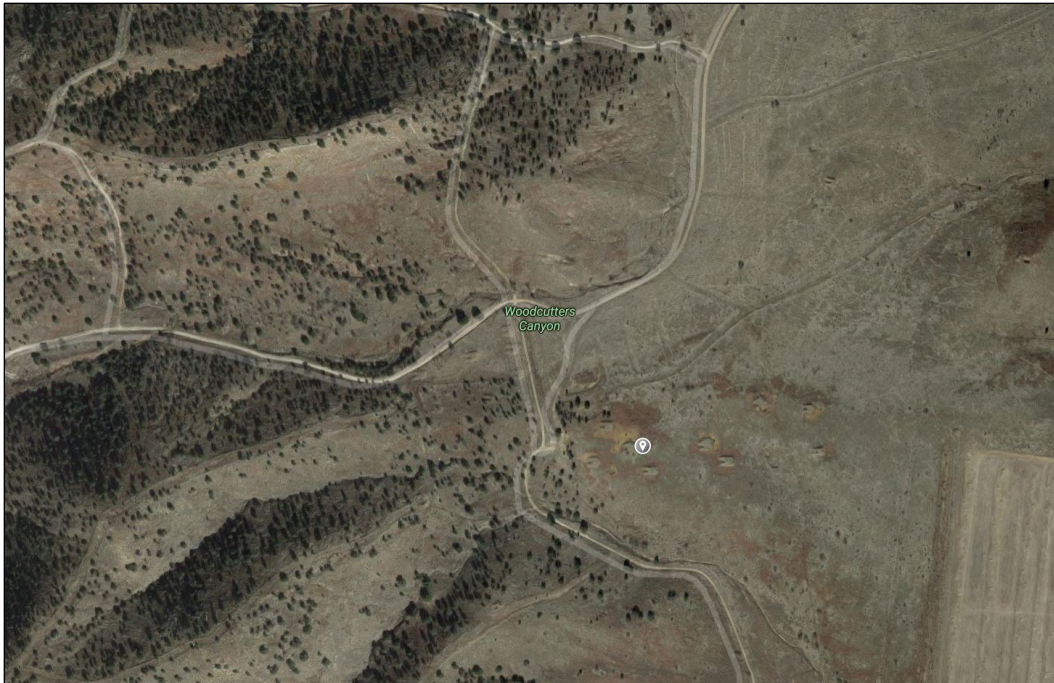


Figure 200. Looking southeast towards one of the large tank bunkers (ID #4) (ERDC-CERL 2016).



4.4.5.2 Poles (ID #21)

A series of wooden poles (ID #21) are located within Range 13 and may have supported targets. Following a prescribed burn, a circular depression was discovered in the area around the poles and a prehistoric component identified (AZ EE:11:76 [ASM]).²⁴⁹

4.4.6 Training Area U

4.4.6.1 Pop-up targets (ID #7) and T-stands (ID #8)

A group of pop-up targets (ID #7) (Figure 201) and T-stands (ID #8) (Figure 202 and Figure 203) are likely affiliated with the former Transition Range (1950s and 1960s)/Rifle Squad Attack Course (1970s and 1980s)/Close Combat Course (1970s and 1980s) as they are located on the site of that training range. The Close Combat Course (then Range 17) was known to have 55 target pits associated with it.

Figure 201. View to the east of pop-up target (ID #7) (ERDC-CERL 2016).



²⁴⁹ Tagg, "Monument Fire Cultural Resources Assessment"; and Martyn D. Tagg, "FY15 Prescribed Burn Site Relocations Cultural Resources Assessment," (unpublished manuscript, 2015), Cultural Resources Report FH-15-8, Fort Huachuca, AZ.

Figure 202. View to the west of a close-up of T-Stand (ID #8) (ERDC-CERL 2016).



Figure 203. View to the west of T-Stand in the larger area of the range (ID #8) (ERDC-CERL 2016).



4.4.6.1 Communication bunker (ID #6)

A communication bunker (ID #6) (Figure 204) is located at the head of the former Range 18, Rifle Platoon Attack Course, which was also used as a Tank Crew Combat Fire Range in 1979. It is a documented archaeological site (AZ EE:11:81 [ASM]) and is surrounded by depressions and stone features that look like defensive positions.²⁵⁰ Inscriptions carved in the bunker wood and cartridge casings have a date range from 1952 to 1975 (the bunker inscriptions are 1963 and 1975).

Figure 204. Looking northeast at the interior through entryway of wood-walled communication bunker (ID #6) (ERDC-CERL 2016).



²⁵⁰ Martyn D. Tagg and Christina T. Rogers, "Tinker Pond Restoration Cultural Resources Inventory," (unpublished manuscript, 2015), Cultural Resources Report FH-14-14, Fort Huachuca, AZ; Laura Burghardt Tenen and Anna Jansson, *Archaeological Inventories of 1,015 Acres for FY17 Prescribed Burn and 832 Acres for FY17 Mesquite Extraction, South Range Parcels, Fort Huachuca, Cochise County, Arizona*, (Tucson, AZ: Harris Environmental Group, 2020), [FH-17-7].

4.4.7 Training Area U1

4.4.7.1 Garden Canyon airfield (ID #18)

The Garden Canyon airfield historic range feature (ID #18) is located in Training Area U1. There is no record of a training range activity in this area requiring an airfield. It is possible that the airfield was built during WWII to facilitate the artillery range that contained an Anti-Aircraft Range & Towed Target (Range 2). Likewise, it may be a UAV runway.²⁵¹ The Garden Canyon airfield is documented as a disturbance within the National Register listed Garden Canyon Site, which is a large prehistoric village (AZ EE:11:13[ASM]). The Garden Canyon Site also contains several military training features, artifacts, and foxholes.

