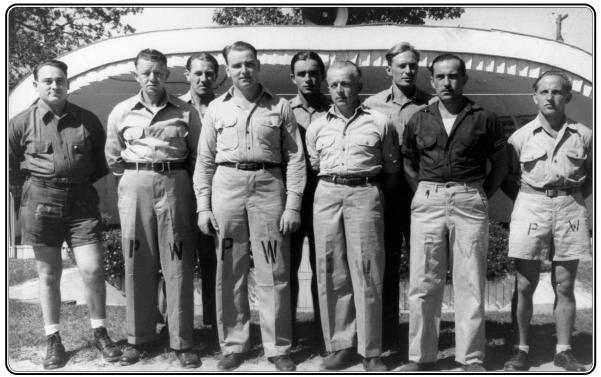
Intensive Survey and Test Excavations at 41BX1576



A World War II German POW Camp at Camp Bullis Military Reservation, Bexar County, Texas

> *by* Richard B. Mahoney

with a Historic Context by John J. Leffler

Prepared for: Performance Group, Inc. 17147 Dahlgren Road King George, Virginia 22485



Prepared by: Center for Archaeological Research The University of Texas at San Antonio Archaeological Survey Report, No. 348

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Cover Photo: Unidentified German POWs at Camp Bullis, Texas, in 1944 or 1945. Courtesy of the Fort Sam Houston Museum, San Antonio.

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Abstract

During November 2003, The Center for Archaeological Research (CAR) at The University of Texas at San Antonio conducted archaeological survey and National Register of Historic Places and State Archeeological Landmark eligibility testing of a former World War II German prisoner of war camp (41BX1576) at the United States Army Camp Bullis Military Reservation in Bexar County, Texas. The survey and testing efforts were accompanied by archival research and interviews with a former Camp Bullis German prisoner of war.

The field efforts within the 4.66-acre proposed area of development consisted of a 100 percent pedestrian survey, excavation of 30 shovel tests, and excavation of six 1-x-1-m test units. Five hundred seventy-six artifacts were recovered, revealing both prehistoric and historic components. Two hundred thirty-five of these artifacts, comprised primarily of wire nails, were discarded pursuant to Chapter 26.27(g)(2) of the Texas Administrative Code. The balance of the cultural material (341 artifacts) is permanently housed at the CAR curatorial facility. No significant cultural deposits or features were encountered during excavation.

Although foundations of camp support facilities still exist, given the lack of undisturbed features and the mixed nature of the historic and prehistoric components, CAR recommends that this site be considered ineligible for nomination to the National Register of Historic Places or for listing as a State Archeological Landmark. It is further recommended that the proposed development be allowed to proceed without additional cultural resources investigations.

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Acknowledgments

Several individuals have contributed to the successful completion of this project. The author would like to thank Peter Pagoulatos of Performance Group, Inc. for facilitating CAR throughout the project. Jerry Thompson of Performance Group, Inc. was also helpful with regard to scheduling the field efforts. The field crew consisted of Bruce Moses, Cindy Muñoz, Stephen "Waldo" Troell, and the author. Cindy Muñoz and Bryant Saner, under direction of Marybeth Tomka, CAR Laboratory Director, conducted laboratory processing and inventory. Anne Fox, CAR Staff Archaeologist, contributed valuable information on the local archaeology of the project area. John Leffler performed the archival research and wrote the Historic Context chapter of this report. Dr. Raymond Mauldin, CAR Assistant Director, provided technical advice. Bruce Moses and Richard Young, CAR draftsmen, produced the figures in this report. Johanna Hunziker, CAR editor, produced the final version this report. Dr. Steve A. Tomka served as Principal Investigator, and Drs. Tomka and Mauldin served as internal reviewers.

Chapter 1: Introduction

The Center for Archaeological Research (CAR) of The University of Texas at San Antonio was contracted by Performance Group, Inc. (PGI) of King George, Virginia, to assess via archival research and field investigations, including shovel test and test unit excavation, the National Register of Historic Places (NRHP) and State Archeological Landmark (SAL) eligibility status of a former World War II German prisoner of war (POW) camp at the United States Army Camp Bullis Military Reservation, Bexar County, Texas (Figure 1-1). The archaeological investigations were conducted during November 2003, with Dr. Steve A. Tomka, CAR Director, serving as Principal Investigator.

Project Overview

A 4.66-acre tract located in the southern portion of Camp Bullis is the proposed site of the construction of a chapel for use by military personnel (Figure 1-2). Currently unused, the tract comprises the majority of the former POW camp. The grounds are regularly mowed and several oak trees are present in the area surveyed (Figure 1-3). According to informal interviews of military staff, the project area has been intermittently used as a bivouac for training troops since the end of WWII.

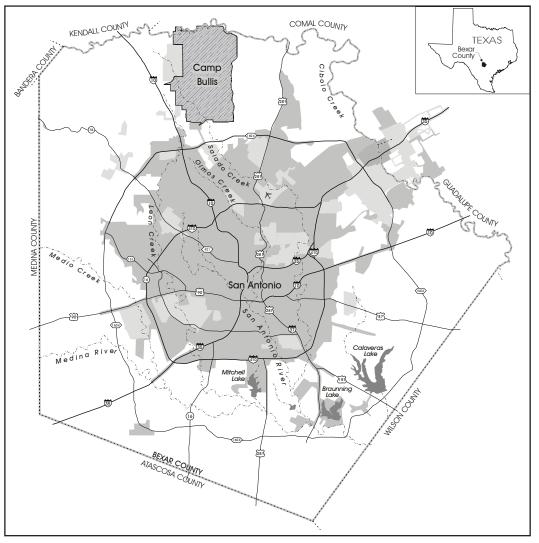


Figure 1-1. Location of Camp Bullis in northern Bexar County.

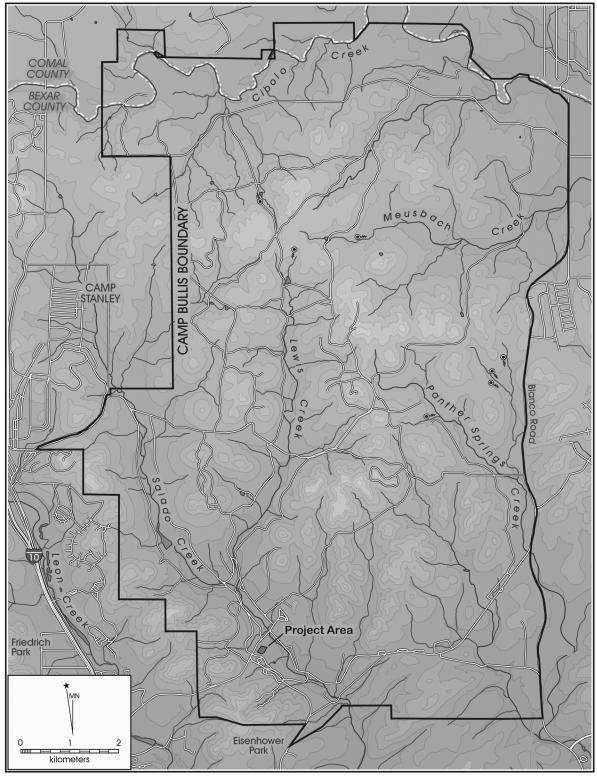


Figure 1-2. Location of project area in the southern portion of Camp Bullis.



Figure 1-3. Aerial photograph depicting the area surveyed within Camp Bullis.

Under CAR's contract with PGI, cultural resources clearance for the proposed development was sought through intensive archival and archaeological investigations. These efforts were performed to satisfy Army Regulation 200-4 (Cultural Resources Management), inclusive of requirements under Section 106 of the National Historic Preservation Act. As such, the Texas Historical Commission (THC) was the reviewing agency for this project.

Project Results

Excavation of 30 shovel tests and six 1-x-1-m test units revealed the presence of both historic and prehistoric deposits at the former POW camp, site 41BX1576. As per the parameters of the original scope of work, background research for the project included a review of previous investigations within the Camp Bullis facility. In addition, intensive archival research was conducted, including a series of interviews with Mr. Karl-Heinz Blumenthal, a former prisoner of war held at Camp Bullis. The results of these investigations have defined the historic and prehistoric components at 41BX1576 and have demonstrated the ineligibility of the site for nomination to the National Register of Historic Places or for designation as a State Archeological Landmark.

Report Layout

This report is comprised of seven chapters and one appendix. Following this introductory chapter, Chapter 2 presents the environmental setting for the project area and briefly summarizes paleoenvironmental conditions throughout the Holocene. The historic context of Camp Bullis is presented in Chapter 3. Chapter 4 reviews the archaeological background for the area, including the cultural setting, recorded archaeological sites, and previous archaeological investigations. Chapter 5 discusses the methodology employed for the survey and testing and presents the laboratory methods used in artifact processing. Chapter 6 details the results of the archaeological fieldwork. Chapter 7 summarizes the results of the current project and offers management recommendations. The single appendix contains a transcript of the interviews with a former prisoner of war interned at Camp Bullis.

Chapter 2: Environmental Setting

This chapter presents a brief overview of the physical environment of the project area. As the environment of Bexar County is quite diverse, a summary of the environment specific to the immediate project area is provided to furnish a background for understanding human adaptation to the Edwards Plateau vegetation region (Figure 2-1). The project area is located 320 m west of the right-descending bankline of Salado Creek. This now intermittent stream heads in Comal County, approximately 12 km north-northwest of the project area.

Weather, Flora, and Fauna

Bexar County has a subtropical climate, with warm winters and hot summers. The average winter temperature is 58° F (14° C) and the average summer temperature is 80° F (27° C). The growing season averages around 245 days a year in the northern half of the county and 275 days a year in the southern half of the county. The prevailing winds are light (9 mph) and predominantly flow from the southeast. The average annual precipitation is 31 inches (79 cm), with rainfall evenly distributed throughout the year (Taylor et al. 1991:118). Atlantic hurricanes occasionally affect the county, causing high winds and sporadic, heavy rainfall.

The project area lies along the southern boundary of the Balconian biotic region of Central Texas (Blair 1950), a region now characterized by oak woodlands, juniper breaks, and pastureland. Some researchers (cf. Hines 1993:6; Kibler and Scott 2000:13) interpret the modern vegetation as invasive, resultant from European modification to the landscape. These views hold that overgrazing and control of natural fires have allowed species such as juniper to thrive across the canyonlands. Historic accounts, however, appear to contradict this view. One of the earliest descriptions of

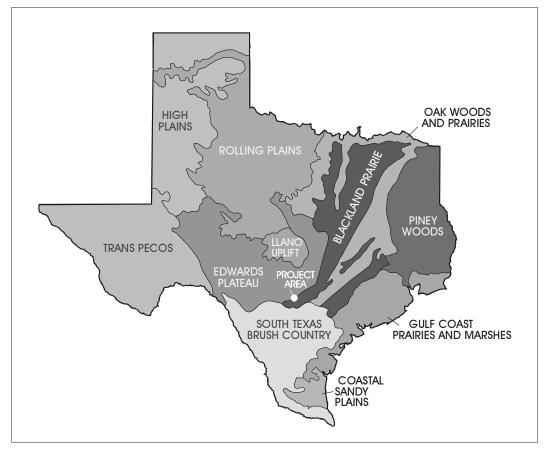


Figure 2-1. Project area in relation to the vegetation regions of Texas.

the Hill Country comes from Bernardo de Miranda, who in 1756 wrote of the density of juniper and oak across the canyonlands (Weniger 1984:67). Other early excursions across the Balcones Escarpment corroborate this account (e.g., Roemer 1983:117) with depictions of a wooded terrain, interspersed with savannas of tall, dense grasses; probably little bluestem (*Schizachyrium scoparium*). Weniger's (1984) review of over 3,000 pre-1860 historic surveys conducted on the Edwards Plateau indicates a landscape of predominantly woody vegetation.

Blair (1950) depicts the fauna of the region as diverse with numerous species of mammals, reptiles, and amphibians; although, the fauna are primarily a mixture of species from surrounding provinces. Neck (1986:35), however, identifies several species that are limited to the Balconian biotic province due to edaphic factors. These species include fauna primarily of ground burrowers, spring or karst fauna, and faunal species reliant on limited flora (Neck 1986:40). Several faunal species witnessed by the early European settlers have since been extirpated from the Balcones Escarpment. Ferdinand Roemer (1983:138-142) describes numerous faunal species encountered in the founding days of New Braunfels, including bear (Ursus americanus), alligator (Alligator mississipiensis), cougar (Felis concolor), ocelot (Felis pardalis), wolf (Lupus occidentalis), and bison (Bison bison).

Geology and Geomorphology

The geology of Bexar County consists primarily of Mesozoic formations beginning with the Cretaceous Trinity Group in the northwest and continuing with the Eocene Claiborne Group in the extreme southeast. Quaternary undivided deposits are present in the central portion of the county, underlying the southern part of the city of San Antonio.

The project area is situated atop the Lower Cretaceous Glen Rose Limestone formation in the southwestern portion of Camp Bullis. Clark (2003:7) defines the project area atop "Interval D" of the upper member of the Glen Rose formation as a generally impermeable, fossiliferous zone overlain by a more permeable zone comprised of dissolved evaporites. The eminence of springs afforded by contact with the impermeable upper portion of this zone and the overlying more permeable limestone would have made the area attractive to prehistoric inhabitants.

Soils within the project area are of the Tarrant-Brackett association and consist of shallow to very shallow soils atop limestone (Taylor et al. 1991). The soils are dark, calcareous, clayey soils with a clay to clay loam surface texture (Taylor et al. 1991:Map Sheet 14). Taylor and others (1991:30) describe the lithosol as susceptible to water erosion.

Paleoenvironment

Recent research, particularly during the past decade, has contributed significantly to understanding the paleoenvironment of the state (e.g., Bousman 1998; Brown 1998; Caran 1998; Frederick 1998; Fredlund et al. 1998; Kibler 1998; Ricklis and Cox 1998). Unfortunately, our understanding of the paleoclimate of Texas still contains gaps primarily due to the scarcity of deep, finely stratified, and well-dated deposits, as well as uneven history of work across the state (Stahle and Cleaveland 1995:51). Nowhere are these gaps more apparent than in the immediate study area. Consequently, this summary relies on information taken from a variety of studies located across the state. More detailed paleoenvironmental discussions can be found in Bousman 1998, Collins 1995, Hall and Valastro 1995, and Johnson and Goode 1994.

The late Pleistocene (ca. 18,000–10,000 BP) represents the earliest period for which there is a reliable paleoenvironmental reconstruction. The pollen spectra from Patschke Bog in Central Texas indicate a cool grassland environment during 17,000–15,500 BP (Camper 1991). From 15,500–10,500 BP, a decline in grass pollen is evident, suggesting a trend toward a warmer, drier environment by the end of the late Pleistocene (Camper 1991).

The early Holocene (ca. 10,000–8000 BP) is suggested to represent the beginning of a general warming and drying trend as evidenced by pollen samples from the Llano Estacado and dry caves of the Trans-Pecos region (Bryant and Shafer 1977:15–19). Fossil pollen counts from Ferndale Bog in southeastern Oklahoma indicate grasslands were predominant in East Texas around 11,000–8000 BP (Bryant and Holloway 1985). The gradual warming trend is supported by an increase in grass pollens at Boriack and Weakly bogs in Central Texas by 7500 BP (Bousman 1994:80).

The middle Holocene (ca. 8000–4000 BP) is marked by a generally arid climate indicated by the pollen spectra from Boriack Bog (Bousman 1994:80) and corroborated by stable carbon ratios from southern Bexar County (Nordt et al. 1994). Humphrey and Ferring (1994) discovered the same arid episode in north-central Texas through soil carbonate stable isotope studies. The opal phytolith records from the

Wilson-Leonard site in Central Texas (Fredlund 1994), and two sites on Colette Creek in South Texas (Robinson 1979:111), agree with increasing aridity in the middle Holocene, indicated by spreading grasslands around 4400 BP and ca. 4500 BP, respectively.

The late Holocene (4000–0 BP) represents a broad trend from the Altithermal exhibited during the middle Holocene to the more mesic modern climate. Although drying episodes are evidenced during the late Holocene at 1600–1500 BP and 500–400 BP in the Boriack and Weakly bog pollen spectra (Bousman 1994:80), Robinson (1982) suggests that the drying episodes may have been more mesic than modern conditions. Data from mean oxygen isotope values (¹⁸O) for freshwater mussel shells from north-central Texas (Brown 1998:164) agree with data from Ferndale Bog (Bryant and Holloway 1985), wherein a final warming trend occurs around 1500 BP with wetter conditions beginning ca. 700 BP.

The gathering of climatological data for the San Antonio area began in 1885 and included information on rainfall, temperature, and drought indices (NOAA 2004). The average annual rainfall for the San Antonio region from the period of 1885 through 1945 was 24.3 inches, with a standard deviation of 7.6 inches. During the period of the POW camp occupancy (1943–1945), the monthly high for precipitation was 4.3 inches in September 1944, and the monthly low was only trace amounts in July 1944. The monthly high temperature during 1943–1945 was 96.8°F in August 1943 and the monthly low during this period was 37.6°F in January 1943.

Chapter 3: Historic Context

by John J. Leffler

Camp Bullis, about seventeen miles northwest of San Antonio, is a 12,000-acre U.S. Army installation straddling Bexar and Comal counties in south-central Texas. Originally created in 1917 to prepare troops for war in Europe during World War I, it is now used primarily to train security police and medical personnel for field conditions. Just a stone's throw away from the base's headquarters building is an empty area about the size of two football fields. Sixty years ago, between late 1944 and early 1946, that space was occupied by perhaps a hundred German prisoners of war captured during the Second World War.