4.4.7.2 Mock Vietnam villages (ID #32)

Two mock Vietnam training sites are located in Garden Canyon south of the road in Training Area U1, including a mock village and a POW camp (Figure 205). All that is left is some barbed wire and C-ration cans with a portion of a berm thought to be in the location of the POW camp (Figure 206 and Figure 207). It has been documented as an archaeological site (AZ EE:11:82[ASM]).²⁵²

²⁵¹ Steve Gregory indicated that it may be a UAV runway.

²⁵² Anna Schneider, "Aerostat Wildfire Cultural Resources Inventory," (unpublished manuscript, 2014), Cultural Resources Report FH-14-11, Fort Huachuca, AZ.

Figure 205. Location of mock Vietnam village and POW camp (AZ EE:11:82 [ASM]), south of Garden Canyon Road (ID #32) (Schneider 2014. Public Domain)

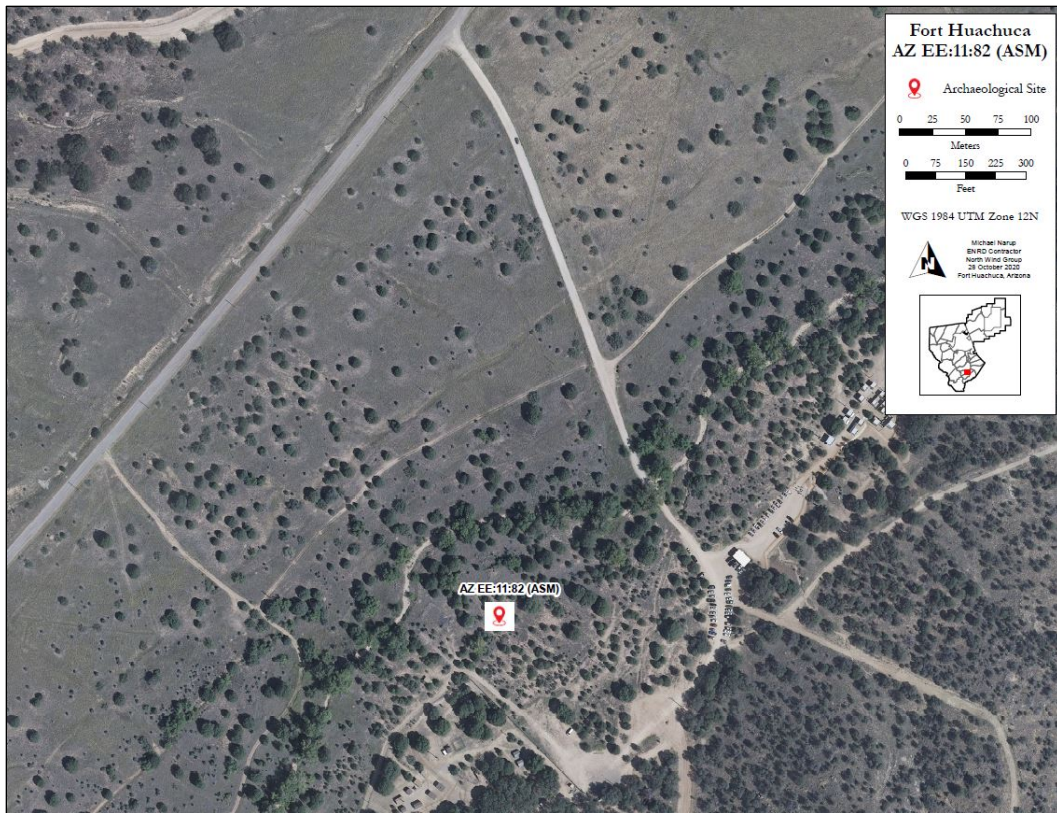


Figure 206. Location of berm at mock Vietnam POW camp (ID #32) (ERDC-CERL 2014).



Figure 207. View of remnants of berm at mock Vietnam POW camp (ID #32) (ERDC-CERL 2014).



4.4.7.3 Fighting position (ID #38)

There are numerous historic range features scattered throughout the installation that are categorized as fighting positions. Historic range features ID #38 and ID #39 (Training Area W1) offer excellent examples of these fighting positions. Fighting position ID #38 is located in Training Area U1 and is documented as an archaeological site (AZ EE:11:150 [ASM]).²⁵³ It is comprised of a series of rock-aligned depressions and rock features on the slope of a ridge overlooking Garden Canyon, and WWII-dated cartridge casings and C ration cans were associated with the features.

4.4.8 Training Area W1—fighting positions (ID #39)

Historic range features ID #39 and ID #38 (Training Area U1) discussed earlier offer excellent examples of the fighting positions scattered through-

²⁵³ Tagg, “Monument Fire Cultural Resources Assessment”; and Tagg, “FY15 Prescribed Burn Site Relocations Cultural Resources Assessment.”

out the installation. ID #39 is located in Training Area W1 and is documented as an archaeological site (AZ EE:7:421 [ASM]).²⁵⁴ The fighting position has a series of rock features and is located on a fortified hilltop with many depressions dropping off the slope, some of which are rock lined (Figure 208 and Figure 209). This site may be associated with the 1955 Training Area 18C, and/or Range 14 (1983)/ Range 12 (1991), which overlapped into Training Area W1.

Figure 208. Fortified hilltop (ID #5) looking northeast (ERDC-CERL 2016).



²⁵⁴ Anna Schneider, "Boston 9 and Range 8 Wildfire Cultural Resources Inventory," (unpublished manuscript, 2015), Cultural Resources Report FH-15-11, Fort Huachuca, AZ.

Figure 209. Fortified fighting positions (ID #5) looking northeast (ERDC-CERL 2016).



4.4.9 Training Area X

4.4.9.1 Concrete stairs, concrete pad, and metal structure (ID #29)

Historic range feature ID #29 is located on the border between Training Area X and Training Area W (Figure 210). ID #29 is comprised of several individual elements, including a concrete platform with stairs, a tipped over metal structure, and two concrete pads (Figure 211, Figure 212, Figure 214, Figure 215, and Figure 216). The concrete platform and stairs have a facility sign with the number 16303 (Figure 213). No former training range facilities were located in this area of the South Range according to the historical record. The general area was labeled as Training Area 18c in 1955, but no actual facilities were listed. Facility #16303 does not appear on the Fort Huachuca Facility lists until 2010 where it is listed as a load/unload/dock/ramp with a construction date of 1983, and it is thought to have been for tank refueling.²⁵⁵ It is believed that the tower, which may

²⁵⁵ Tagg, "DeConcini Hill Communication Tower Cultural Resources Inventory."

not be in its original location, was used for observing tank firing and training, and that all of the elements that comprise ID #29 were associated with tank training.

Figure 210. Location of concrete platform with stairs, metal structure and concrete pads (ID #29) (Map data: Google, 2019).

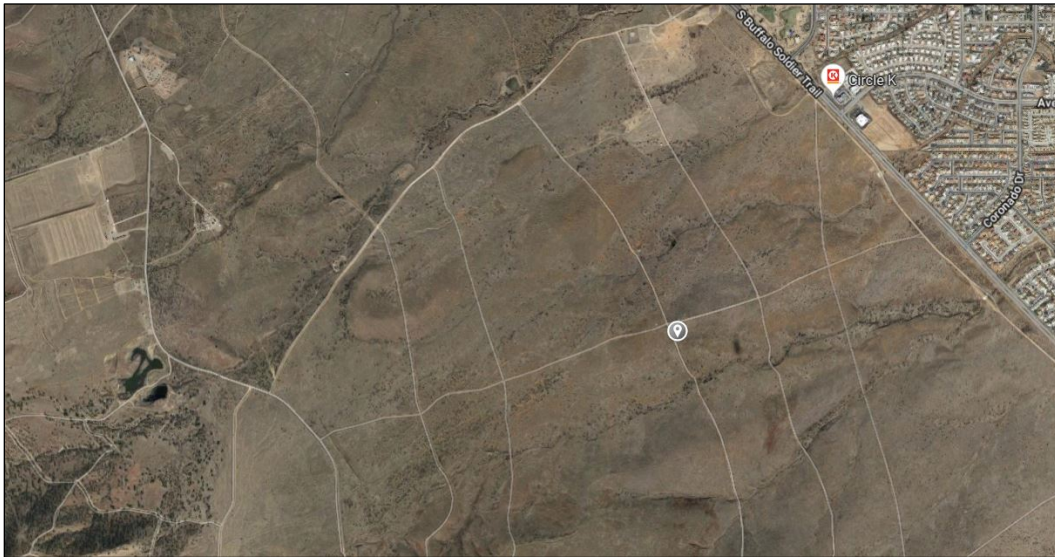


Figure 211. Site map of concrete platform with stairs, metal structure, and concrete pads (ID #29) (Map data: Google, 2019).



Figure 212. View to the west of concrete stairs and platform (Facility #16303) (ID #29) (ERDC-CERL 2016).



Figure 213. Concrete stairs and platform facility sign (Facility #16303) (ID #29) (ERDC-CERL 2016).



Figure 214. Concrete stairs and cracked platform on top of Facility 16303 (ID #29) (ERDC-CERL 2016).



Figure 215. View to the west of tipped over metal structure near concrete stairs and platform (ID #29) (ERDC-CERL 2016).



Figure 216. View to the south of concrete slab with possible tether pole insert near concrete stairs and platform (Facility #16303) (ID #29) (ERDC-CERL 2016).



4.4.9.2 DiConcini Hill (ID #5)

DiConcini Hill (ID #5) is located on the border between Training Areas X and Y, just to the east of Garden Canyon Road. At the west edge of the hill is an archaeological site (AZ EE:7:376 [ASM]) with tower footings used for a viewing tower for tank training, as well as what appears to be a U-shaped tank position and a high linear berm, potentially for tanks to sit behind when they fired at the range; the linear berm ran from the hill well north onto the flat bajada almost to Site Boston Road. Based on previous research conducted by Fort Huachuca personnel, the tower was Facility 15310 and related to Range 12 A/B/C tank gunnery. The tower was reportedly moved to this location in 1975 and removed in 2005.²⁵⁶

4.4.10 Training Area Y

4.4.10.1 Bunkers (#36 and #37)

Historic range features #36 (Facility #16249) and #37 (Facility #16241) are general purpose ammunition bunkers located in Training Area Y, and are listed as constructed in 1942 and 1960, respectively. They are within the 1952 Demolition, Mines, and Booby Traps Range. By 1955, the area was subdivided into two ranges: Range 14 was the Demolition Area and

²⁵⁶ Tagg, "DeConcini Hill Communication Tower Cultural Resources Inventory."

had a latrine and concrete bunker (Facility 16249) affiliated with it, and Range 15 was the Mines and Booby Traps Area and had a latrine, storage house, and concrete bunker (Facility 16241) affiliated with it.²⁵⁷

4.4.10.2 Miscellaneous features (ID #40)

There are several sites and isolates located in the eastern portion of Training Area Y, referred to as historic range feature ID #40. These resources include an artillery position (AZ EE:7:431 [ASM]) and two Vietnam-era listening devices, known as Air Delivered Seismic Intrusion Detectors (AD-SID), embedded in the ground. Additionally, archaeological inventories have documented two isolates with radio truck boxes (U.S. Army Teletype Shelters) set into a bermed depression, probably as radio stations for ground training.²⁵⁸

4.5 Charleston Maneuver Area and off-post training areas

Two off-post locations east of the current East Range are included here because the area was utilized by Fort Huachuca for training during WWII and returned to the Bureau of Land Management (BLM) after the war.