By the end of World War II, almost 500,000 enemy prisoners of war—mostly Germans, but also Italians, Japanese, and other nationalities—were interned in a vast network of prisoner of war (POW) compounds that stretched across the United States. For several reasons, including considerations relating to climate, topography, and local demand for agricultural labor, Texas was home to more POWs than any other state—about ten percent of the total POW population. Richard Walker's exhaustive study of World War II POW camps in Texas, published in 2001 as *The Lone Star and the Swastika*, identified 21 "base camps" and at least 48 "branch camps" in Texas. We know from several sources that the Bullis POW camp was a "branch" or satellite of a base camp located at Fort Sam Houston in San Antonio.

Very little is known about the Camp Bullis POW camp or the men who lived or worked there. It does not receive a single mention in Walker's (2001) book, for example, or in other books and scholarly publications on the subject. To date, almost nothing (aside from a few brief local newspaper articles and a paragraph in John Manguso's 1990 book, Camp Bullis: Admirably Suited to All Purposes of Military Training) has been written about the place. Few official records of it seem to exist. In January and early February 2004 Richard Boylan, an experienced archivist at the National Archives, looked for evidence of the Camp Bullis POW camp at the Archives—without results. Fortunately, Karl-Heinz Blumenthal, a former German soldier who was interned at the Camp Bullis POW camp for about a year and a half, survives to share his unique knowledge of the camp and its operations.

Given what is known about other World War II-era POW camps in Texas, the Bullis camp seems rather atypical. But its development, placement and use were shaped by larger

developments and trends, some of which stretch back many decades before World War II began.

Early Settlement and Development in the Camp Bullis Vicinity

Information about Native Americans in the Camp Bullis vicinity during the late seventeen and early eighteenth centuries, when the Spanish began to move into the general area, is limited. Some studies, however, indicate that the Payaya, a Coahuiltecan group, occupied the Bullis vicinity into the 1700s, when they began to be squeezed between intrusions by the Spanish and by other Native American groups such as the Jumanos, Cholme and Cibola. Though many of the Payaya apparently sought refuge at the Spanish Mission San Antonio de Valero (now known as the Alamo), disease and dislocation contributed to high attrition rates there; the last known reference to the Pavava, recorded at San Antonio de Valero, was in 1789. As the Payaya declined, Apaches, Tonkawa, and Comanches came to dominate the area, helping to deter Anglo settlement there for many years (Green 1996:237; Long 1996a:517; Scott 1999:9-10).

Though the threat of Indian attacks on settlers in Bexar and Comal counties persisted into the 1850s, Anglo-Americans began to lay claim to property in the vicinity of Camp Bullis in 1838. Actual settlement in the area began in the 1840s, encouraged by generous land grants distributed by the new Republic of Texas. Just southwest of the Rafael Herrerra grant, three 320-acre properties in the vicinity of what would later become the cantonment area of Camp Bullis (and eventually the POW camp) were surveyed in 1839, 1840, and 1841. Two of these grants, Madison James surveys 2 and 3 (Figure 3-1), which included the land on which the cantonment area would later be built, were surveyed by Madison James in 1839 and 1840, respectively. Both were patented by James in 1846. Another property in the area, the William M. McCullough grant, was surveyed in 1841 and patented in 1845 (Texas General Land Office 1841, 1846). All three of these grants were claimed and located using Toby script headrights purchased in New Orleans in 1837. It is very unlikely that either Madison James (from Cincinnati, Ohio) or William M. McCullough & Co. (of St. Louis, Missouri), the original owners of these properties, ever actually occupied them.

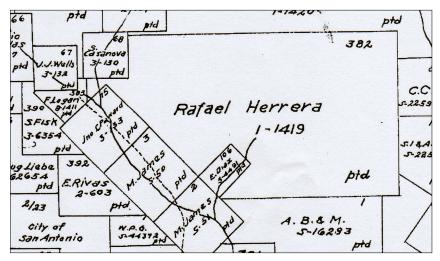


Figure 3-1. *Land grants in the southern Camp Bullis area*. Land Grant Map of Bexar County 1860, Texas General Land Office.

As documented in Martha Doty Freeman's study of the area, as well as other sources, settlement in the Camp Bullis vicinity began to grow during the late 1840s through the early 1860s (Freeman 1994a; Green 1996; Long 1996b). By 1850 the Pieper settlement (later called Bulverde) had been established on Cibolo Creek, and by 1856 a stage stop was being operated at Leon Springs, both within a few miles of the general area of present-day Camp Bullis (Haas 1996:825; Long 1996:263). Though relatively large cattle and sheep operations dominated the area's economy for much of the and 1860s and 1870s, by the 1880s the large ranches had already begun to be broken up into smaller stockfarms, often owned by families of German extraction. The new landholders increasing turned to corn and cotton cultivation, and often also raising cattle, sheep, and goats (Freeman 1994a).

In the immediate vicinity of the future site of the Camp Bullis cantonment area, Madison James's surveys 2 and 3 were sold by his heirs to Heinrich Kabelmacher in August 1873. Kabelmacher, a resident of Comal County, may never have resided on the James surveys, and in his 1888 will he bequeathed those properties to three of his children; his daughter Minna received title to 208 acres out of survey 3 and 13.6 acres out of survey 2. In 1895 she and her husband Ernst Abel sold these properties to Otto Scheel, her brother-in-law (Otto had married Minna's sister Alwina; Freeman 1994a: Appendix A). Otto Scheel established a small dairy with about 15 dairy cattle on his property, and the Scheel Ranch became something of a landmark in the area, noted on military maps of the vicinity (Figure 3-2). In 1917, as

part of the U.S. government's World War I expansion of its holdings in the area and the creation of Camp Bullis, the Scheel ranch was leased by the government, and the southern section of the ranch eventually came to contain Camp Bullis's cantonment area including the area that would later become the site of the World War II POW camp (Freeman 1994a: Appendix A; John Manguso, personal communication 2004).

Creation and Development of the Leon Springs Military Reservation and Camp Bullis, 1906–1942

After the 1870s, as the need for an active U.S. Army military presence to counteract Indian problems in the west subsided, the Army began to consolidate its garrison sites on the western frontier. In 1882 the Army's post at San Antonio, Texas was chosen to be one of the most important remaining outposts of the Army's presence in the west. Renamed Fort Sam Houston in 1890, the post did not possess the space necessary to conduct adequate artillery ranges; this problem became even more clear during the Spanish-American War of 1898, when Fort Sam Houston became the largest single U.S. Army post in the United States. Unfortunately, the post's location, near the center the city of San Antonio, did not provide for large-scale maneuvers or effective artillery exercises. There were numerous civilian complaints about the army's activities in the area (Freeman 1994b; Manguso 1990).

In 1906 and 1907 these problems were alleviated by the government's acquisition of more than 17,000 acres of land

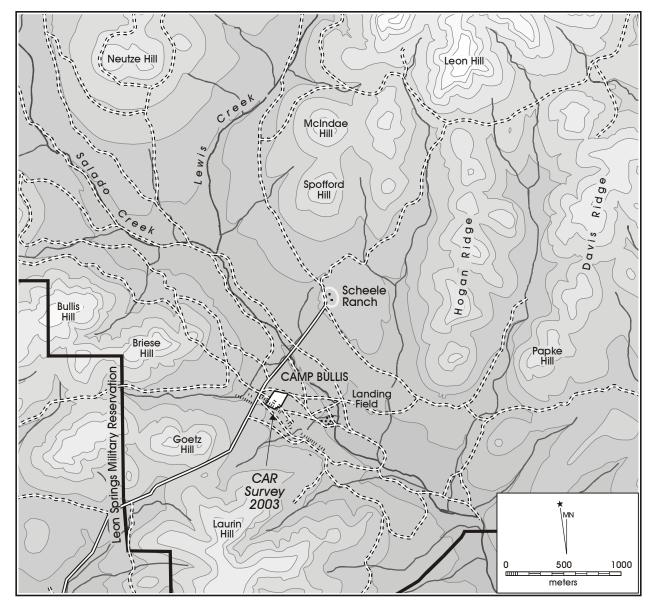


Figure 3-2. Detail from U.S. Army Corps of Engineers 1925 map, showing location of the Scheel (Scheele) Ranch.

about 20 miles northwest of San Antonio to allow for more effective infantry and artillery exercises. The Leon Springs Military Reservation was created to acquire adequate space for military maneuvers and artillery exercises. The area had never been very densely populated, and its rolling hills, good drainage and remote location seemed to make it an ideal location for military maneuvers. In 1916, during the Punitive Expedition against Pancho Villa and, especially after 1917 with the beginning of the First World War, the facilities at the Leon Springs Reservation were considerably enlarged and enhanced. In 1917, particularly, the reservation was significantly increased when 16,000 acres to the south of the original Leon Springs Reservation were leased to allow for additional maneuvering areas and firing ranges. Included in this new area was the old Scheel Ranch, which was leased from the Scheel family beginning in 1917 and then acquired by the government during condemnation proceedings in 1921 and 1922 (Figure 3-3; Freeman 1994a; Manguso 1990; U.S. Army Corps of Engineers 1925; U.S. Army Eighth Corps Area 1938).

After 1917, and especially between 1930 and 1942, the cantonment area, including the area immediately surrounding the eventual POW camp, was considerably altered and improved through the construction of several new roads, dozens of structures and a number of alterations to the landscape (Figure 3-4).

Though much of the work was completed by the Army Corps of Engineers and other military units, other work was done by workers connected to the Civilian Conservation Corps (CCC) and the Works Progress Administration (WPA). Between 1930 and 1933 alone more than a dozen mess halls and kitchens had been built in the area, along with a number of other support structures such as latrines, warehouses, an infirmary, a firehouse, and recreational facilities (Freeman 1994b; Manguso 1990).

About 1930, a massive swimming pool was built in the area, probably by soldiers attached to the 3rd Battalion, 23rd Infantry stationed at Fort Sam Houston (Figure 3-5). William Hall, who was assigned to the 3rd Battalion at the time, later remembered that it took the men "a couple of months" to dig out the creek bed. "Then we lined the pool with slabs of rock we gathered out in the woods," he said. "Concrete was poured over all of the rock, and then we plastered over it." For some reason, by the 1980s a legend had grown that the pool had been built by German prisoners of war held at Camp Bullis during World War II. The legend is still very much alive today. But while German POWs very probably repaired or improved the pool in 1944 or 1945, Hall's testimony—and a photograph of the pool taken in 1931 show that the pool was being used long before the war ever began (Blumenthal 2004a; Manguso 1990:51; Winingham 1982, n.d.; Dusty Bruns, personal communication 2004).

Despite the considerable construction activity which had taken place in Camp Bullis's cantonment area after 1917, a sizeable zone near the headquarters building had remained undeveloped as late as 1939, and probably as late as 1944. Sometime in late 1944, this would become the site of the prisoner of war camp that would be built at Camp Bullis.

World War II POW Camps in the United States and Texas

Although the United States had participated in a number of foreign wars before World War II, the nation had never been forced to confront the challenge of housing hundreds of thousands of enemy prisoners of war within the territory of the United States. German prisoners of war during World War I, for example, had never been transported to the United States in large numbers partly because the U.S. entered the war quite late in the game and, largely, because our British and French allies had insisted that they be allowed to control (and use) enemy POWs in Europe for labor and reconstruction projects (Choate 1989:40–41).

During the Second World War, however, France was occupied by the Nazis for most of the war and, especially after the successful Allied campaigns in Africa and Italy in 1942 and 1943, Britain alone could not possibly house and feed the hundreds of thousands of Germans and Italian prisoners that surrendered to Allied armies. Fewer than 500 enemy prisoners were held in the United States in the fall of 1942; but by the spring of 1944, according to one estimate, there were already over 100,000 German and Italian POWs held in camps in the United States. By July 1945, there were about 500 POW camps in the U.S., and they held more than 367,000 German, 49,000 Italian, and about 5,400 Japanese POWs (Choate 1989:43; Krammer 1979:3, 270–271).

Apparently little advance planning had been conducted to prepare for this sudden influx of foreign POWs, but beginning in September 1942 the Army's Provost Marshal General began to create a program of camp construction, including the adaptation of empty CCC camps, unused areas of existing military reservations, and even open fairgrounds, to meet the growing demands for POW accommodations (the famed Santa Anita Racetrack was at one time occupied by POWs). By design, most of the camps were placed in the South and the Southwest, and in rural, less-populated areas where the prisoners could be better isolated and controlled (Figure 3-6). In 1942 alone, over \$50 million was budgeted to create entirely new camps where necessary. Most of the camps would be placed in areas overseen by the Army's Fourth, Seventh, and Eighth Service commands, which covered 18 states including, but not limited to, Alabama, Arkansas, Colorado, Louisiana, Nebraska, Oklahoma, Texas, and Wyoming. By the end of 1942, the Provost Marshal General's office had already begun to create POW camps in several U.S. Army installations judged to have extra space to accommodate POWs; one of these was at Fort Sam Houston, in San Antonio, Texas (Krammer 1979:26-27).

The Provost Marshal General's office made every attempt to conform to the standards set by the Geneva Convention of 1929 for POW accommodations. Every POW camp was supposed to meet the same specifications set for any

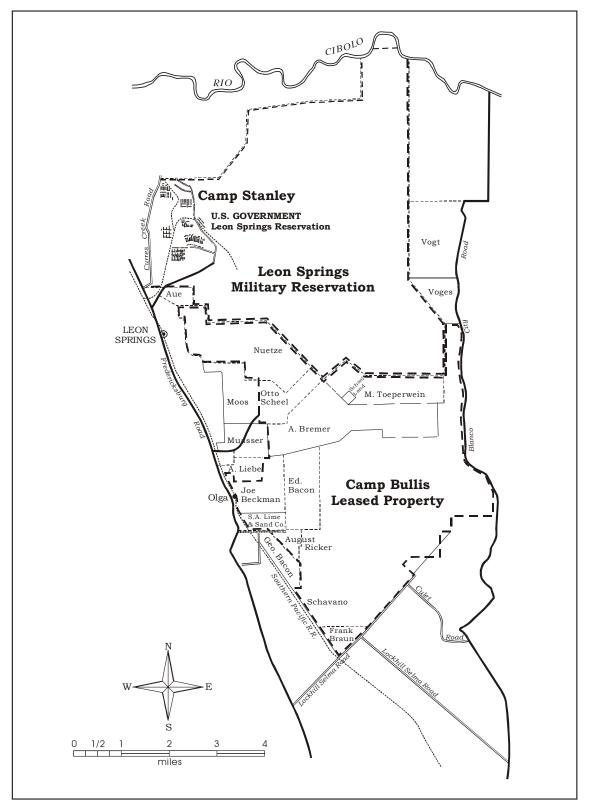


Figure 3-3. Map of Leon Springs Military Reservation and vicinity 1917–1919. Adapted from Manguso 1990: Map 4.

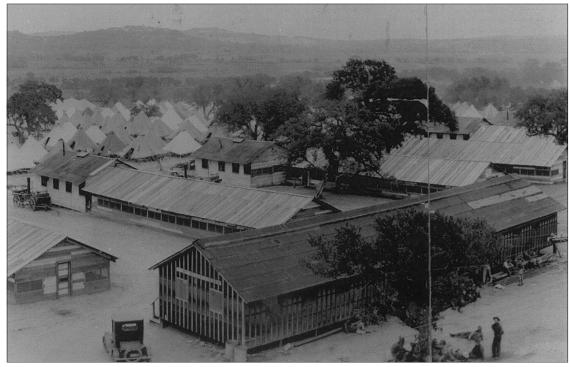


Figure 3-4. *The Camp Bullis headquarters building (in foreground) and other structures in the cantonment area, circa 1917.* Photo courtesy of the Fort Sam Houston Museum.



Figure 3-5. *The Camp Bullis swimming pool, built about 1930 and probably improved during World War II by German prisoners of war. In 2004 it was being used as a catfish pond.* Photo by John Leffler, 2004.

American military camp. Every base camp, for example, was supposed to include a hospital, a chapel, a post office, an inspection ground, and an athletic (or soccer) field, with additional buildings for showers and laundry tubs with unlimited hot and cold water (Krammer 1979:28-29). While many if not most base camps did contain all or most of these amenities-and while American POW camps were far superior to those provided to American POWs at most German and Japanese POW camps-these ideal standards were not always met in the many POW "branch camps" eventually established in the U.S., such as the Camp Bullis POW camp. Still, the accommodations and food most Axis prisoners experienced while in U.S. custody were more healthy and comfortable than some American civilians lived with at the time, and the camps were sometimes called the "Fritz Ritz."

On the whole, America's experience with its Axis POWs during World War II was very successful. Not a single episode of sabotage or meaningful espionage by an escaped POW occurred in the United States during the entire war. Escapes were few and almost always short-lived, and relatively few instances of violent crimes by escaped POWs were reported. The vast majority of the prisoners acknowledged that they were treated well and (as the system's administrators had hoped) returned to their homes after the war with good reports about the United States and the American people. The POWs contributed many millions of man-hours of labor to the American economy, particularly the agricultural sector (Choate 1989; Fincher 1995; Krammer 1979; Walker 2001).

About ten percent of the Axis prisoners of war held in the United States during World War II were held in camps in Texas—by May 1945, there were more than 49,000 POWs in camps scattered across the Lone Star State. In virtually every case, the camps were located so that the prisoners' labor could be used to improve military installations or to cultivate and harvest cotton, rice or other crops, to clear lands or to work on timber operations. The prisoners' environments and experiences, however, varied considerably and changed from time to time as prisoners were moved around.



Figure 3-6. Location of major POW Camps in the United States during World War II. Adapted from Krammer 1979.

Most POWs in Texas were held, at least for a while, in the military and non-military "base camps" which could accommodate thousands of prisoners at a time. "Nonmilitary" base camps were operated by the U.S. Army, but they were built away from existing military installations. In Texas there were six large base camps of this type (in Huntsville, Mexia, McLean, Hereford, Hearne, and Brady) and each could hold between 3,000 and 6,000 prisoners (Walker 2001:1-10). "Military" base camps, on the other hand, were placed at or in existing U.S. military bases, such as Camp Maxey (near Paris), Camp Swift (Bastrop), Camp Bowie (Brownwood), or Camp Hulen (Palacios). These varied greatly in size; Camp Hulen's POW camp, for example, could hold only 250 prisoners at a time while Camp Maxey's, the largest POW camp in Texas, held almost 7,500 prisoners by April 1945. Altogether there were 15 "military" base camps in Texas (Figure 3-7; Walker 2001:11-18). The military base camp that was established at Fort Sam Houston was, as we shall see, in several ways a special case.

Operating in cooperation with the base camps in Texas were two types of "branch" or "satellite" camps-military and non-military. It was common for prisoners to be moved back and forth between camps. Military branch camps were established at military installations and were intended to provide labor for improvements or to help with general operations; non-military branch camps provided labor for civilian pursuits, such as agricultural labor, lumber mills, canning factories, and canal construction. (The Geneva Convention prohibited using prisoners of war for industries directly related to war production.) Richard Walker's (2001) intensive study of World War II POW camps in Texas identified at least 48 branch camps in the state, including 16 military branch camps (Figure 3-8). Depending upon its purpose, a branch camp could employ a few prisoners for days or weeks for a transitory task or remain in place for months or even years (Walker 2001:vii, 3, 32-37).

The POW camp established at Camp Bullis in 1944 (not identified by Walker) seems to have been a military branch camp of the military base camp established earlier at Fort Sam Houston. Arnold Krammer's studies of World War II POW camps in Texas and the United States (Krammer 1977, 1979) show that the Fort Sam Houston camp, created in 1942, was one of the first established in the United States. Walker, who studied the Texas camps more closely than Krammer did, found that the Fort Sam Houston camp was unusual in several respects. The Fort Sam Houston camp, first established in March 1942 with the capacity to hold 900 prisoners, was originally used to intern suspected enemy aliens, not prisoners of war. This continued to be its principal mission until the fall of 1943, when it was designated as a temporary prisoner of war-camp and enlarged to hold 1,000 prisoners (Figure 3-9). The camp was not designated as a permanent POW camp until January 1944 (Walker 2001:25).

These circumstances may help to explain why, unlike most permanent base camps, the Fort Sam Houston POW camp was a "tent camp." The prisoners lived in the facility's 170 six-man tents (instead of barracks) which were heated by coal-fired stoves (Figure 3-10). Eventually, Walker writes, "the prisoners themselves added certain amenities to the otherwise drab appearance of the camp by planting a vegetable garden, a flower garden and cactus garden, and palm trees around each of the tents." They also eventually enjoyed a canteen, a recreational center, a beer garden, a theater and an "extremely attractive library furnished with modern ranch furniture, fluorescent lighting, tables and floor lamps, with decorative murals on the walls" (Walker 2001: 25; U.S. Army Office of the Provost Marshal General 1945).

Since the vast majority of the POWs held in the United States and in Texas were Germans, those responsible for administering the POW camps were often challenged by unrepentant Nazi prisoners who did what they could to control the camps and the men in them. The German prisoners were a mixed lot, to be sure; by no means were they all fanatical National Socialists, and more than a few could even be considered to be fervently anti-fascists. According to studies conducted in the camps late in the war, perhaps thirty percent of the prisoners were "deeply sympathetic" to the Nazi cause. Article 43 of the Geneva Convention guaranteed prisoners the right to name their own representatives. For a number of reasons-through appeals to nationalism and discipline, through their own tough determination, and sometimes through brutal intimidation and violence-pro-Nazi elements dominated many of the POW camps in the United States during the war. Often American commanders found it convenient-and more conducive to good discipline and order-to look the other way (Krammer 1979:149-175).

Pro-Nazi activity was a problem at several Texas POW camps, including Fort Sam Houston. In 1945 a group of pro-Nazi non-commissioned officers at the Fort Sam Houston camp clashed with an anti-Nazi group there; when one of the anti-Nazis learned that his family back in Germany was being threatened because of his political views, he committed suicide (Walker 2001:109). The American commander of the Fort Sam Houston camp refused to allow

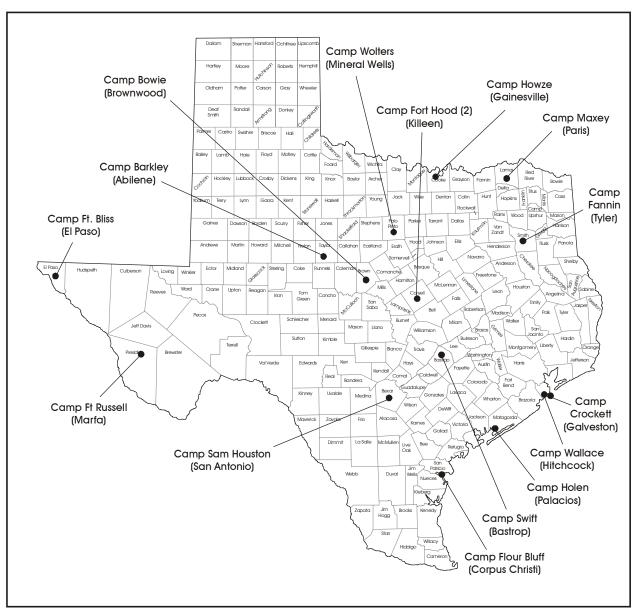


Figure 3-7. Military POW base camps in Texas. Adapted from Walker 2001.

the POWs to publish their own magazine or newspaper (as POWs in many other camps were allowed to do). According to a January 1945 inspection report, the commander felt that "the strong Nazi element in the camp would use this opportunity to promulgate their philosophy of life" (U.S. Army Office of the Provost Marshal General 1945).

The Camp Bullis POW Camp

Prisoners from the Fort Sam Houston POW camp were regularly sent to daily work assignments at Camp Bullis as early as the summer of 1944, and sometime later that year a small POW installation was built at Camp Bullis that could accommodate perhaps 80 prisoners (Figure 3-11). As noted earlier, very little is known about the Bullis POW camp.

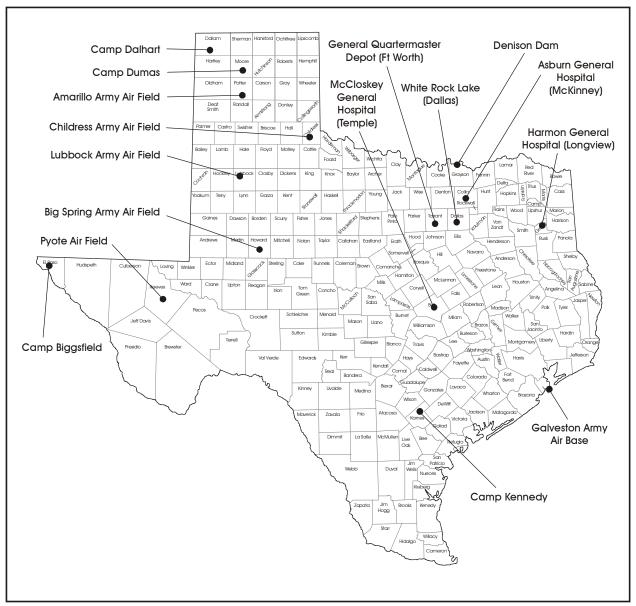


Figure 3-8. Military POW branch camps and non-agricultural branch camps. Adapted from Walker 2001.



Figure 3-9. Street scene at the prisoner of war camp at Dodds Field, Fort Sam Houston, during construction in 1943. Completed tent pads can be seen on the right. Photo courtesy of Fort Sam Houston Museum.



Figure 3-10. POWs and their tents at Fort Sam Houston, year unknown. Note the stovepipes at the tops of the tents. U.S. Army photo reproduced in Krammer 1979.

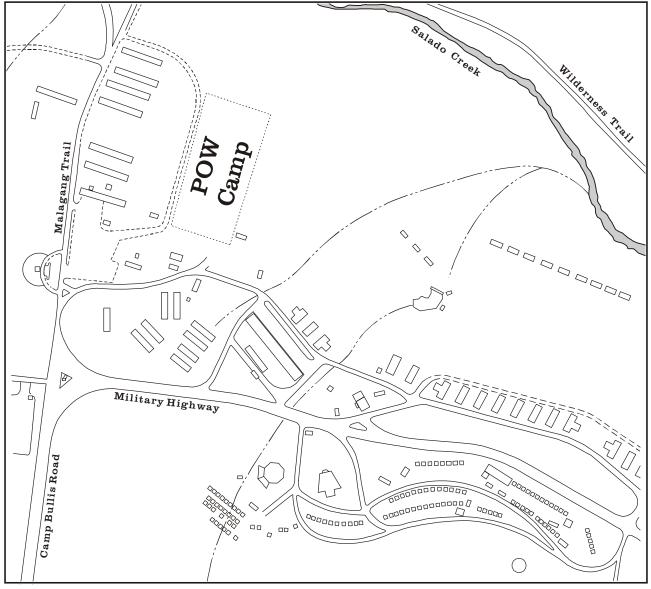


Figure 3-11. Location of the POW camp at Camp Bullis ca. 1944. Adapted from Manguso 1990: Map 10.

Few official records of it seem to exist. The Bullis camp was clearly associated with the Fort Sam Houston camp, and using the terminology adopted by Walker, it seems to have been a "military branch camp." But even this may be too grandiose a term to describe the Bullis camp's actual status. A 1946 newspaper article correctly identified two of Fort Sam Houston's actual "branch camps," but referred to the Bullis installation simply as "a compound under the main camp" (San Antonio Light 1946). Almost everything we know about the camp is derived from two 1944 maps, some not always reliable local traditions, a few newspaper clippings, and the memories of Karl-Heinz Blumenthal, a former German soldier who was interned at the camp from late 1944 to early 1946. Nevertheless, working with these sources a rough description of the camp and its operations can be sketched out.

Karl-Heinz Blumenthal was about 20 years old in the spring of 1944 when he was transferred from the large POW base camp at Huntsville to the Fort Sam Houston POW camp (Figure 3-12). At about that time, he remembers 10 to 15 POWs were transported every morning (at 4:30 a.m.) from the Fort Sam Houston camp to Camp Bulllis to work in the kitchens. Sometime later that year, he says, "a POW camp was built at Bullis and 50 to 80 POWs [were sent there]. Some came from Fort Sam Houston and [some] from other camps in Texas." Blumenthal was among the first to live at the Camp Bullis POW camp (Blumenthal 2004a, 2004b; see Appendix A of this report for the full transcript of interviews with Blumenthal).

According to existing maps of the camp (and Blumenthal's recollections) it was a small and simple installation enclosed by two parallel barbed-wire fence lines six feet apart and eight feet high. Its primary facilities were a mess hall (T-118), a recreation/canteen building (T-116), a dispensary (T-119), and a shower/latrine building (Figure 3-13). As Dusty Bruns observed in his 1992 description of the historical site (U.S. Army Corps of Engineers 1992), the latrine must have been located in T-120; in a 2004 interview, Blumenthal emphatically insisted that the latrine was inside the wire fences, and not outside of them as this map of the camp suggests. The prisoners lived in lines of tents. In a 2004 interview, Blumenthal remembered:

In the camp, the kitchen, recreation barracks, washshower and toilet were wood-frame buildings. On the outside they had a dark gray or even a black look. ... The Rec[reation] barrack was roughly 30 feet by 20 feet and was about 2 feet above the ground. Inside we had our PX store. Besides benches and tables there was also a ping pong table in there. Our sleeping quarters were gray or khaki-colored tents with a wooden floor and a wood burner heating stove, same as the GIs had. Four to six people occupied each tent. [For] the sidewalk[s] we scraped the grass and weeds off with a pick and shovel and lined it out with fieldstones, picked up from our sport (soccer) field after the U.S. Army Engineers had leveled it out. (Today it is still used by US soldiers.)

How many POWs lived in the camp? If available maps can be relied upon, the camp could have accommodated more than 250 POWs. But in his 2004 interviews, Blumenthal insisted that the camp never held more than about a hundred POWs, and expressed his belief that the maps exaggerated the number of tents in the camp. Was the map shown in Figure 3-13 just a plan for the POW camp (that is, not a map of an actually existing camp) that was later partially

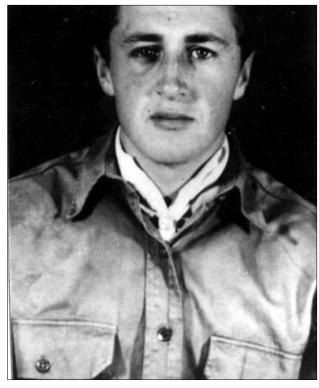


Figure 3-12. Photo of Karl-Heinz Blumenthal, taken in 1944 at the POW camp at Fort Sam Houston. Blumenthal was about 20 years old at the time. Courtesy Karl-Heinz Blumenthal.

and imperfectly carried out? Probably so. This problem appears again when we contemplate Figure 3-14. That map, probably drawn sometime in 1944 but after the map shown in Figure 3-13, seems to be a plan for reorganizing and expanding the camp and the surrounding area. Given the paucity of other available evidence, it is unclear as to what extent it was accurate and actually implemented.

Consonant with the regimen of a military branch camp, the prisoners at the Camp Bullis camp worked only on projects that maintained or improved the military installation surrounding them. According to local tradition they built stone walls (some of which still exist today; Figure 3-15) and worked in kitchens and on grounds maintenance (Frakes 1979; San Antonio Express 1984; Schramm 1984; Dusty Bruns, personal communication 2004). According to Blumenthal, they also worked on roads, replaced electrical light posts, drove trucks (at least after the war was over) and performed a number of other tasks. Although the persistent legend that the POWs built the camp's swimming pool is unfounded (as previously discussed), the POWs may

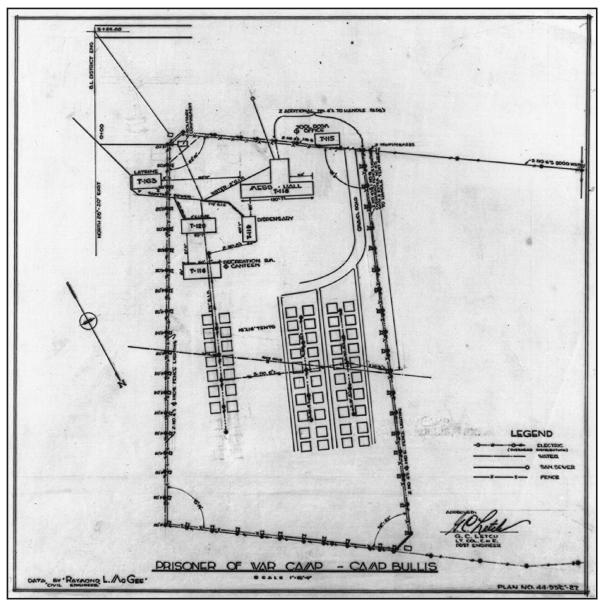


Figure 3-13. Site plan of POW camp at Camp Bullis, 1944. U.S. Army, Fort Sam Houston Office of the Post Engineer (1944a).

have repaired or refurbished the pool. Most of the prisoners were assigned to more or less permanent jobs, but others, whom Blumenthal called "floaters," were assigned tasks on a day-by-day basis. The usual work day was about seven hours, according to Blumenthal (Blumenthal 2004a, 2004b).

Security surrounding the prisoners in and out of the camp seems to have been relatively relaxed, even during the war. Although Blumenthal remembers that the perimeter of the camp was lit up at night, he does not recall any guard towers, and no towers or guard shacks are shown on the maps of the camp. Prisoners were allowed to possess scissors and other barbering tools, and could drink beer in their tents (Blumenthal 2004a). According to local tradition, soldiers guarding prisoners would sometimes take them by Specht's Store, a local saloon. Augie Noll, a local resident for many years, remembered that "oldtimers" had told him that during the war "German POWs, the German farmers and the soldiers would all sit around [at the saloon] and drink beer" (Anonymous n.d.). After the war was over, this loose security apparently grew even more relaxed. Blumenthal was issued a driver's license at Camp Bullis in January 1946 (Figures

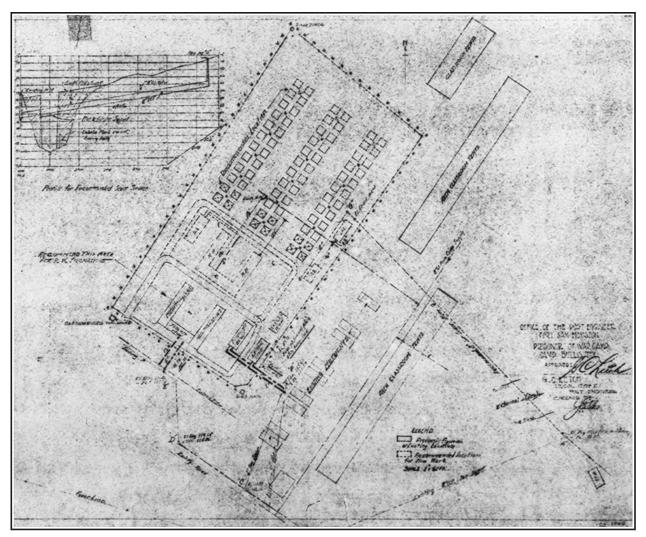


Figure 3-14. Later map of site plan of POW camp at Camp Bullis, 1944. U.S. Army, Fort Sam Houston, Office of the Post Engineer (1944b).