4.5.1 Charleston training village (ID #20)

The Charleston town site and WWII training village (ID #20) is now located off post (Figure 217 and Figure 218). Charleston was a late 1800s mining town that the Army modified during WWII for street fighting training. It presently contains several historic range features (Figure 219, Figure 220, Figure 221, Figure 222, and Figure 223). It was exceded in June 1947.

²⁵⁷ Valenzuela, *FY 12 SRM Facilities and Demolition Projects: Documentation and National Register Evaluation of 29 Buildings on Fort Huachuca, Arizona*.

²⁵⁸ Diane L. Slocum, "Mesquite Extraction Cultural Resources Inventory," (unpublished manuscript, 2020), Cultural Resources Report FH-18-10, Fort Huachuca, AZ; Tenen and Jansson, *Archaeological Inventories of 1,015 Acres for FY17 Prescribed Burn and 832 Acres for FY17 Mesquite Extraction, South Range Parcels, Fort Huachuca, Cochise County, Arizona*.

Figure 217. Portion of Fort Huachuca *Real Estate Map* with box showing location of Charleston, November 1947 (USACE Phoenix Archive, Box 21. Public Domain).

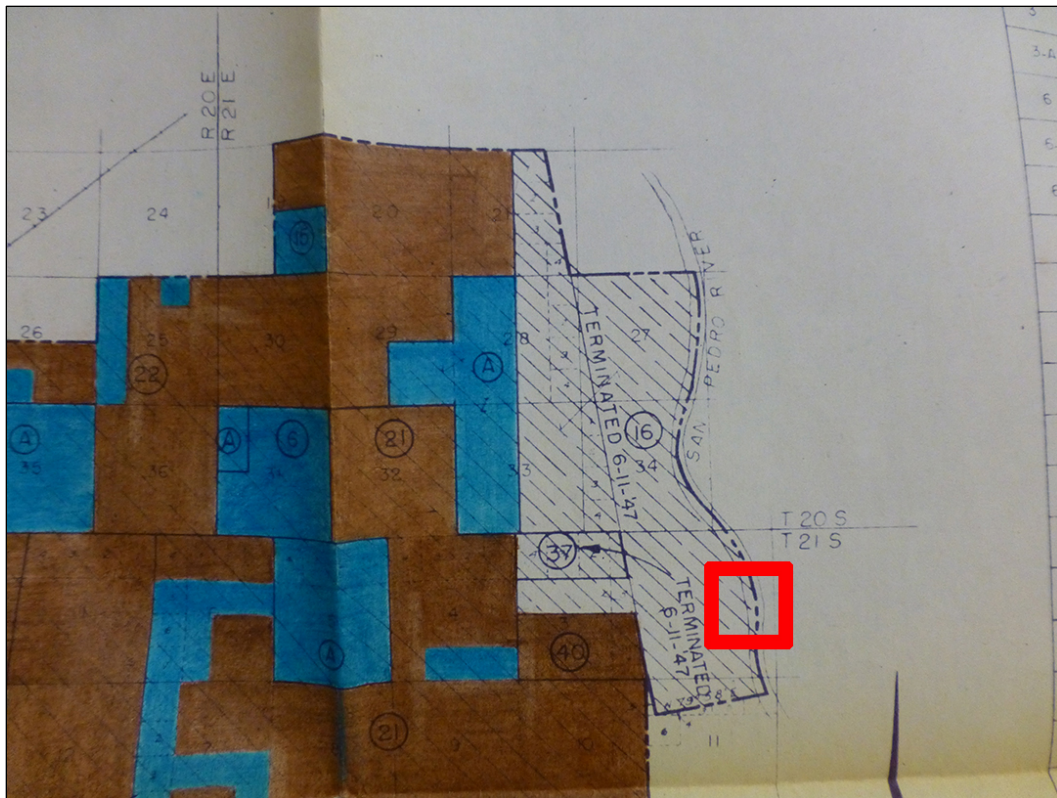


Figure 218. Location of Charleston marked by red circle past East Range boundary (Map data: Google, 2016).



Figure 219. Remnants of the Charleston training village (ID #20) (ERDC-CERL 2016).



Figure 220. Remnants of the Charleston training village (ID #20) (ERDC-CERL 2016).



Figure 221. Remnants of the Charleston training village (ID #20) (ERDC-CERL 2016).