3-16 and 3-17), and at one point an American GI friend of his took him on an enjoyable but illegal trip to San Antonio (Blumenthal 2004b).

In any case, discipline does not seem to have been a problem at the camp. According to Blumenthal, nobody ever tried to escape from the place, and he could remember only one case of an even fairly serious infraction of discipline. It involved a fight between two prisoners over a job assignment, and resulted in one of the prisoners being transferred back to the Fort Sam Houston POW camp. When asked if there were any members of the Nazi Party at the Bullis camp and, if so, whether they had any influence there, Blumenthal simply replied, "I don't think we had any loud-speaking political persons in our camp" (Blumenthal 2004a). According to Blumenthal, the Germans at the Bullis POW camp had two tents that served as a sort of loose headquarters for the POWs. A quartermaster worked out of one of the tents; the other was used by their "company chief" or "camp officer," who, he wrote, was "a well-liked sergeant major who we respected very much." All of the POWs at Bullis, he said, were enlisted men (Blumenthal 2004a).

When the POWs at the Bullis camp weren't working, they found many different ways to occupy their time, according to Blumenthal. Sports, especially soccer, European handball, Faustball (volleyball), and table tennis were particularly popular activities, and on weekends "many GIs" would show up to watch the POW sports tournaments. Some prisoners played guitars or harmonicas, and the POWs would often



Figure 3-15. Markings, traditionally ascribed to POWs, on a wall about 30 yards northwest of former Camp Bullis POW camp. The date "12-12-44" is easily legible on the top of the wall. Above the numbers are the raised letters "POW." Photo by John Leffler, 2004.

get together for "singalongs" inside or outside the recreation barracks. Chess and card-playing tournaments were also held in the recreation barracks. A few prisoners were lucky enough to scrounge radios, and were apparently allowed to listen to local programming. Non-alcoholic beer could be bought at the canteen and consumed there or in the tents. A couple of POWs not satisfied with that weak brew managed to build a still inside a tent heating stove. "Do not ask me how it tasted," Blumenthal wrote. "Never had tried it." Once or twice a month religious services would be held at the camp, presided over by Pastor Dunnam from the Fort Sam Houston POW camp (Blumenthal 2004a).

At roll call on the morning of May 8, 1945, Blumenthal recalls the POWs were officially told that Germany had surrendered. "The end of the war was very emotional to all of us," he recalled:

Are we going to go home? Are our relatives still alive? Do you still have a home to go home to??? Those had been the most asked questions by then. ... Many GIs came up to us and said "Now you can go back home" (Blumenthal 2004a). But of course the war was not quite over yet. Japan did not surrender until August that year, and it would be many months until the POWs were all repatriated. Blumenthal remembered that although movies were not normally shown at the Bullis camp, after Germany surrendered

[W]e had one documentary film shown to all of us about the concentration camps. It was shown at an outside theater. It was very depressing for all of us to learn at this point and we could not understand how things like that could happen. Each of us felt very bad and sorry about that" (Blumenthal 2004a).

Karl-Heinz Blumenthal left Camp Bullis for New Jersey en route to Germany in January 1946; the Camp Bullis POW installation was still open when he left. It's not clear when it was closed down. The Fort Sam Houston POW camp finally let its last live prisoners go on June 16, 1946. A few remained behind, in graves carved with swastikas (Blumenthal 2004b; Parker 1985; San Antonio Light 1946; Sharpe 1985).

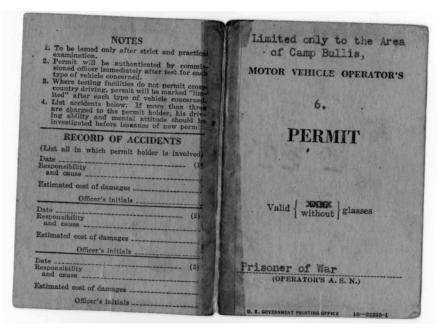


Figure 3-16. The cover of Karl-Heinz Blumenthal's POW driver's license, issued to him at Camp Bullis in January 1946. Courtesy of Karl-Heinz Blumenthal.

(1	2 January, 19.46. Date of issue)
(0	Operator's signature)
I CERTIFY THAT Karl-Hein	z Blumenthal POW (Name and rank)
has demonstrated proficiency in the types of vehicles listed below	driving (par. 16, A/R 850-15) v as per signed authentication.
TYPE VEHICLE	AUTHENTICATION (Signed by a commissioned officer)
Gar hulftrack Cri pessenger t	
Tank, heavy	
Tank, light	
Tank, medium	
Tractor	
Truck-tractor (semitrailer)	
Trucks, cargo, 1/4-3/4-ton	Lapl. Connor Byt
Trucks, cargo, 11/2-21/2-ton	Lapt. Connor By It
Trucks, cargo, 4-ton and larger	the state of the s
Trucks, amphibian (all)	
Vehicle, wheeled, combat	
the second	The second s

Figure 3-17. *Inside page of Blumenthal's Camp Bullis POW driver's license*. Courtesy of Karl-Heinz Blumenthal.

Chapter 4: Archaeological Background

This chapter briefly discusses the archaeological background of the project area. A brief overview of the prehistoric cultural context of the Balcones Canyonlands of the Edwards Plateau relative to the project area and a synopsis of previous archaeological investigations conducted in Camp Bullis are presented in this chapter. These summaries are based, in part, on more comprehensive reviews of cultural chronologies and archaeological investigations found in Johnson and Goode (1994) and Collins (1995).

To summarize the range of previously recorded sites in Camp Bullis, the Texas Archeological Sites Atlas was consulted in December 2003 (Texas Historical Commission [THC] 2003). At that time, a total of 237 archaeological sites had been recorded within the camp. Conversely, a review of all available cultural resource reports for the military reservation indicates that at least 320 sites have been recorded within Camp Bullis.

Cultural Setting

The Camp Bullis area falls along the southern border of the Central Texas archaeological region (Collins 1995; Turner and Hester 1993). Given its proximity to South Texas, brief mention of the chronological trends in South Texas will also be made. The major cultural periods defined for this region are briefly described below. Additional information can be found in Johnson and Goode (1994) and Collins (1995). Comparative cultural chronologies for Central and South Texas are presented in Figure 4-1.

Paleoindian

The Paleoindian period marks the first appearance of humans in the New World, although the exact date of their arrival is unclear. Traditionally, the Paleoindian period is first marked by the appearance of Clovis points in North America, which are then replaced by Folsom points. The later Paleoindian period (10,000–8000 BP) is characterized by a variety of dart point types, including Plainview, Dalton, Scottsbluff, and Golondrina (Black 1989a, 1989b). Despite changes in these various projectile point types through time, their geographic range is widespread.

Artifacts, particularly projectile points, are often only isolated finds, though camp, lithic procurement, kill, cache,

ritual and burial sites are known (Collins 1995). Early Paleoindian peoples have generally been conceptualized as hunter-gatherers ranging over wide areas in pursuit of now extinct megafauna, such as mammoth and *Bison antiquus*. This view of Paleoindian peoples, much like the dating of this period, is now being reassessed. While certainly exploiting late Pleistocene megafauna, these peoples are perhaps better characterized as more generalized huntergatherers. Certainly, by the later Paleoindian time frame, after the extinction of these megafauna, the hunting aspect of subsistence shifted to exploitation of large herbivores like deer and *Bison bison*.

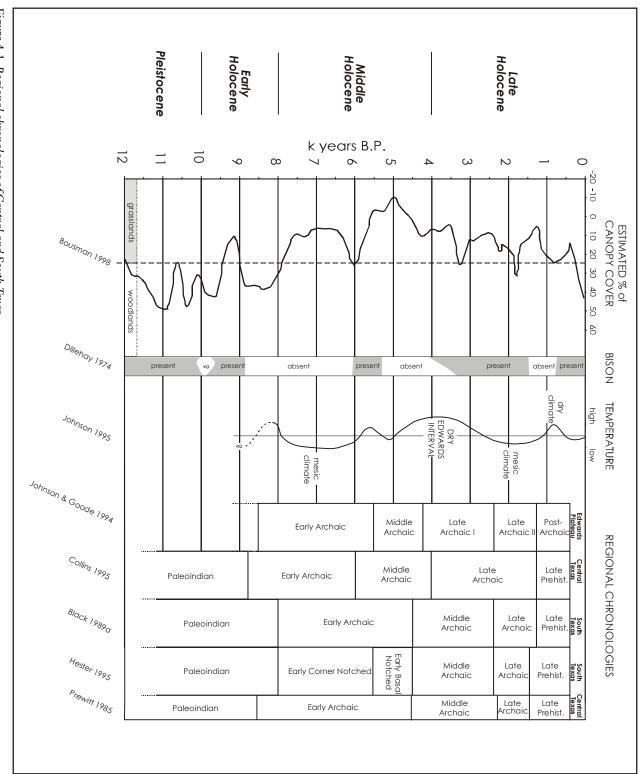
Archaic

The Archaic period can be broadly defined by changes in projectile point types, an increase in the number and types of sites (including burned rock hearths and middens), and by an increase in the variety of point styles, with many having more limited geographical distribution (Prewitt 1995). While a number of finer subdivisions exist for the Archaic (e.g., Prewitt 1981; Weir 1976), this period can be broadly divided into Early, Middle, and Late periods.

Early Archaic

Collins (1995:383) dates the Early Archaic from 8800 to 6000 BP in Central Texas with three divisions based on projectile point types. In contrast, Hester (1995:436-438) identifies the Early Archaic with Early Corner Notched and Early Basal Notched dart points roughly dating between 7950 and 4450 BP. The Early Archaic on the Southern Great Plains is approximated at 8000–5000 BP (Hofman 1989), although Johnson and Holliday (1986) offer more finegrained dates of 8500-6400 BP for the Llano Estacado, based on data from the Lubbock Lake site. The extinction of large herds of megafauna and the changing climate at the beginning of the Holocene appears to have stimulated a behavioral change by the prehistoric inhabitants of Texas. While the basic hunter-gatherer adaptation probably remained intact, an economic shift away from big game hunting was necessary. In general, more intensive exploitation of local resources in Central Texas, such as deer, antelope, fish, and plant bulbs is indicated by greater densities of ground stone artifacts, fire-cracked rock cooking features, and more specialized tools such as Clear Fork gouges and Guadalupe bifaces (Turner and Hester 1993:246, 256). Weir (1976) speculates that Early Archaic groups were

Chapter 4: Archaeological Background



small and highly mobile, an inference based on the fact that Early Archaic sites are thinly distributed and diagnostic projectile point types are seen across a wide area, including most of Texas and northern Mexico. Hurt (1980) suggests that the decline in the number of bison on the plains forced the inhabitants to broaden their diets to pursue plants and animals which would produce the same amount of calories and protein with the same or slightly more effort expended. Story (1985) suggests that population densities were low during this period, and that groups consisted of related individuals in small bands with "few constraints on their mobility" (Story 1985:39). Their economy was based on the exploitation of a wide range of resources, especially such year-round resources as prickly pear and lechuguilla, as well as rodents, rabbits, and deer (Story 1985:38).

Middle Archaic

Collins (1995:383) defines this intermediate interval of the Archaic as lasting from about 6000 to 4000 BP in Central Texas, but Hester (1995:438-441) suggests that the period between 4450 and 2350 BP more correctly reflects the Middle Archaic in South Texas. The Southern Plains Middle Archaic complex, as derived from changes in climate and subsistence, is recognized generally as the period from 5000-3000 BP (Hofman 1989:45-47), and as 6400-4500 BP on the Llano Estacado (Johnson and Holliday 1986:46). The Middle Archaic appears to have been a time of increased population, based on the large number of sites from this period in South and Central Texas (Story 1985:40; Weir 1976:125, 128). The reasons for this increase are not known, but the amelioration of a very dry period (Altithermal) during the Early Archaic is often seen as the prime mover (Story 1985:40). A wide variation in projectile point styles at the Jonas Terrace (41ME29) site suggests "a time of ethnic and cultural variety, as well as group movement and immigration" (Johnson 1995:285). Hurt (1980) posits that the quantity of diversified game animals on the Southern Great Plains decreased, and thus led to an intensified, narrower diet. On the South Texas Plain, exploitation of widely scattered, year-round resources such as prickly pear continued (Campbell and Campbell 1981:13-15), as did hunting deer and rabbit. However, a shift to concentrated, seasonal nut harvests in the riverine environments of the Balcones Escarpment seems to have occurred (Black 1989a, 1989b). Weir (1976) believes that an expansion of oak on the Edwards Plateau and Balcones Escarpment led to intensive plant gathering and acorn processing. He also believes that the widely scattered bands prevalent in the Early Archaic now began to coalesce, at least during the acorn-gathering season, into larger groups who shared the intensive work of gathering and processing the acorn harvest

(Weir 1976:126). Some researchers believe burned rock middens are a result of this endeavor (Creel 1986; Prewitt 1991; Weir 1976). Other investigators doubt this conclusion and suggest that an increase in the utilization of rock oven cooking technology did not occur until Late Prehistoric times, and that such features were multi-purpose cooking facilities (Black et al. 1997; Goode 1991; Mauldin and Nickels 2003).

Late Archaic

Collins (1995:384) dates the final interval of the Archaic in Central Texas to approximately 4000-800 BP. Hester believes the Late Archaic in South Texas may be better defined as 2350-1250 BP, while Hofman's (1989:45) synthesis of these data places the Late Archaic on the Southern Plains at 3000-2000 BP, and possibly later. Johnson and Holliday (1986:46) specify 4500-2000 BP as the Late Archaic period on the Llano Estacado. Some researchers believe populations increased throughout the Late Archaic (Prewitt 1985), while others feel populations remained the same or fell during this period (Black 1989a). Prewitt (1981:80-81) asserts that the accumulation of burned rock middens nearly ceased during the course of this period; however, excavations at a number of sites (e.g., Houk and Lohse 1993:193–248; Johnson 1995) provide evidence that large cooking features up to 15 m in diameter were in use. Subsistence is assumed to have become less specialized during the Late Archaic (Black 1989a:30). Hurt (1980) asserts that bison began returning to the Southern Great Plains area, and there was an increase in the exploitation of bison during the Late Archaic. However, by about 1450 BP, bison had again disappeared from South and Central Texas (Dillehay 1974).

The proliferation of cemeteries has been attributed to this period, with the earliest occurrences dating to the South Texas Middle Archaic (Hester 1995:439–440). The cemeteries at Loma Sandia date between ca. 2550 and 2750 BP (Taylor and Highley 1995). Story (1985:44–45) believes the presence of cemeteries at sites such as Ernest Witte (Hall 1981), Hitzfelder Cave (Givens 1968), and Olmos Dam (Lukowski 1988) indicate that Late Archaic populations in Central and South Texas were increasing and becoming more territorial.

Late Prehistoric

The term Late Prehistoric is commonly used to designate the period following the Late Archaic in Central and South Texas. Collins (1995:385) states that the commonly used date of 1200 BP for the end of the Archaic and beginning of the Late Prehistoric in Central Texas is arbitrary, and Hester (1995:442) acknowledges the problematic issue of selected tools appearing at both Late Archaic and Late Prehistoric sites. However, a series of distinctive traits marks the shift from the Archaic to the Late Prehistoric period, including the technological shift to the bow and arrow and the manufacture of distinctive triangular corner-notched arrow points throughout Central Texas and the northern South Texas Plain (Black 1989a:32; Story 1985:45-47). This widespread technological shift accompanied by no apparent subsistence change is known as the Austin Phase. Two complexes following the Late Archaic in the Southern Great Plains region are the Plains Woodland from about 2000-1150 BP, and the Plains Village from 1150-450 BP (Hofman 1989:61-90). Most researchers agree the early Late Prehistoric period was a time of population decrease (Black 1989a:32). Mauldin and Nickels (2003) document numerous burned rock middens associated with the Late Prehistoric and suggest they were used for the processing of high-starch plants such as camas. Settlement shifts into rockshelters such as Scorpion Cave in Medina County (Highley et al. 1978) and Classen Rockshelter in northern Bexar County have been noted (Fox and Fox 1967; Skinner 1981). Cemeteries from this period often reveal evidence of conflict (Black 1989a:32).

Beginning rather abruptly at about 650 BP, a second shift occurred in technology. This shift is characterized by the introduction of the first ceramics in Central Texas (bonetempered plainwares), accompanied by the appearance of Perdiz arrow points and alternately beveled bifaces (Black 1989a:32; Huebner 1991:346). These shifts have been identified as diagnostics of the Toyah Phase. Prewitt (1985) suggests this technology encroached from north-central Texas. Patterson (1988), however, notes the Perdiz point was first seen in southeast Texas by about 1350 BP, and was introduced to the west some 600–700 years later. Hester (1995:444) recognizes this phase as the "best documented Late Prehistoric pattern" throughout South Texas, with dates ranging from ca. 650/700 BP to 300/350 BP.

Steele and Assad Hunter (1986) argue for the occurrence of a distinct change in diet between the Late Archaic and the Late Prehistoric components in two sites in the Choke Canyon Reservoir area in South Texas. Analysis of the number of identified specimens (NISP) shows a marked increase in artiodactyl elements during the Toyah Phase of the Late Prehistoric, an increase largely due to the addition of bison to the "menu" (Steele and Assad Hunter 1986:468). Huebner (1991) suggests that the sudden return of bison to South and Central Texas resulted from a more xeric climate in the plains north of Texas, and increased grass in the Cross-Timbers and Post Oak Savannah in north-central Texas, forming a "bison corridor" into the South Texas Plain along the eastern edge of the Edwards Plateau (Huebner 1991: 354–355). Sites from this period frequently have associated bison remains (Black 1986; Black and McGraw 1985; Prewitt 1974).

Previous Investigations

Spanning the previous five decades, at least 18 professional and one avocational archaeological field investigations have been conducted and recorded within the confines of the Camp Bullis Military Reservation (Figure 4-2 and Table 4-1), recording approximately 320 prehistoric and historic archaeological sites. Recorded sites span the majority of the known human occupation of the Edwards Plateau, from 10,000 BP (41BX377; Kibler and Scott 2000) to the present.

The first recorded work performed within the current confines of the facility appears to be that of avocational archaeologist T. C. Kelly in 1959 (Kelly 1978:36). Kelly dug a roughly 10 foot by 10 foot pit along a terrace at site 41BX36. While lacking specific provenience, Kelly unearthed nearly 200 bifacially flaked artifacts within this small area, including Nolan, Bulverde-like, and Pedernales dart points and two Clear Fork gouges. Site 41BX36 would not be officially recorded, however, until 1969, when T. R. Hester revisited the site (Townsend 1975).

The first professional field effort at Camp Bullis was performed by the Texas Archeological Salvage Project (later, the Texas Archeological Survey) of the University of Texas at Austin in 1971 (Dibble 1979). The investigations consisted of a 400-acre reconnaissance of two areas along Salado and Lewis creeks (see Figure 4-2). Three prehistoric sites were encountered, although none were officially recorded or assigned trinomials. Two of the sites contained burned rock features, with a single component of Late Archaic material at one burned rock feature site and Late Archaic and Late Prehistoric material at the other burned rock feature site. The third site consisted of a lithic scatter and lacked any temporally diagnostic material.

CAR performed the first large-scale field effort in 1977, recording 71 sites (Gerstle et al. 1978). Approximately 20 percent, or roughly 5,600 acres, of the military facility was subject to pedestrian survey. In reference to Figure 4-2, it should be noted that this project is not plotted along with the other field efforts conducted at Camp Bullis. The reason

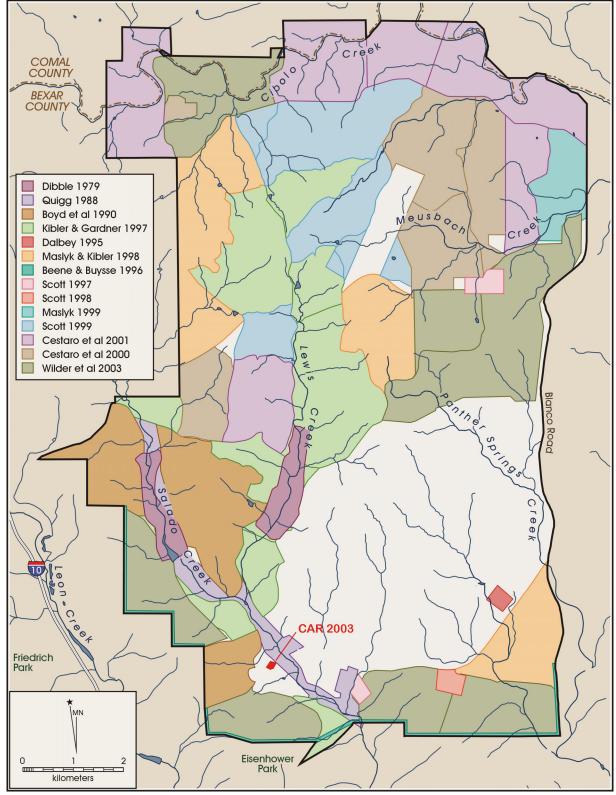


Figure 4-2. Previously surveyed areas in Camp Bullis.

for this omission is twofold: 1) the published report does not present a final map of the area subject to survey; and 2) in review of the original 1977 project documents (on file at CAR), archived field maps depict stylized transects, or survey gridlines, spaced at 300 m intervals within arbitrarily defined zones. These wide-spaced transects appear to cover the majority, if not the entirety, of the facility.

In 1988, Prewitt and Associates, Inc. conducted the first in a series of cultural resources investigations at Camp Bullis under contract with the United States Army Corps of Engineers (COE), Fort Worth District (Quigg 1988). To date, Prewitt and Associates has conducted 11 surveys (Boyd et al. 1990; Cestaro et al. 2000; Cestaro et al. 2001; Kibler and Gardner 1997; Maslyk 1999; Maslyk and Kibler 1998; Quigg 1988; Scott 1997, 1998, 1999; Wilder et al. 2003), two testing programs (Kibler and Gardner 1997; Wilder et al. 2003), and one data recovery operation (Kibler and Scott 2000) at Camp Bullis. According to their reports, Prewitt and Associates has surveyed 21,193 acres and identified 226 previously unrecorded archaeological sites.

During Prewitt and Associates' tenure, only four other cultural resources investigations were conducted at Camp Bullis; two of which were performed under contract with Prewitt and Associates. In 1995, COE Fort Worth Staff Archeologist Tim Dalbey conducted a survey of three small areas totaling 80 acres in the southeastern portion of the facility and identified six previously unrecorded sites (Dalbey 1995). During 1995 and 1996, Geo-Marine, Inc. conducted a survey for a facility perimeter fence, surveying approximately 87 acres and identified three previously unrecorded sites (Beene and Buysse 1996). From 1997 to 2000, George Veni & Associates, under contract to Prewitt and Associates, Inc. conducted two multi-disciplinary investigations of caves and karst features and identified a total of 10 previously unrecorded archaeological sites (Veni et al. 1998; Veni et al. 2000).

Field Date	Firm	Project Type	Report	Reference	Report Date	Area Surveyed	Percentage of Total Area	No. of Sites Recorded
1959	TC Kelly		ASR 40	Kelly 1978	1978			1
1969	TR Hester							1
1971	TASP	Survey	SR 9	Dibble 1979	1979	400	1.4%	3
1977	CAR	Survey	ASR 40	Gerstle et al 1978	1978	5600	19.9%	71
1988	PAI	Survey	TR 5	Quigg 1988	1988	729	2.6%	8
1989	PAI	Survey	RI 75	Boyd et al 1990	1990	1833	6.5%	27
1994	PAI	Survey	RI 101	Kibler and Gardener 1997	1997	3688	13.1%	48
1995	COE	Survey	-	Dalbey 1995	1995	80	0.3%	6
1996	PAI	Survey	TR 30	Maslyk and Kibler 1998	1998	2450	8.7%	20
1996	PAI	Data Recovery	RI 126	Kibler and Scott 2000	2000		0.0%	0
1996	GMI	Survey	-	Beene and Buysse	1996	87	0.3%	3
1997	PAI	Survey	TR 28	Scott 1997	1997	125	0.4%	8
1998	PAI	Survey	TR 32	Scott 1998	1998	63	0.2%	2
1998	PAI	Survey	TR 36	Maslyk 1999	1999	400	1.4%	1
1998	PAI	Survey	RI 123	Scott 1999	1999	1925	6.9%	20
1999	PAI	Survey	RI 129	Cestaro et al 2001	2001	3255	11.6%	39
1999	PAI	Survey	RI 125	Cestaro et al 2000	2000	2302	8.2%	25
2001	PAI	Survey	RI 135	Wilder et al 2003	2003	4423	15.8%	28
1998	Veni	Survey		Veni et al. 1998	1998			5
2000	Veni	Survey		Veni et al. 2000	2000			5
2003	CAR	Survey		Mahoney and Leffler 2004	2004	4	0.0%	1

Table 4-1. Documented Archaeological Investigations at Camp Bullis

Chapter 5: Methodology

This chapter details the various field and laboratory techniques and methods used to investigate site 41BX1576. The discussion includes sections concerning the initial literature review, field methods, and laboratory methods. The field methods section is further divided into subsections describing shovel testing, test unit excavations, and site mapping.

Literature Review

The archaeological research commenced with a comprehensive review of all available archaeological reports and databases to identify and characterize all archaeological sites known to occur within Camp Bullis and in the general vicinity of the project area. At least in part, the compilation of the known sites in the vicinity of the project area is based on the Texas Archeological Sites Atlas, Texas Historic Sites Atlas, and THC map files that contain information on all sites recorded within each county in the state. The literature and archival review also inspected United States Geological Survey (USGS) topographic maps, the USDA Soil Conservation Service's Soil Survey of Bexar County (Taylor et al. 1991), and historic maps and manuscripts located at the Fort Sam Houston Museum. Recent project-specific aerial photographs were assembled for the delimitation of the project area in an ArcView® database. This baseline was used to define the precise limits of the project area.

Field Methods

Following the preliminary literature review, a series of onsite field efforts ensued. Site 41BX1576 was initially subject to pedestrian survey to identify any surface expression of the site. Next, the site was subject to systematic shovel testing to determine the horizontal and vertical extent of cultural material across the site. This was followed by the hand excavation of six 1-x-1-m test units. Finally, a detailed map of the site was produced using Global Positioning System units and a Total Data Station.

Shovel Tests

Thirty shovel tests were proposed for excavation within the project area. A 30-m grid was established over the site, with a single shovel test placed at each node along the grid. Twenty of the 30 shovel tests fell within this grid system. The remaining 10 shovel tests were positioned to investigate

areas exhibiting higher densities of cultural material, as determined from the excavation of the first 20 shovel tests.

For the purpose of this survey, shovel tests were approximately 30 cm in diameter and were excavated to bedrock. The shovel tests were dug in arbitrary 10-cm levels and the matrix from each level was screened through ¼-inch hardware cloth. The results of each shovel test was recorded on a standardized form, including soil and sediment description, natural inclusions, and artifact content. All artifacts recovered from each level were bagged and identified with provenience information. Following excavation and recordation, the shovel tests were backfilled.

Manual Excavations

Six 1-x-1-m test units were proposed for manual excavation. Five of these test units were placed to explore the apparent densest portions of the site, as defined during the shovel testing. Specifically, five of the test units were placed adjacent to shovel tests that returned the highest densities of cultural material. The sixth test unit was placed adjacent the eastern entryway of the former mess hall to explore construction methods and prospect for artifacts that may have been dropped or swept out of this entryway.

Based upon results from the shovel testing, excavation of the test units was conducted in arbitrary 10-cm levels. Specifically, no natural or cultural stratigraphy was evidenced in the shovel tests and cultural material appeared relegated to the upper 30 cm of deposits. In addition, several of the shovel tests encountered limestone by 30 cm below surface (cmbs). All manually excavated sediments were dry screened through ¹/₄-inch hardware cloth. All cultural material encountered during excavation was collected and its provenience recorded on field forms.

Total Data Station Mapping

Following completion of the manual excavation, a detailed topographic map of the project area was produced. A Sokkia[®] SET 6E Total Data Station (TDS) and two Trimble[®] GeoExplorer Global Positioning System (GPS) units were used in mapping the site. All extant remnants of the POW camp were recorded, including the two concrete foundations, visible roads, and all cobble-lined walkways. All trees within the project area were mapped and their diameters measured. This was deemed significant historically due to the fact all trees were live oaks (*Quercus virginiana*), with chest-high trunk diameters measuring up to 2 m. While no tree cores were bored, due to their slow growth rate, it is unquestionable that the majority of these trees were present during the occupation of the POW camp. Other more recent features, such as two subsurface utility corridors, new fence lines, parking lots, and post-World War II structures were also mapped to show proximity of the site to existing buildings and features.

Laboratory Methods

Cultural material recovered from the excavations at site 41BX1576 were submitted to the CAR laboratory following each field day for processing that included washing, sorting, and cataloging. All artifact field sacks were cross-checked against the field log and sorted by provenience. Photocopies of all original field forms including the feature log, the field sack log, and unit excavation forms were made and kept in a secure location in the CAR laboratory.

All recovered artifacts were hand-washed in tap water, and a soft bristle toothbrush was used when necessary. The artifacts were then placed on drying racks and left to air-dry. Following washing, the artifacts were sorted according to their analytical classes and separated by their corresponding unit and level in preparation for cataloging. During the sorting process, lithic debitage was counted, but not weighed.

After the artifacts were washed, sorted, counted, and/or weighed, an artifact catalog was generated. The artifact catalog included provenience data along with the count and/ or weight for each entry. As each provenience was entered into the catalog it was assigned a lot number. Each artifact class within a particular unit and level received a unique three-digit number in addition to the lot number, forming a catalog number.

The artifact catalog was initially entered into a Microsoft[®] Excel spreadsheet and later imported into Microsoft[®] Access. A quality control check was preformed on the entries to identify and correct any inconsistencies and typographical errors. Provenience errors were caught by manually checking each entry against the unit level forms, the field sack log, and the feature forms.

Once the fieldwork was completed, all original field forms were returned to the laboratory for curation. All unit/level and feature forms, and any additional field forms, were placed in archivally stable folders. All forms generated in the laboratory were kept in three-ring binders until transferred to archival folders for final curation. All photos, slides, and negatives were also placed in plastic archival sheet protectors with the corresponding provenience written on the back of each photo or slide. Labeling of the artifacts for final curation consisted of writing the site trinomial and catalog number on a base 25 percent solution of B-72 in acetone. All labeling was done with a pigma ink pen and a top coat of B-72 was applied.

Subsequent to proper artifact analyses and quantification and prior to discard, consultation was sought with Peter Pagoulatos, the facility archaeologist, regarding the specific discard and sampling strategies proposed. Once a proposed strategy was agreed upon, unidentifiable metal, wire nails, curved glass, and recent (post-1950) materials were discarded in a manner consistent with suitable disposal procedures. In all instances discarded materials were documented and their counts included in the curation documentation.

All laboratory and curation procedures followed for processing, washing, sorting, and cataloging artifacts and records meet CAR's curatorial standards. Each artifact was bagged in a 4-mil polyethylene re-closeable bag along with an acid-free curation tag that provides all specific provenience data related to location, depth, count, analytical class, and in some instances, artifact descriptions. All records were placed in archivally stable, acid-free folders and sorted accordingly to type and unit. All original field forms with adhering dirt or staining were placed in sheet protectors. Each class of artifacts was boxed together. Every box was labeled with standard accession information including intrasite provenience, class of material, collection ownership, and permanent location within the CAR repository. The electronic database has been placed on a CD-ROM and is curated with the records. All records and artifacts will have permanent housing at CAR.

Chapter 6: Results

This chapter presents the results of the intensive survey and testing at 41BX1576. The artifact counts and distributions discussed in this chapter are the result of final laboratory processing and do not include the discarded materials. Formal analyses of cultural material has been performed, and the results of these analyses are presented in the tables contained herein. The data gathered from the shovel tests and test units have been combined where appropriate, as both methods utilized 10-cm excavation levels and are deemed comparable data sets.

Manual Excavations

Shovel Tests

Excavation of the 30 shovel tests across the site revealed the horizontal and vertical extent of the cultural material associated with 41BX1576 (Figure 6-1). Eleven shovel tests contained cultural material. Table 6-1 lists the number and types of artifacts recovered from each of the positive shovel tests. Table 6-2 presents the number and types of artifacts recovered from each of the 10-cm levels excavated in the shovel tests. Of note in Table 6-2 is that only two artifacts, lithic debitage, were recovered below 20 cmbs and no artifacts were recovered deeper than 30 cmbs.

In reference to Tables 6-1 and 6-2, six prehistoric artifacts were recovered during shovel testing. Two lithic debitage were encountered at 10–20 cmbs in Shovel Test (ST) B8. Four lithic debitage were encountered in ST R2, two in Level 2 (10–20 cmbs) and two in Level 3 (20–30 cmbs). The majority (68%) of the historic artifacts came from Level 1 where no prehistoric materials were encountered. On the other hand, two of the six prehistoric specimens came from Level 3 where no historic artifacts were present. Level 2 (10–20 cmbs) appears to contain mixed deposits.

Test Units

Six 1-x-1-m test units (TUs) were excavated across the site to a terminal depth of 40 cmbs. A total of 4 m³ was excavated, representing approximately one percent of the site area and about 0.1 percent of the estimated site volume. No significant cultural deposits or features were encountered.

TU I

The first test unit was located along the east elevation of the mess hall foundation, near a probable former entryway (see Figure 6-1). The grid west and grid south walls were formed by the concrete foundations of the original mess hall and a later addition, respectively. Accordingly, only the grid east and grid north walls were profiled.