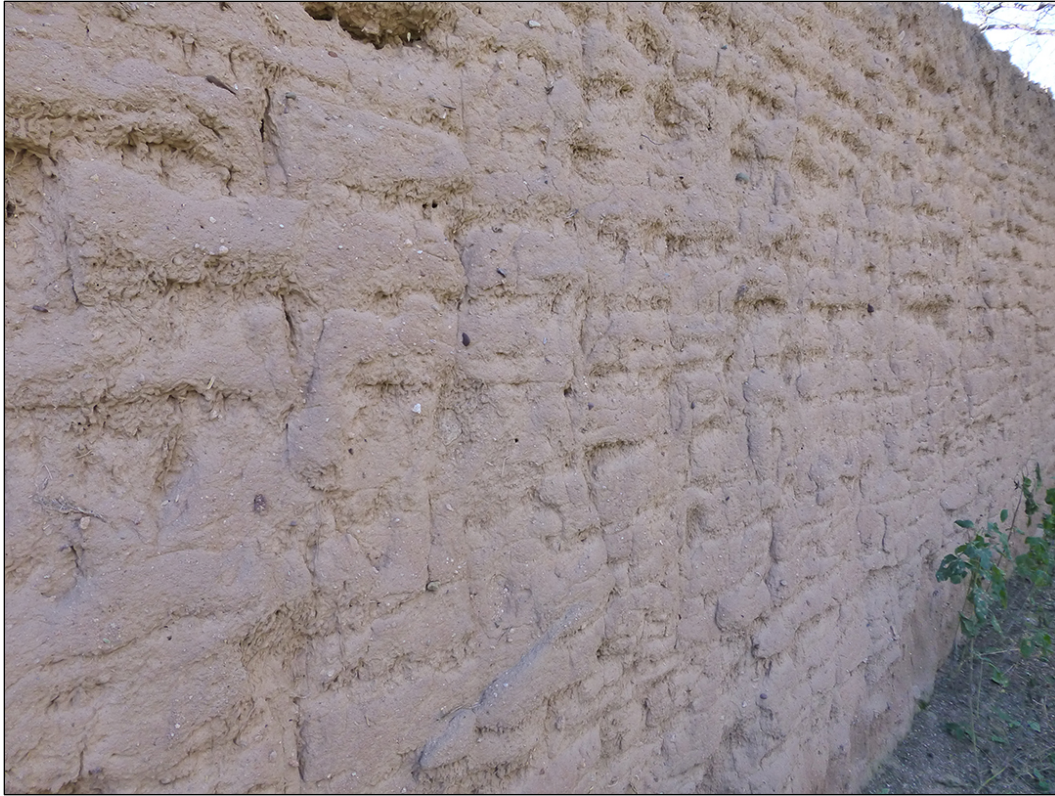


Figure 222. Remnants of the Charleston training village (ID #20) (ERDC-CERL 2016).



Figure 223. Remnants of the Charleston training village (ID #20) (ERDC-CERL 2016).



4.5.2 Concrete structures (ID #19)

Concrete structures, targets, and other associated historic range features (ID #19) are still present in the areas located to the East of Fort Huachuca (Figure 224 and Figure 225). These features, however, are located outside the present-day boundaries of Fort Huachuca on land owned by the BLM (Figure 226). Remains of the western-most concrete feature are partially within the current Fort Huachuca boundary, but they have not been documented. Like the Charleston training site, this area was also once part of Fort Huachuca but was excessed in June 1947. These historic range features are likely from WWII and supported training activities in Charleston (Figure 227, Figure 228, Figure 229, Figure 230, Figure 231, Figure 232, Figure 233, and Figure 234). The concrete features were likely targets for small arms and mortar training.

Figure 224. Portion of Fort Huachuca Real Estate Map with *red box* showing location of concrete targets, November 1947 (ID #19) (USACE Phoenix Archive, Box 21. Public Domain).

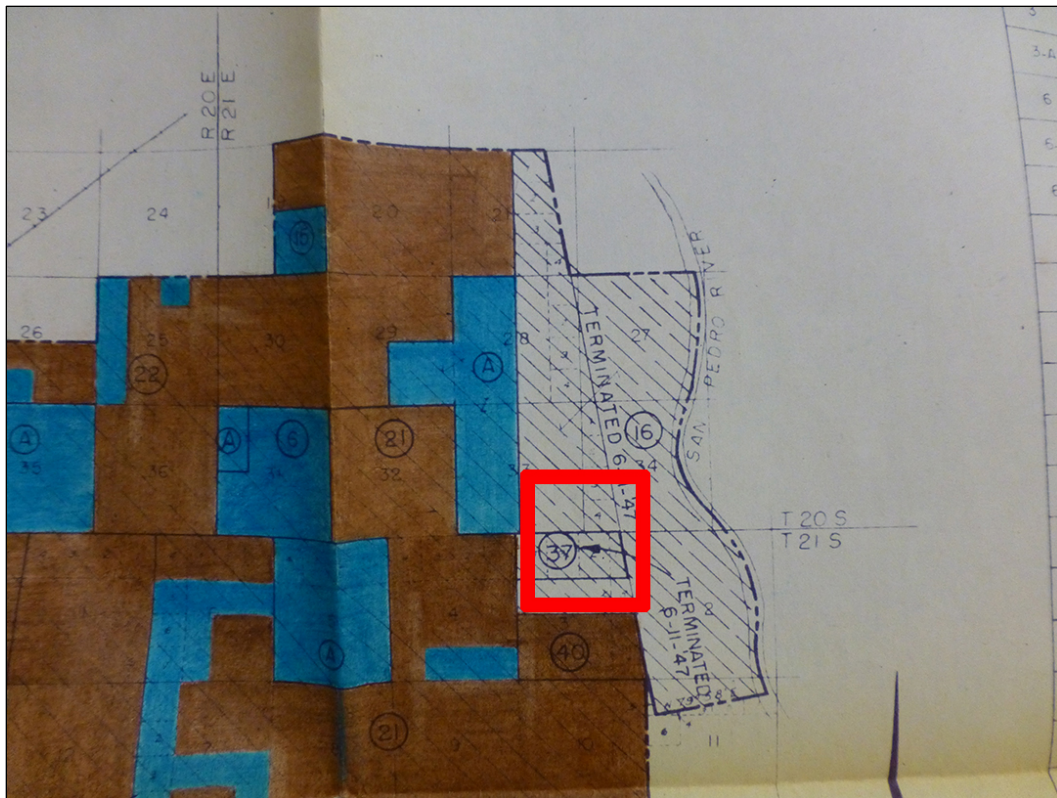


Figure 225. Range target locations (ID #19) (*Huachuca Water Umbel Inventory, Fort Huachuca DPW. Public Domain.*)

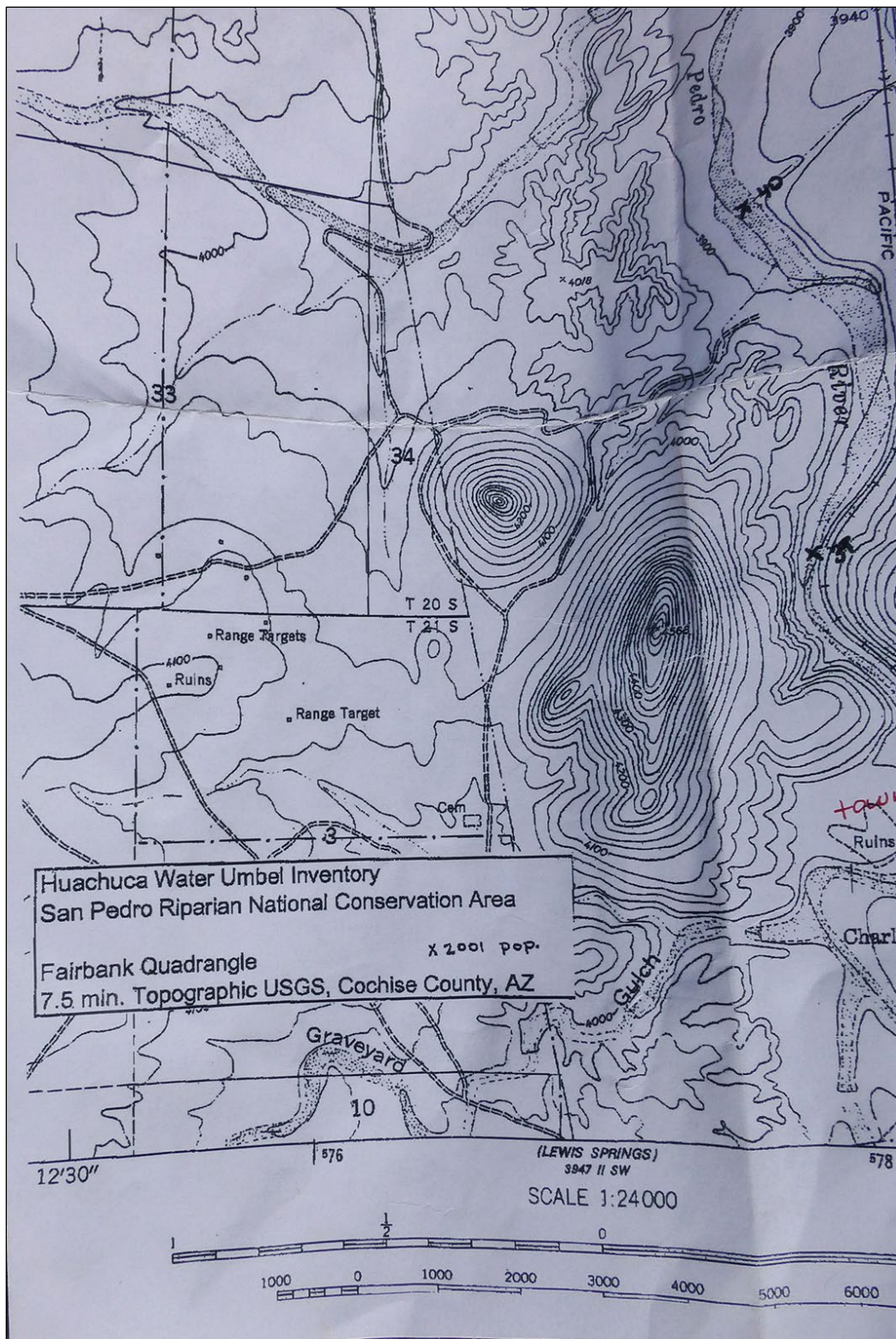


Figure 226. Location of targets past East Range boundary (ID #19) (Map data: Google, 2016).



Figure 227. Remnants of concrete range targets looking east (ID #19) (ERDC-CERL 2016).



Figure 228. Remnants of concrete range targets looking east (ID #19) (ERDC-CERL 2016).



Figure 229. Remnants of concrete range targets looking west (ID #19) (ERDC-CERL 2016).



Figure 230. Remnants of concrete range targets looking east (ID #19) (ERDC-CERL 2016).



Figure 231. Close-up of remnants of concrete range targets looking east (ID #19) (ERDC-CERL 2016).



Figure 232. Remnants of concrete range targets looking northwest (ID #19) (ERDC-CERL 2016).



Figure 233. Remnants of concrete range targets looking east (ID #19) (ERDC-CERL 2016).



Figure 234. Close-up of opening on the south side of remnants of concrete range targets (ID #19) (ERDC-CERL 2016).



5 Conclusion

The intention of this document is to provide a broad overview of activities and construction that took place on Fort Huachuca to support its various training missions through the years. This report lays out the history of training activities and gives enough detail to hopefully enable researchers to tie the various training sites throughout Fort Huachuca to a specific historic context.