Three full 10-cm levels and two partial levels were excavated in TU 1. The ground surface of the unit was covered with landscaping material of red pumice fragments, 2-5 cm in diameter. Assorted modern debris, including paper and plastic fragments, was contained within the landscaping material and into the upper few centimeters of the soil. The excavated sediments were heavily disturbed as a result of the construction of the concrete foundation. Excavation of the two lower, partial levels revealed the builder's foundation trenches. These trenches were excavated into a dense caliche bed, which occurs at 25 cm below the ground surface. The foundation of the original structure extends roughly 30 cm below the current ground surface. The addition, which extends east of the original structure foundation, extends about 45 cm below the current ground surface. No other significant cultural features or deposits were encountered.

Historic cultural material (n=108) recovered from this unit consists of glass (n=91) and metal (n=17; Table 6-3). All of the glass pieces recovered are curved or bottle shards which lack temporal indicators. Individual shard color includes clear (n=9), brown (n=9), and aqua (n=73). Metal artifacts are comprised of bullets (n=9), construction fasteners (n=5), and unidentifiable fragments (n=3). The bullets consist of one .22-caliber and eight .30-caliber specimens. Of the five construction fasteners, three are washers, one is a screw hook, and one is a nut. No prehistoric material was encountered in TU 1.

TU2

The second test unit was situated adjacent ST R2 (see Figure 6-1). This shovel test produced the highest density of prehistoric material, with a total of four lithic debitage recovered from 10–30 cmbs. Contained within the first level (0-10 cmbs) of the shovel test were seven shards of flat glass, one curved glass shard, and a fragment of a bone toothbrush.

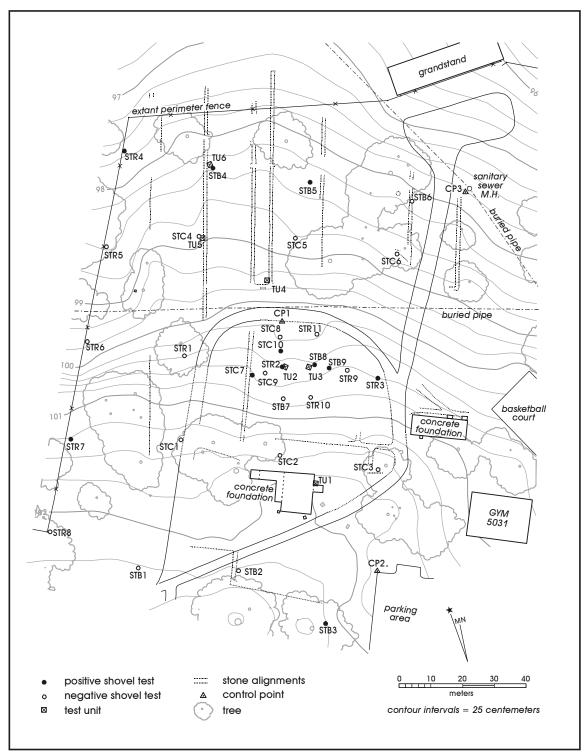


Figure 6-1. TDS-derived map of project area depicting extant features, shovel tests, and excavations units.

Shovel Test	Debitage	Flat Glass	Glass	Metal	Personal	Slag	Wood	TOTAL	%
B3							1	1	3%
B4			1	1				2	6%
B5			1					1	3%
B8	2							2	6%
B9			1			2		3	10%
C7			1					1	3%
C10		3						3	10%
R2	4	7	1		1			13	42%
R3						2		2	6%
R4				2				2	6%
R7			1					1	3%
Total	6	10	6	3	1	4	1	31	100%
%	19%	32%	19%	10%	3%	13%	3%	100%	

Table 6-1. Horizontal Distribution of Artifacts Recovered from Shovel Tests

Table 6-2. Vertical Distribution of Artifacts Recovered from Shovel Tests

Level	Debitage	Flat Glass	Glass	Metal	Personal	Slag	bood	TOTAL	%
1		10	3	1	1	1	1	17	55%
2	4		3	2		3		12	39%
3	2							2	6%
Total	6	10	6	3	1	4	1	31	100%
%	19%	32%	19%	10%	3%	13%	3%	100%	

Table 6-3. Vertical Distribution of Artifacts from TU 1

Level	Glass	Metal	6 TOTAL	%
1	82	8	90	83%
2	9	3	12	11%
3		4	4	4%
4		1	1	1%
5		1	1	1%
Total	91	17	108	100%
%	84%	16%	100%	

One partial and two full 10-cm levels were excavated in TU 2. The sediments consisted of hard, dense silty clay loams, with variable (10-50%) erosional limestone gravels and limestone cobble inclusions. Limestone boulders were encountered as shallow as 18 cm below the ground surface. The final, partial level exposed solid limestone across the unit, extending to a depth of 30 cmbs. Figure 6-2 depicts the massive boulders encountered.

Forty-nine artifacts were recovered from TU 2 (Table 6-4), with artifact recovery in TU 2 similar to that of the adjacent shovel test. The majority (n=12; 57%) of the historic material was recovered from the first level (0–10 cmbs) of the unit and consisted of 11 curved glass shards and one bullet. Of the 11 glass shards, eight are aqua in color and three are clear. The single bullet is a .30-caliber specimen. The second level (10–20 cmbs) produced a mixture of historic (n=9) and prehistoric (n=5) material. The historic material from this level consists of eight curved clear glass shards and one flat glass shard. Prehistoric material from the second level consists of four pieces of lithic debitage and a piece of fire-cracked rock (FCR). The partial third level produced 18 pieces of lithic debitage, a biface fragment, and four pieces of FCR. No cultural features were encountered.

TU 3

This unit was positioned adjacent to a shovel test (ST B8) which contained prehistoric material. Located 10 m east of ST R2, ST B8 recovered two pieces of lithic debitage at 10–20 cmbs. Several fragments of coal slag were found in the first level (0–10 cmbs) of the shovel test, but no other historic material was encountered.

Three complete 10-cm levels were excavated in TU 3. Overall, the sediments varied little from those encountered in TU 2, although soil compaction was markedly greater in TU 3 than in TU 2. Silty clay loams with erosional limestone gravels and caliche inclusions predominated until roughly 20 cmbs, where a dense caliche bed was encountered in the eastern half of the unit. The bed slopes downward to the west and, along the western portion of the unit, occurs at roughly 25 cmbs. Excavation of the third level (20–30 cmbs), then, exposed and went through 5–10 cm of the caliche bed to end at the terminal depth of 30 cmbs (Figure 6-3).

Artifact recovery from TU 3 consisted solely of prehistoric cultural material (n=76; Table 6-5). Lithic debitage comprises the bulk (n=68; 89%) of the recovery, with eight small burned rock fragments rounding out the assemblage.



Figure 6-2. Floor and south wall of TU 2. Note exposed limestone across floor.

Level	Biface Fragment	Burned Rock	Debitage	Flat Glass	Glass	Metal	TOTAL	%
1					11	1	12	24%
2		1	4	1	8		14	29%
3	1	4	18				23	47%
Total	1	5	22	1	19	1	49	100%
%	2%	10%	45%	2%	39%	2%	100%	

Table 6-4. Vertical Distribution of Artifacts from TU 2

tal	TOTAL		Level	Burned Rock	Debitage
Metal	ΓO	%	1	1	10
1	12	24%	2	4	39
	14	29%	3	3	19
	23	47%	Total	8	68
1	49	100%	%	11%	89%

Table 6-5. Vertical Distribution of Artifacts from TU 3

TOTAL

11

43

22

76

100%

%

14%

57%

29%

100%

TU	4
----	---

Material was encountered in each of the three levels. A relatively low density (14%) of artifacts was encountered in the first level. Level 2 exhibited the densest concentration, with 57 percent (n=43) of the material recovered. Artifact density dropped significantly in the third level, with half (n=22) of the amount of material recovered in Level 2. No cultural features were encountered.

Test Unit 4 was situated near the center of the project area at the presumed southeastern corner of a tent pad alignment (see Figure 6-1). The purpose of the test unit was to examine the subsurface in an area adjacent to one of the POW tents. Lacking any archival documentation of the tents and the underlying tent pads, excavation of the test unit was thought to be a means to possibly answer questions regarding feature

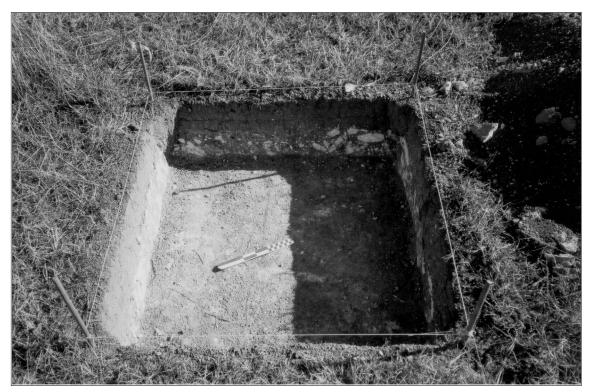


Figure 6-3. Floor and east wall of TU 3. Note caliche bed in east wall.

structure. As such, the unit was placed along what was thought to be the exterior western alignment of the central cobble-lined walkway (Figure 6-4A). It was not until excavations were completed and the entire site mapped with the TDS, however, that it became apparent that the assumed placement was, in fact, incorrect.

According to Figure 6-4A, the central walkway consists of a single path separating the eastern and western tent pad alignments. The diagram further indicates that the individual tents were 16 by 16 feet and the tents were spaced roughly 10 feet apart, east to west, separated by an alley-like corridor. Within this east to west spacing, or alley, there appear to be utility lines and possibly water lines.

In contrast to Figure 6-4A is the map presented on the historic monument in the southeastern portion of the project area (Figure 6-4B). This map indicates a double walkway separating the eastern and western tent pad alignments. Other discrepancies include wider spaces separating the individual tents, additional interior roads or trails, and additional walkways. This latter map appears to more accurately represent the layout of the POW camp.

Three partial 10-cm levels were excavated in TU 4. Compact silty clay loams comprised the sediments encountered. Bedrock occurred in the first level of excavation, with the encounter of a massive limestone boulder in the southern portion of the unit. By the second level (10–20 cmbs), a dense caliche bed replaced the silty clay loam sediments in the western portion of the unit. Similarly, and at this same depth, exfoliated bedrock predominated the eastern portion of the unit. With the encounter of bedrock across the unit, only small areas of the unit could be excavated to the terminal depth of 30 cmbs (Figure 6-5).

Twenty-two artifacts were recovered from TU 4 (Table 6-6), including both prehistoric (n=2) and historic (n=20) items. Artifact recovery was limited to the first two levels (0–20 cmbs) of excavation. Prehistoric cultural material consists of two pieces of lithic debitage, with one each occurring in the first two levels. The historic assemblage consists of glass (n=9) and metal (n=11). Level 2 (10–20 cmbs) had a higher density (n=13; 59%) of material than Level 1 (n=9; 41%). No cultural features were encountered.

TU5

The fifth test unit (TU 5) was placed adjacent to ST C4 in the northwestern portion of the project area (see Figure 6-1). The unit was situated to bisect one of the cobble-lined walkways. It was hoped that this excavation would allow the documentation of the construction methods and techniques for the other walkways in the POW camp.

One partial and three complete 10-cm levels were excavated in TU 5. Outside of the walkway, darker, more clayey sediments predominated. The clay loam exhibited a darker brown color and a slightly more compact hardness than the sediments encountered in units situated higher in elevation (TUs 1–4). Sparse limestone gravels occurred in the upper level and increased in density until the bedrock was encountered at roughly 30–35 cmbs.

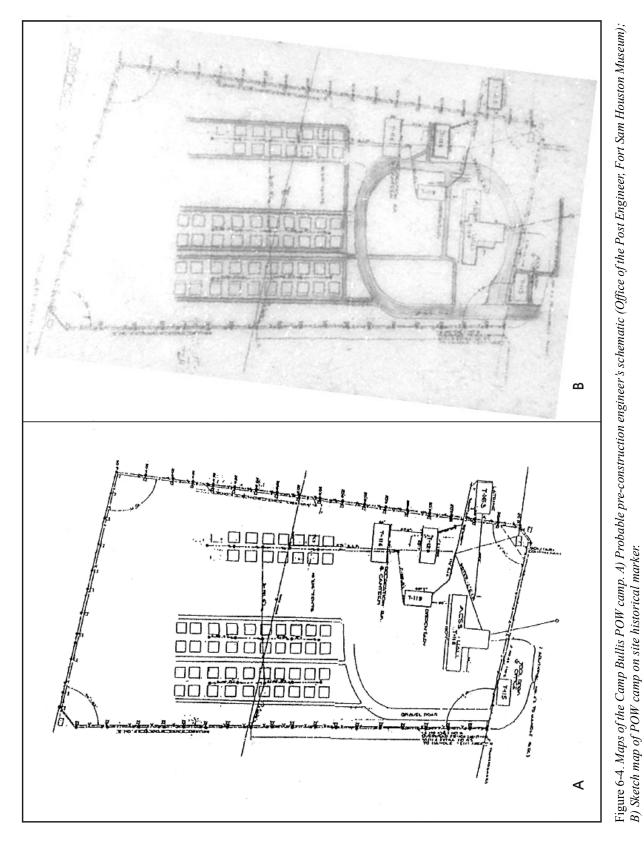
The walkway was excavated separately from the rest of the unit. It had an exterior width of 122 cm and an interior width of 92 cm, with each cobble alignment roughly 15 cm wide. The interior of the walkway consists primarily of limestone gravels with a clayey sand matrix. The thickness of the gravel fill is approximately 10 cm. Figure 6-6 depicts a plan view of a portion of the walkway as expressed in TU 5.

Aside from the limestone cobbles of the walkway, 11 artifacts were recovered from TU 5 (Table 6-7); all occurred outside of the walkway. All but one of the artifacts were historic. The single exception is a piece of lithic debitage recovered from Level 1 (0–10 cmbs). The historic material consists of glass (n=2), metal (n=4), and wood (n=4). All of the material was recovered from the first two levels of excavation (0–20 cmbs), with 64 percent (n=7) recovered from Level 1 (0–10 cmbs). No additional cultural features were encountered.

TU6

The final test unit was placed adjacent ST B4 in the northern portion of the former POW camp (see Figure 6-1). ST B4 recovered glass and metal in the upper 30 cm of sediments. In addition, a four-hole metal button with the inscription "USA" (Figure 6-7) was recovered at ground surface approximately three meters east of ST B4.

Four complete 10-cm levels were excavated in TU 6. The upper 15 cm of sediments probably represent recent fill and/ or grading of the area. These disturbed sediments consisted of a moderately compact clay loam, with a higher content of sand than the sediments encountered in the other five test units. Below this zone, undisturbed silty clay loams similar to those encountered in TU 5 occurred. Contact between the two units was abrupt, with the underlying matrix noticeably more compact.



41



Figure 6-5. Floor of TU 4. Note massive limestone boulders.

Forty-four artifacts were recovered from TU 6 (Table 6-8). Only one of these artifacts is prehistoric, a single piece of lithic debitage recovered from the upper 10 cm of the unit. Ninety-five percent of the material was recovered from the upper two levels of the unit, with only two pieces of metal recovered below 20 cmbs. Recent material encountered in the disturbed zone included foil, foamed polystyrene, rubber, cartridge casings from the 1970s and 1980s, pull-tabs, and plastic fragments. No cultural features were encountered.

Table 6-6. Vertical Distribution of Artifacts from TU 4

Level	Debitage	Glass	Metal	TOTAL	%
1	1	3	5	9	41%
2	1	6	6	13	59%
Total	2	9	11	22	100%
%	9%	41%	50%	100%	

Cultural Material

This section of the chapter considers the types of cultural material recovered during the current field efforts. Due to the multicomponent nature of the site, artifacts are separated into prehistoric and historic categories. The discussion includes combined assemblages from the shovel tests and the test units.

Prehistoric

One hundred pieces if unmodified lithic debitage were recovered from the site (Table 6-9). Six percent of the debitage was recovered from two shovel tests and 94 percent was recovered from five test units. The two test units (TUs 2 and 3) placed in the central portion of the project area produced 90 percent of the lithic assemblage. Together with the associated shovel tests (STs B8 and R2), the central portion of the project area, then, returned 96 percent of the lithic debitage from the site. Table 6-9 presents the balance of the lithic debitage recovered from 41BX1576.

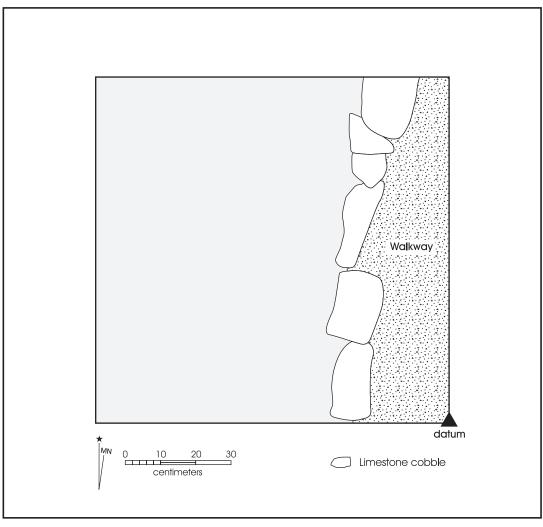


Figure 6-6. Plan view of cobble-lined walkway exposed in TU 5.

Level	Debitage	Glass	Metal	Wood	TOTAL	%
1	1	1	1	4	7	64%
2		1	3		4	36%
Total	1	2	4	4	11	100%
%	9%	18%	36%	36%	100%	

Table 6-7. Vertical Distribution of Artifacts from TU 5



Figure 6-7. Metal button recovered near ST B4.