5.1 Categories of historic properties

The identification of historically significant properties is achieved through evaluation of their position within a larger historic context. According to the NRHP, historic contexts are defined as “the patterns, themes, or trends in history by which a specific occurrence, property, or site is understood and its meaning (and ultimately its significance) within prehistory or history is made clear.”²⁵⁹ A historic property is determined significant or not significant by applying standardized National Register Criteria for Evaluation to property within its historical context. The NRHP categorizes significant properties as buildings, sites, districts, structures, or objects.²⁶⁰

5.2 Criteria for evaluation

The National Register Criteria for Evaluation define how historic properties are significant by categorizing a property’s associations with important historic qualifiers. The *National Register Bulletin #15* lists four major criteria by which a historic property can be evaluated: Criterion A—association with important events, Criterion B—association with important persons, Criterion C—importance in design and construction, and Criterion D—information potential.²⁶¹

5.3 Aspects of historic integrity

In addition to possessing historical significance, to be eligible to the NRHP, properties must also retain sufficient physical integrity of features in order to convey their significance.²⁶² Historic properties both retain

²⁵⁹ National Park Service (NPS). *National Register Bulletin #15: How to Apply the National Register Criteria for Evaluation*. (Washington, DC: U.S. Department of the Interior, 1991), 7.

²⁶⁰ *Ibid.*, 9.

²⁶¹ *Ibid.*, 12–24 summarized.

²⁶² *Ibid.*, 44–45.

integrity and convey their significance, or they do not. The National Register recognizes seven aspects or qualities of a property that define the concept of integrity. To retain historic integrity, a property must possess several, and usually most, of the seven aspects. The retention of specific aspects of historic integrity is paramount for a property to convey its significance. Determining which of these aspects are most important to a particular property requires knowing why, where, and when the property is significant. The seven aspects of integrity are again listed in *National Register Bulletin #15*.

Properties in a historic district are classified as either “contributing or non-contributing” resources. Contributing resources date from the historic period of significance established for the district. They contribute to the significance and character of the district through their historical associations and/or architectural values. Noncontributing resources are those that, due to the date of construction, alterations, or other factors, do not contribute to the district’s historic significance or character.

5.4 Themes under which Fort Huachuca training facilities possess significance

Through researching the archival records and developing the overall historic context for training at Fort Huachuca, the authors determined that there are four periods of significance under Criterion A: from 1878 through 1890, covering the Indian Wars; from 1913 through 1931, covering the 10th Cavalry and WWI; from 1941 through 1945, covering the 92nd and 93rd Infantry and WWII, and from 1954 through 1967, covering the EPG. Although Fort Huachuca was utilized for troop training during the Korean War, this was a short-lived operation and does not serve as a defining era in Fort Huachuca’s history. During the Vietnam War, Fort Huachuca was not a recruit induction center and only offered Advanced Individual Training Courses for deploying troops from 1967–1970 or 1971. Deploying troops also received a mandatory 16 hours of Vietnam orientation training, utilizing the mock village and POW camp. As a result, the Vietnam War is also not a defining era in Fort Huachuca’s history.

With those periods of significance outlined above, the key to a property’s significance is the question: *What properties on Fort Huachuca were constructed or adapted to directly support the United States’ efforts in conducting the Indian Wars, WWI, WWII, or EPG?*

In addition to Criterion A, individual facilities might be significant under Criterion C for their architectural or engineering design, but Criterion C significance would need to be determined by Fort Huachuca on a case-by-case basis by locating additional architectural or engineering information. While the “Is it significant for Criterion C?” must be asked, the historic record has not shown that any of the range facilities or properties were designed by a noted architect or engineer, and that except for certain EPG facilities, the ranges are typical Army range training properties.

5.4.1 Specific themes

Synthesizing the information in the chronology of training activities has led to several historic themes per period of significance. These are outlined below. Properties related to specific themes may be significant for NRHP Criterion A during a particular period (it is important to note that the listed property types are likely to be significant, but each individual property needs to be evaluated for its integrity as well). Additionally, the omission of a property type in the following list does not automatically exclude it from potentially having significance under one of the thematic areas.

- Facility was constructed, underwent a major expansion, or was adapted and heavily used during 1878–1890, and was directly related to providing Indian War-specialized ground training:
 - Mounted Cavalry Training
 - Target Practice

- Facility was constructed, underwent a major expansion, or was adapted and heavily used during 1913–1931, and was directly related to providing 10th Cavalry/WWI-specialized warfare training:
 - Mounted Cavalry Training
 - Infantry Training
 - Target Practice
 - Weapons Training
 - Development of CMTTC and National Guard Training

- Facility was constructed, underwent a major expansion, or was adapted and heavily used during 1941–1945, and was directly related to providing 92nd and 93rd Infantry/WWII-specialized warfare training:
 - Infantry Training
 - Target Practice
 - Weapons Training

- Combat Training
 - Artillery Ranges
 - Maneuver Areas
 - Specialized Training (e.g., Demolition, Bridge Building, Urban Warfare, etc.)
- Facility was constructed, underwent a major expansion, or was adapted and heavily used during 1954–1967, and was directly related to providing EPG training:
 - Electronic Training
 - Specialized Training (In-country)

5.4.2 Example of identification and evaluation process

In order for a property at Fort Huachuca to meet NRHP significance Criterion A, it must be important under one or more of the themes established in this report. The property's importance must also have been achieved during that theme's period of significance. If the property cannot be tied to one of the themes, then the building, structure, or site does not have significance under Criterion A.

For example, in evaluating the Cavalry Firing Range, it must be shown to have been important under the theme Indian War-specialized ground training and the period (1878–1890). In this case, the property falls under the Target Practice property type determined to be significant under this theme. As the property is significant, then the aspects of integrity should be examined. The property should retain the aspects which are most important to conveying its significance, in this case targets, lanes, distance indicators, berms, etc. There would need to be enough elements left to make it clear the property was a firing range. A scatter of era-specific bullets may not be enough to provide the sense of a firing range. These elements would be analyzed in terms of the NRHP aspects of integrity to see if they retain sufficient integrity to convey the story of cavalry training. If the site is determined to have integrity, it is eligible as a landscape under Criterion A or as an archeological site under Criteria A and D.