Level	Debitage	Glass	Metal	Mirror Glass	Wood	TOTAL	%
1	1	3	15	1	3	23	52%
2		5	11		3	19	43%
3			2			2	5%
Total	1	8	28	1	6	44	100%
%	2%	18%	64%	2%	14%	100%	

Table 6-8. Vertical Distribution of Artifacts from TU 6

Table 6-9. Horizontal	Distribution	of Lithic Debitage
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Unit	Level 1	Level 2	Level 3	TOTAL	%
STB8		2		2	2%
STR2		2	2	4	4%
TU2		4	18	22	22%
TU3	10	39	19	68	68%
TU4	1	1		2	2%
TU5	1			1	1%
TU6	1			1	1%
Total	13	48	39	100	100%
%	13%	48%	39%	100%	

Tertiary flakes comprise the vast majority (97%) of the lithic debitage assemblage. The remaining three pieces of debitage are secondary flakes, with less than 25 percent cortical surface present on the dorsal aspect. This composition of flake types and the lack of cores or tested cobbles is consistent with activities associated with late stage reduction of lithic tools or lithic tool rejuvenation. Table 6-10 presents the mean and standard deviation for thickness, length, and width for the lithic debitage assemblage. On average, the thin and short mean dimensions support the conclusion that the sample represents the late stages of reduction.

Slightly more than one-half (54%) of the lithic debitage assemblage consists of flake fragments. Proximal (14%), medial (21%), distal (17%), and longitudinal (2%)

Table 6-10. Average Dimensions of Lithic Debitage

	Mean	SD
Thickness	2.94	1.87
Length	14.89	7.07
Width	12.95	6.04

specimens comprise the fragmentary assemblage. It remains unclear what factor caused the breakage, although late reduction stage specimens tend to be thinner and, therefore, may have a tendency to break more easily than early reduction stage flakes. Possible causes of breakage include human or vehicular traffic, manufacture technique, or raw material composition. Damage caused by alluvial action and/ or redeposition is not considered due to the lack of evidence of alluvial transport typically indicated along the dorsal aspect and lateral edges of the individual flakes.

Eleven specimens exhibited evidence of thermal alteration, and combined with the recovery of 13 burned rock fragments, it is suggestive of thermal features in the vicinity of the excavations. Virtually no charcoal was recovered, and aside from the burned rock fragments, these 11 pieces of thermally altered lithic debitage represent the only other burned material recovered from the prehistoric component of the site.

Thirteen burned rocks were recovered from two test units (TUs 2 and 3), with a total weight of 10.92 grams. Of this total, one is burned limestone and 12 are burned chert. The recovery of these artifacts suggests that thermal features were constructed and used at the site. No significant amount of charcoal or charred vegetal remains was encountered during the excavations.

A single bifacially flaked lithic tool fragment was recovered from Level 3 (20–30 cmbs) of TU 2. Thermal alteration of the biface fragment is evident.

Historic

Few, if any, of the historic cultural materials recovered during the excavations are temporally diagnostic. Given that the military presence in the area has predominated for over a century, artifacts associated with military activities spanning that time period have accumulated accordingly. Specifically, items such as wire nails, cartridge casings without markings, curved glass shards, and various construction fasteners offer little information to differentiate time periods following World War I.

Site Discussion

Tables 6-11 and 6-12 present the distribution of artifacts recovered from the 30 shovel tests and six test units. Table 6-11 includes vertical data from the shovel tests and the test units, while Table 6-12 includes data only from the test units.

Of the 341 artifacts analyzed and curated, the greatest percentage (n=169; 50%) of items was recovered from Level 1, or 0–10 cmbs. From the test units, the greatest percentage (n=108; 32%) of the artifacts was recovered from TU 1.

All but one of the four pieces of lithic debitage from TUs 4, 5, and 6, located at lower elevations, were recovered from the upper 10 cm. The presence of these flakes at such a shallow depth within the topographically lower units may represent colluvial redeposition from the higher center of the site.

Lacking any subsurface features, the extant concrete foundations and cobble-lined walkways are all that appear to be left of the former POW camp. Using a combination of ground-truthing, oral histories, and the scant historic documentation that exists, though, a likely reconstruction of the former camp is possible. Figure 6-8 depicts our interpretation of how the camp may have looked during the period of prisoner occupancy, based on the synthesis of the available data. The northern portion of the prisoner camp has been intentionally omitted due to the lack of features apparent in that area. It is interesting to note the location of trees in proximity to the perimeter fence. The southern portion of the camp was the location of the more substantial structures including the mess hall, dispensary, recreation room and canteen, kitchen, and solitary confinement. The latrine is shown on several 1944 maps as being outside the immediate POW camp boundaries, although Mr. Blumenthal suggests that it may have been inside the confines of the camp proper. Two double rows of tents on square, wooden tent pads ran north-south immediately north of the circular driveway. Stone-lined sidewalks ran in front of the rows of tents. No doubt the area was well maintained and kept relatively free of refuse since few personal items and historic artifacts other than construction nails and window glass were identified during the CAR excavations. It is also likely that judicious cleaning of the camp following liberation would also have contributed to the low historic artifact recovery.

Table 6-11. Vertical Distribution of all Artifacts from Shovel Tests and Test Units

Level	Biface Frag	Burned Rock	Debitage	Flat Glass	Glass	Metal	Personal	Slag	Wood	TOTAL	%
1		1	13	11	103	31	1	1	8	169	50%
2		5	48	1	32	25		3	3	117	34%
3	1	7	39			6				53	16%
4						1				1	0%
5						1				1	0%
Total	1	13	100	12	135	64	1	4	11	341	100%
%	0%	4%	29%	4%	40%	19%	0%	1%	3%	100%	

Table 6-12. Horizontal Distribution of all Artifacts from Test Units

Test Unit	Burned Rock	Debitage	Glass	Metal	booW	TOTAL	%
1			91	17		108	35%
2	3	25	20	1		49	16%
3	2	75				77	25%
4		2	9	11		22	7%
5		1	2	4	4	11	4%
6		1	9	28	6	44	14%
Total	8	100	131	61	10	310	100%
%	3%	32%	42%	20%	3%	100%	

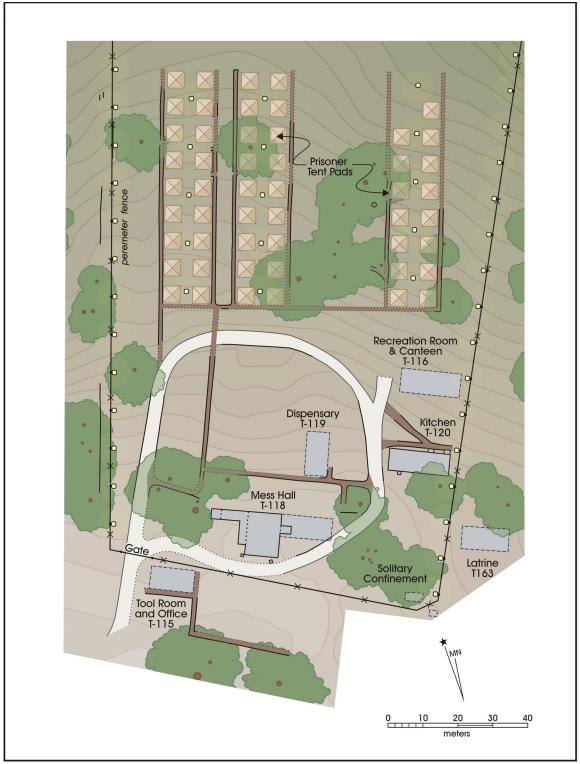


Figure 6-8. Likely reconstruction of the Camp Bullis POW camp layout.

Chapter 7: Summary and Recommendations

During the fall of 2003, the Center for Archaeological Research at The University of Texas at San Antonio was contracted by Performance Group, Inc. of King George, Virginia, to conduct a survey and testing of site 41BX1576, the location of a former WWII German POW camp within Camp Bullis, a military facility located in north-central Bexar County, Texas. The parcel is to be the site of a new chapel.

As defined in the scope of work, two principal archaeological services were to be performed by CAR.

Task I: Archival Investigations

Archival investigations were to focus on the evaluation of primary and secondary sources related to the establishment and use of the POW camp. These resources were to include, but not be limited to, the military archives housed at the Fort Sam Houston Military Museum and other historical repositories, as well as local newspaper accounts, diaries, and informant interviews.

Task II: Archaeological Investigations

Archaeological investigations to be performed by CAR included the following:

- The placement of 30 shovel tests (30-x-30-cm) and six (1-x-1-m) test units within the study area. The shovel tests were to be placed on a 30-m interval grid across the property. The 1-x-1-m test units were to be excavated in areas of high artifact concentrations or cultural features as defined by the shovel testing.
- 2) The two existing POW camp foundations, as well as traces of tent pads, gravel roads and walkways within the project area were to be mapped using a Sokkia[®] SET 6E Total Data Station. The locations of all shovel tests and 1-x-1-m units were to be recorded using Trimble[®] GPS units and these data were to be integrated with the TDS map. The locations of all shovel tests and other features, were to be recorded on USGS 7.5-minute project maps. Any newly discovered archaeological sites were to be plotted on the same maps.

- 3) At least two data points were to be established and mapped in the POW camp. Newly discovered archaeological sites located away from the POW camp also would have one datum established as a mapping reference point. Any shovel tests or 1-x-1-m test units, if necessary, were to be tied to these datum points.
- 4) During the excavation of the shovel tests and test units, all recovered artifacts were to be provenienced to unit and level within each shovel test or test unit.

Overall, the goal of the investigations was to evaluate the eligibility of site 41BX1576 for nomination to the National Register of Historic Places and/or for designation as a State Archeological Landmark. The archaeological investigations have shown that 41BX1576 is a multicomponent archaeological site, containing historic and prehistoric materials. The historic component dates to the early 1940s and reflects the establishment and use of the POW camp to house German prisoners. The prehistoric component remains undated since no temporally diagnostic artifacts were recovered and no charcoal samples were extracted during the excavations. As part of the investigations, a permanent trinomial site number, 41BX1576, was obtained from the Texas Archeological Research Laboratory and a Standard Texas Archeological Site Form was completed on the newly documented site.

The archival investigations, based largely on interviews with Mr. Karl-Heinz Blumenthal, a German soldier during World War II who was captured in Africa and later interned at the POW camp, indicate that the camp may have at one point housed as many as 80–100 prisoners of war in 51 tents. The camp also contained a mess hall, dispensary, recreation room, canteen, and probably a latrine. An athletic field was also part of the camp. The POWs worked within the camp and had their own command structure.

The archaeological investigations, the mapping of the foundations and their comparison with maps of the former POW camp helped identify many of the features of the former camp. However, subsurface investigations also showed that the historic materials, largely consisting of glass and unidentified metal fragments, were in a mixed context. Although, the upper level (0–10 cmbs) of the deposits tended to contain historic materials, in nearly all excavation units Level 2 (10–20 cmbs) contained a mix of prehistoric and historic remains. The prehistoric remains consisted primarily of unmodified lithic debitage and fragments of burned rock. A single non-diagnostic biface fragment also was recovered. Deposits in Level 3 (20–30 cmbs) and below contained a low frequency of exclusively prehistoric materials. No prehistoric features were identified during the excavations and the fragments of burned rock suggest that if any were present within the project area proper, they may have been disturbed by camp construction and use.

Overall then, the Camp Bullis POW camp represents an interesting and important link to this country's involvement in World War II and a direct physical connection to this involvement in Texas. Nonetheless, the fact that none of the original structures of the POW camp remain standing, only a portion of the historic cultural materials are not mixed with prehistoric remains, and the prehistoric remains themselves cannot be dated, suggests that neither component present on site has significant research potential. It is the recommendation of the Center for Archaeological that site 41BX1576 is not eligible for nomination to the National Register of Historic Places or for designation as a State Archeological Landmark. It is our assessment that the proposed construction of the chapel can proceed as planned since it will not impact cultural deposits with significant research value.

References Cited

Anonymous

n.d. Behind Bars. Undated, unidentified newspaper clipping [San Antonio Light ?] in POW camp historical file, Camp Bullis, Texas.

Beene, D. L., and J. L. Buysse

1996 Cultural Resources Survey and Reevaluation of Resources along the Proposed Perimeter Fence Line at Camp Bullis, Bexar and Comal Counties, Texas. Miscellaneous Reports of Investigations, Number 124. Geo-Marine, Inc., Plano, Texas.

Black, S. L.

- 1986 *The Clemente and Herminia Hinojosa Site, 41JW8: A Toyah Horizon Campsite in Southern Texas.* Special Report, No. 18. Center for Archaeological Research, The University of Texas at San Antonio.
- 1989a Central Texas Plateau Prairie. In From the Gulf Coast to the Rio Grande: Human Adaptation in Central, South and Lower Pecos Texas, by T. R. Hester, S. L. Black, D. G. Steele, B. W. Olive, A. A. Fox, K. J. Reinhard, and L. C. Bement, pp. 17–38. Research Series No. 33. Arkansas Archeological Survey, Fayetteville.
- 1989b Environmental Setting. In From the Gulf Coast to the Rio Grande: Human Adaptation in The Central, South, and Lower Pecos Texas, by T. R. Hester, S. L. Black, D. G. Steele, B. W. Olive, A. A. Fox, K. J. Reinhard, and L. C. Bement, pp. 5–17. Research Series No. 33. Arkansas Archeological Survey, Fayetteville.

Black, S. L., L. W. Ellis, D. G. Creel, and G. T. Goode (editors)

1997 Hot Rock Cooking on the Greater Edwards Plateau: Four Burned Rock Midden Sites in West Central Texas. Studies in Archaeology, Number 22. Texas Archaeological Research Laboratory, The University of Texas at Austin; Archeology Studies Program, Report 2, Environmental Affairs Division, Texas Department of Transportation, Austin.

Black, S. L., and A. J. McGraw

1985 *The Panther Springs Creek Site: Cultural Change and Continuity in the Upper Salado Creek Drainage, South-Central Texas.* Archaeological Survey Report, No. 100. Center for Archaeological Research, The University of Texas at San Antonio.

Blair, W. F.

1950 The Biotic Provinces of Texas. *Texas Journal of Science* 2(1):93–117.

Blumenthal, K-H.

- 2004a Appendix A: Karl-Heinz Blumenthal Interview Transcripts. In *Intensive Survey and Test Excavations at 41BX1576.* A World War II German POW Camp, Camp Bullis, Bexar County, Texas, by R. B. Mahoney and J. J. Leffler, pp. 60–66. Archaeological Survey Report, No. 348. Center for Archaeological Research, The University of Texas at San Antonio.
- 2004b My Return After 60 Years to a POW Camp in Texas. http://home.nexgo.de/kriegsgefangene/memoirs/karl_blumenthal.htm>Accessed Jan.

Bousman, C. B.

- 1994 The Central Texas Pollen Record: A Reinterpretation. Current Research in the Pleistocene 11:79–81.
- 1998 Paleoenvironmental Change in Central Texas: The Palynological Evidence. *Plains Anthropologist* 164:201–219.

Boyd, D. K., I. W. Cox, and H. G. Uecker

1990 Archeological and Historical Investigations at Camp Bullis, Bexar and Comal Counties, Texas. Reports of Investigations, Number 75. Prewitt & Associates, Inc., Austin.

Brown, D.

1998 Late Holocene Climates of North-Central Texas. *Plains Anthropologist* (43)164:157–172.

Bryant, V. M., Jr., and R. G. Holloway

- 1985 Late-Quaternary Paleoenvironmental Record of Texas: An Overview of the Pollen Evidence. In *Pollen Records* of Late-Quaternary North American Sediments, edited by V. T. Bryant, Jr., and R. G. Holloway, pp. 39–70. American Association of Stratigraphic Palynologists Foundation, Dallas.
- Bryant, V. M., Jr., and H. J. Shafer
 - 1977 The Late Quaternary Paleoenvironment of Texas: A Model for the Archeologist. *Bulletin of the Texas Archeological Society* 48:1–25.

Campbell, T. N., and T. J. Campbell

1981 *Historic Indians of the Choke Canyon Reservoir and Surrounding Area, Southern Texas.* Choke Canyon Series, No. 1. Center for Archaeological Research, The University of Texas at San Antonio.

Camper, H. A.

1991 Pollen Analysis of Patschke Bog. Unpublished MS thesis, Department of Botany, Texas A&M University, Bryant, Texas. Data archived at the World Data Center-A for Paleoclimatology Data. NOAA/NGDC Paleoclimatology Program, Boulder, Colorado.

Caran, S. C.

1998 Quaternary Paleoenvironmental and Paleoclimatic Reconstruction: A Discussion and Critique, with Examples from the Southern High Plains. *Plains Anthropologist* (43)164:111–124.

Cestaro, G. C., M. D. Freeman, M. E. Blake, and A. M. Scott

2001 Cultural Resources Survey of Selected Maneuver Areas at Camp Bullis, Bexar and Comal Counties, Texas: The Archeology and History of 3,255 Acres along Cibolo Creek. Reports of Investigations, Number 129. Prewitt & Associates, Inc., Austin.

Cestaro, G. C., A. M. Scott, and K. W. Kibler

2000 *Cultural Resources Survey of 2,302 Acres at Camp Bullis Military Reservation, Bexar County, Texas.* Reports of Investigations, Number 125. Prewitt & Associates, Inc., Austin.

Choate, M.