5.5 Breakdown of typical evaluation process

The Cultural Resources staff and its contractors should use this report during construction efforts to recognize the major trends in training at Fort Huachuca to identify facilities that potentially correlate with any of the

four periods of significance (1878–1890, 1913–1931, 1941–1945, and 1954–1967).

The following steps will take future researchers through the process of determining NRHP eligibility for particular properties.

1. Determine if the property had an important role in one or more of the context thematic areas for training at Fort Huachuca.
2. If the property had no important role under these themes, then the property does not possess significance for training at Fort Huachuca.
3. If “yes” to theme(s), then determine if the specific property or properties under review were important under that theme(s). Sometimes there may be multiple properties in the same area of Fort Huachuca that may address different themes over different periods of time, but all could be brought together as one historic district. Is there a spatial link to the properties? Or are they dispersed, but all mission-related?
4. If “yes” for individual or groups of properties, then determine the importance of the property or properties to the training outlined in the Fort Huachuca historic context.
5. Identify the specific period(s) of significance (which may be more than one for multiple properties under one theme or may have multiple properties relating to more than one theme or may have one property with multiple themes and multiple periods of significance). A period of significance is the time span that the property had its most important uses for training at Fort Huachuca.
6. Determine if the property retains sufficient integrity to tell the story of its importance to its themes, and if it also retains character-defining features. Character-defining features are those elements of the property that are visual representations of historic significance. This determination is made by visual inspection, comparison with historical documents or photographs, and evaluation to measure individual aspects of integrity. The property, although originally a building or structure, might now qualify as an archaeological site, and significance under Criterion D will have to be evaluated.
7. SIGNIFICANCE + INTEGRITY = ELIGIBILITY

5.6 Postscript

For this project, ERDC-CERL personnel performed research at the National Archives and Records Administration in Washington, DC, and College Park, MD, and Riverside, CA; the Fort Huachuca Real Property Office and Museum; and the Corps of Engineers in Phoenix, AZ. They visited

most of the major training sites on the East Range, South Range, and West Range. This survey satisfies Section 110 of the NHPA of 1966 as amended in providing a historic context for training at Fort Huachuca from its inception into the post-Cold War era. In general, many of the training sites and properties from the founding of Fort Huachuca through the end of WWII have ceased to be standing buildings or structures and have devolved into potential archaeological sites; therefore, this report can be informative for establishing temporal associations, methods, and tactics if archival documentation is lacking in future archeological research on these sites.

References

[NOTE: Fort Huachuca report numbers in brackets after a reference indicate the number was assigned after 2010 when the numbering system was established.]

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Acronyms and Abbreviations

Term	Meaning
ADSID	Air Delivered Seismic Intrusion Detectors
AGF	Army Ground Forces
AIT	Advanced Individual Training
AMC	Army Material Command
AR	Automatic Rifle
ASF	Army Service Forces
ASM	Arizona State Museum
AT	Anti-tank
ATV	All-Terrain Vehicle
BLM	Bureau of Land Management
CCC	Civilian Conservation Corps
CLFX	Convoy Live Fire Exercise
CMTC	Citizens' Military Training Camps
CONARC	Continental Army Command
CPL	Corporal
CWA	Civil Works Administration
DOD	Department of Defense
DPW	Directorate of Public Works
EAUTC	Engineer Aviation Unit Training Center
ENRD	Environmental and Natural Resources Division
EPG	Electronic Proving Ground
FOB	Forward Operating Base
FTX	Field Training Exercise
HE	High Explosive
ITAM	Integrated Training Area Management
JITC	Joint Interoperability Test Command
LAAF	Libby Army Airfield
LAW	Light Anti-Tank Weapon
LCPL	Lance Corporal
LSA	Logistical Support Area
MARS	Military Affiliate Radio System
MCAS	Marine Corps Air Station
MI	Military Intelligence
MG	Machine Gun
MOS	Military Occupational Specialty
MOUT	Military Operations on Urban Terrain
MWSS	Marine Wing Support Squadron
NARA	National Archives and Records Administration
NETCOM	Network Enterprise Technology Command
NRHP	National Register of Historic Places
OR	Officers Reserve
POW	Prisoner of War
RL	Rocket Launcher
ROTC	Reserve Officer Training Corps
STANO	Surveillance, Target Acquisition, Night Observation

STRATCOM	Strategic Command
TIC	Tactical Interrogation Center
UAV	Unmanned Aerial Vehicle
UOS	Urban Operations Site
USMC	United States Marine Corps
VC	Viet Cong
WPA	Works Progress Administration
WWI	World War I
WWII	World War II

Conversion Factors

Multiply	By	To Obtain
acres	4,046.873	square meters
feet	0.3048	meters
inches	0.0254	meters
miles (U.S. statute)	1,609.347	meters
square feet	0.09290304	square meters
yards	0.9144	meters

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14. ABSTRACT Fort Huachuca Environmental and Natural Resources Division (ENRD) sent funds to ERDC-CERL to develop a historic context that assists Fort Huachuca personnel in identifying the likely history and provenance of numerous historic range features located across Fort Huachuca's training lands. The historic context will be used by cultural resources personnel to evaluate and manage the resources appropriately. Various historic training range features (e.g., structures, fragments, and items left over from previous activities) are located across the ranges of Fort Huachuca, representing its long and storied history. To help identify and catalog these features, ERDC-CERL conducted a field survey of the training ranges in 2016 in order to photograph the historic range features. Forty-one historic range features were identified. Researchers conducted archival research, literature reviews, and image analysis of historic and current maps and photographs to identify the 41 historic range features and place them within a chronology context of Fort Huachuca's training ranges. The report concludes with guidance on how to identify and associate sites and features within the overall historic training range chronology and evaluate them appropriately for significance and National Register of Historic Places (NRHP) eligibility.						
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