1989 Nazis in the Piney Woods. Best of East Texas Press, n.p.

Clark, A. K.

2003 Geologic Framework and Hydrogeologic Features of the Glen Rose Limestone, Camp Bullis Training Site, Bexar County, Texas. Water Resources Investigations Report 03-4081. U.S. Geological Survey, Austin.

Collins, M. B.

1995 Forty Years of Archeology in Texas. Bulletin of the Texas Archeological Society 66:361–400.

Creel, D.

1986 A Study of Prehistoric Burned Rock Middens in West Central Texas. Unpublished Ph.D. dissertation, The University of Arizona, Tucson.

Dalbey, T. S.

1995 Cultural Resources Survey of Areas to be Affected by the Relocation of the Air Base Ground Defensive (ABGD) Training Facilities on Camp Bullis, Texas. U.S. Army Corps of Engineers, Fort Worth District.

Dibble, D. S.

1979 Archeological Reconnaissance in the Salado Creek Watershed, Bexar County, Texas. Survey Reports, Number 9. Texas Archeological Salvage Project, The University of Texas at Austin.

Dillehay, T.

1974 Late Quaternary Bison Population Changes on the Southern Plains. *Plains Anthropologist* 19:180–196.

Fincher, J.

1995 By Convention, the enemy within never did without. *Smithsonian* 26(15):126-130.

Fox, A. A., and D. E. Fox

1967 The Classen Rockshelter, 41BX23. Manuscript on file. Center for Archaeological Research, The University of Texas at San Antonio.

Frakes, L.

1979 German Ex-POW Returns to Site of Imprisonment. San Antonio News Leader, July 12.

Frederick, C. D.

1998 Late Quaternary Clay Dune Sedimentation on the Llano Estacado. *Plains Anthropologist* (43)164:137–156.

Fredlund, G.

1994 The Phytolith Record at the Wilson-Leonard Site. Program and Abstracts, 52nd Plains Conference, 65th Annual Meeting of the Texas Archaeological Society. Lubbock.

Fredlund, G. G., C. B. Bousman, and D. K. Boyd

1998 The Holocene Phytolith Record from Morgan Playa in the Rolling Plains of Texas. *Plains Anthropologist* (43)164:187–200.

Freeman, M. D.

- 1994a Agriculture in Texas: Ranching and Stock Farming on the Eastern Edwards Plateau, 1845-1941. Komatsu/ Rangel, Inc., Fort Worth, Texas.
- 1994b Camp Bullis: A Military Training Facility in the Southern Department and Eighth Corps Area. Komatsu/Rangel, Inc. Fort Worth, Texas.

Gerstle, A., T. C. Kelly, and C. Assad

1978 *The Fort Sam Houston Project: An Archaeological and Historical Assessment.* Archaeological Survey Report, No. 40. Center for Archaeological Research, The University of Texas at San Antonio.

Givens, R. D.

1968 A Preliminary Report on Excavations at Hitzfelder Cave. Bulletin of the Texas Archeological Society 38:47–50.

Goode, G. T.

1991 Late Prehistoric Burned Rock Middens in Central Texas. In *The Burned Rock Middens of Texas: An Archaeological Symposium*, edited by T. R. Hester, pp. 71–93. Studies in Archaeology 13. Texas Archeological Research Laboratory, The University of Texas at Austin.

Green, D.

1996 Comal County. In *The New Handbook of Texas*, edited by R. Tyler, vol. 2, pp. 237-239. Texas State Historical Association, Austin.

Haas, O.

1996 Bulverde, Texas. In *The New Handbook of Texas*, edited by R. Tyler, vol. 1, pp. 825-826. Texas State Historical Association, Austin.

Hall, G. D.

- 1981 Allens Creek: A Study in the Cultural Prehistory of the Brazos River Valley, Texas. Research Report 61. Texas Archeological Survey, The University of Texas at Austin.
- Hall, S. A., and S. Valastro, Jr.
 - 1995 Grassland Vegetation in the Southern Great Plains during the Last Glacial Maximum. *Quaternary Research* 44:237–245.

Hester, T. R.

1995 The Prehistory of South Texas. Bulletin of the Texas Archeological Society 66:427–459.

Highley, L., C. Graves, and G. Judson

1978 Archeological Investigations at Scorpion Cave (41ME7), Medina County, Texas. *Bulletin of the Texas Archeological Society* 49:139–194.

Hines, M. H.

1993 Prehistoric Research Context for Camp Bullis and Fort Sam Houston, Bexar and Comal Counties, Texas. Technical Reports, Number 16. Prewitt & Associates, Inc., Austin.

Hofman, J. L.

1989 Prehistoric Culture History-Hunters and Gatherers in the Southern Great Plain. In From Clovis to Comanchero: Archeological Overview of the Southern Great Plains, by J. L. Hofman, R. L. Brooks, J. S. Hays, D. W. Owsley, R. L. Jantz, M. K. Marks, and M. H. Manhein, pp. 25–60. Research Series No. 35. Arkansas Archeological Survey, Fayetteville.

Houk, B. A., and J. C. Lohse

1993 Archaeological Investigations at the Mingo Site, Bandera County, Texas. *Bulletin of the Texas Archeological Society* 61:193–247.

Huebner, J. A.

1991 Late Prehistoric Bison Populations in Central and Southern Texas. *Plains Anthropologist* (36)137:343–358.

Humphrey, J. D., and C. R. Ferring

1994 Stable Isotopic Evidence for Latest Pleistocene and Holocene Climatic Change in North-Central Texas. *Quaternary Research* 41:200–213.

Hurt, R. D.

1980 Archeological Investigations of Portions of the Middle Concho Valley. Unpublished Masters Thesis, Texas Tech University, Lubbock.

Johnson, E., and V. T. Holliday

1986 The Archaic Record at Lubbock Lake. In *Current Trends in Southern Plains Archaeology*, edited by T. G. Baugh. Plains Anthropologist Memoir 22:7–54.

Johnson, L., Jr.

1995 *Past Cultures and Climates at Jonas Terrace, 41ME29, Medina County, Texas.* Office of the State Archeologist, Report 40. Texas Department of Transportation and Texas Historical Commission, Austin.

Johnson, L., Jr., and G. T. Goode

1994 A New Try at Dating and Characterizing Holocene Climates, as well as Archeological Periods, on the Eastern Edwards Plateau. *Bulletin of the Texas Archeological Society* 65:1–51.

Kelly, T. C.

1978 Previous Archaeological Research. In *The Fort Sam Houston Project: An Archaeological and Historical Assessment*, edited by A. Gerstle, T. C. Kelly, and C. Assad, pp. 31–44. Archaeological Survey Report, No. 40. Center for Archaeological Research, The University of Texas at San Antonio.

Kibler, K. W.

1998 Late Holocene Environmental Effects on Sandstone Rockshelter Formation and Sedimentation on the Southern Plains. *Plains Anthropologist* (43)164:173–186.

Kibler, K. W., and K. M. Gardner

1997 Archeological Survey and National Register Testing at 41BX377, Camp Bullis Military Reservation, Bexar and Comal Counties, Texas. Reports of Investigations, Number 101. Prewitt & Associates, Inc., Austin.

Kibler, K. W., and A. M. Scott

2000 Archaic Hunters and Gatherers of the Balcones Canyonlands: Data Recovery at the Cibolo Crossing Site (41BX377), Camp Bullis Military Reservation, Bexar County, Texas. Reports of Investigations, Number 126. Prewitt & Associates, Inc., Austin.

Krammer, A. E.

- 1977 The Afrika Korps Comes to Texas. Southwestern Historical Quarterly 50:247–282.
- 1979 Nazi Prisoners of War in America. Steiner and Day, Briarcliff Manor, New York.

Long, C.

- 1996a Bexar County. In *The New Handbook of Texas*, edited by R. Tyler, vol. 1, pp. 517-521. Texas State Historical Association, Austin.
- 1996b Leon Springs, Texas. In *The New Handbook of Texas*, edited by R. Tyler, vol. 4, pp. 163. Texas State Historical Association, Austin.

Lukowski, P. D.

1988 Archaeological Investigations at 41BX1, Bexar County, Texas. Archaeological Survey Report, No. 135. Center for Archaeological Research, The University of Texas at San Antonio.

Manguso, J. M.

1990 Camp Bullis: Admirably Suited to All Purposes of Military Training. A History of the Leon Springs Military Reservation, 1890-1990. Fort Sam Houston Museum, San Antonio, Texas.

Maslyk, P.

1999 An Archeological Survey of 400 Acres at Camp Bullis Military Reservation, Bexar County, Texas. Technical Reports, Number 36. Prewitt & Associates, Inc., Austin.

Maslyk, P., and K. W. Kibler

1998 *A Cultural Resources Survey of Camp Bullis, Bexar County, Texas: The 1996 Season.* Technical Reports, Number 30. Prewitt & Associates, Inc., Austin.

Mauldin, R. P., and D. L. Nickels

2003 Archaeological Testing to Determine the National Register Eligibility Status of 18 Prehistoric Sites on Camp Bowie, Brown County, Texas. Archaeological Survey Report, No. 334, Center for Archaeological Research, The University of Texas at San Antonio.

National Oceanic and Atmospheric Administration (NOAA)

2004 Global Historical Climatological Network Data from the National Climatic Data Center of the National Oceanic and Atmospheric Administration. http://www.ncdc.noaa.gov/oa/climate/onlineprod/drought/xmgr.html#gr Accessed January.

Neck, R. W.

1986 The Balcones Fault Zone as a Major Zoogeographic Feature. In *The Balcones Escarpment: Geology, Hydrology, Ecology, and Social Development in Central Texas*, edited by P. L. Abbott and C. M. Woodruff, Jr., pp. 35–40. Geological Society of America, San Antonio, Texas.

Nordt, L. C., T. W. Boutton, J. S. Jacob, and R. Mandel

1994 Late Quaternary Climates of Central Texas Based on the Stable Isotopic Composition of Organic Carbon. *Program* and Abstracts, 52nd Plains Conference, 65th Annual Meeting of the Texas Archeological Society, Lubbock.

Parker, J. M.

1985 Nazis buried at Fort Sam. San Antonio Express-News, May 7, 1985.

Patterson, L. W.

1988 Intergroup Conflict in Prehistoric Texas. Houston Archeological Society Journal 90:8–10.

Prewitt, E. R.

- 1974 Archeological Investigations at the Loeve-Fox Site, Williams County, Texas. Research Report 49. Texas Archeological Survey, The University of Texas at Austin.
- 1981 Culture Chronology in Central Texas. *Bulletin of the Texas Archeological Society* 52:65–89.
- 1985 From Circleville to Toyah: Comments on Central Texas Chronology. *Bulletin of the Texas Archeological Society* 54:201–238.
- 1991 Burned Rock Middens: A Summary of Previous Investigations and Interpretations. In *The Burned Rock Middens* of *Texas: An Archeological Symposium*, edited T. R. Hester, pp. 25–32. Studies in Archeology 13. Texas Archeological Research Laboratory, The University of Texas at Austin.
- 1995 Distribution of Typed Projectile Points in Texas. Bulletin of the Texas Archeological Society 66:83–173.

Quigg, J. M.

1988 Cultural Resources Reconnaissance in Secondary Impact Areas along Salado Creek at Brooke Army Medical Center, Fort Sam Houston and Camp Bullis, Bexar County, Texas. Technical Reports, Number 5. Prewitt & Associates, Inc., Austin.

Ricklis, R. A., and K. A. Cox

1998 Holocene Climatic and Environmental Change in the Texas Coastal Zone: Some Geoarchaeological and Ecofactual Indicators. *Plains Anthropologist* (43)164:125–136.

Robinson, R. L.

- 1979 Biosilica and Climatic Change at 41GD21 and 41GD21A. In Archaeological Investigations of Two Prehistoric Sites on the Colette Creek Drainage, Goliad County, Texas, edited by D. E. Fox, pp. 102–113. Archaeological Survey Report, No. 69. Center for Archaeological Research, The University of Texas at San Antonio.
- 1982 Biosilica Analysis of Three Prehistoric Archaeological Sites in the Choke Canyon Reservoir, Live Oak County, Texas: Preliminary Summary of Climatic Implications. In Archaeological Investigations at Choke Canyon Reservoir, South Texas: The Phase I Findings, edited by G. D. Hall, S. L. Black, and C. Graves, pp. 597–610. Choke Canyon Series, No. 5. Center for Archaeological Research, The University of Texas at San Antonio.

Roemer, F.

1983 *Texas: With Particular Reference to German Immigration and the Physical Appearance of the Country*. Eakin Press, Austin.

San Antonio Express

1984 POWs kept at Camp Bullis, sent home in '46. March 19, 1984.

San Antonio Light.

1946 POW Camp Closes At Fort. June 17, 1946.

Schramm, A.

1984 World War II POWs treated well in Texas camps. San Antonio Light, June 3, 1984.

Scott, A. M.

- 1997 Archeological Survey of 125 Acres at Camp Bullis Military Reservation, Bexar County, Texas. Technical Reports, Number 28. Prewitt & Associates, Inc., Austin.
- 1998 Archeological Survey of 63 Acres at the 90th ARCOM Rock Crusher Site, Camp Bullis Military Reservation, Bexar County, Texas. Technical Reports, Number 32. Prewitt & Associates, Inc., Austin.
- 1999 *Cultural Resources Survey of 1,925 Acres at Camp Bullis Military Reservation, Bexar County, Texas.* Reports of Investigations, Number 123. Prewitt & Associates, Inc., Austin.

Sharpe, S.

1985 Swastikas decorate Fort Sam stones. San Antonio Light, May 8, 1985.

Skinner, S. A.

1981 Aboriginal Demographic Changes in Central Texas. *Plains Anthropologist* (26)92:111–118.

Stahle, D. W., and M. K. Cleaveland

1995 Texas Paleoclimatic Data from Daily to Millennial Time Scales. In *The Changing Climate of Texas: Predictability and Implications for the Future*, edited by J. Norwine, J. R. Giardino, G. R. North, and J. B. Valdes, pp. 49–69. GeoBooks, Texas A&M University, College Station. Steele, D. G., and C. Assad Hunter

1986 Analysis of Vertebrate Faunal Remains from 41MC222 and 41MC296, McMullen County, Texas. In *The Prehistoric Sites at Choke Canyon Reservoir, Southern Texas: Results of Phase II Archaeological Investigations*, edited by G. D. Hall, T. R. Hester, and S. L. Black. Choke Canyon Series, No. 10. Center for Archaeological Research, The University of Texas at San Antonio.

Story, D. A.

1985 Adaptive Strategies of Archaic Cultures of the West Gulf Coastal Plain. In *Prehistoric Food Production in North America*, edited by R. I. Ford, pp. 19–56. Anthropological Papers No. 75. Museum of Anthropology, University of Michigan, Ann Arbor.

Taylor, A. J., and C. L. Highley

1995 Archaeological Investigations at the Loma Sandia Site (41LK28): A Prehistoric Campsite in Live Oak County, Texas, 2 volumes. Studies in Archeology No. 20. Texas Archeological Research Laboratory, The University of Texas at Austin.

Taylor, F. B., R. B. Hailey, and D. L. Richmond

1991 *Soil Survey of Bexar County, Texas.* United States Department of Agriculture, Soil Conservation Service, Washington, D.C.

Texas Historical Commission (THC)

2003 Texas Archeological Sites Atlas. http://pedernales.thc.state.tx.us/ Accessed December 2003.

Texas General Land Office

- 1841 Land grant records for James M. McCullough survey, Bexar file S-53.
- 1846 Land Grant Records for Madison James surveys 2 and 3, Bexar files S-50 and S-51.
- 1860 Land grant records for Raphael Herrera survey, Bexar file 1-1419.

Townsend, J. C.

1975 Analysis of a Collection from 41BX36, A Burned Rock Midden. Unpublished manuscript on file Center for Archaeological Research, The University of Texas at San Antonio.

Turner, E. S., and T. R. Hester

1993 A Field Guide to Stone Artifacts of Texas Indians. Gulf Publishing Co., Houston.

U.S. Army Corps of Engineers (COE)

1925 Training Map, Leon Springs Military Reservation, Texas. In collection of the Fort Sam Houston Museum, San Antonio.

U.S. Army Eighth Corps Area

1938 Realty Records for Camp Bullis Military Reservation. In Camp Bullis acquisition file, Fort Sam Houston Museum, San Antonio.

U.S. Army Fort Sam Houston, Office of the Post Engineer

- 1944a Map of Prisoner of War Camp, Camp Bullis. In collection of the Fort Sam Houston Museum, San Antonio.
- 1944b Map of Prisoner of War Camp, Camp Bullis. In collection of the Fort Sam Houston Museum, San Antonio.

Veni, G., W. R. Elliott, A. M. Scott, R. S. Toomey, III, and J. R. Reddell

1998 Hydrogeological, Biological, and Archeological Investigations of Caves and Karst Features, and Continued Biological Monitoring of Four Edwards Limestone Caves, Camp Bullis, Texas. George Veni & Associates, San Antonio.

Veni, G., A. M. Scott, R. S. Toomey, III, J. R. Reddell, and J. C. Cokendolpher

2000 *Hydrogeologic, Biological, and Archeological Karst Investigations, Northern Camp Bullis, Texas.* George Veni & Associates, San Antonio.

Walker, R. P.

2001 The Lone Star and the Swastika: Prisoners of War in Texas. Eakin Press, Austin, Texas.

Weir, F. A.

1976 The Central Texas Archaic. Unpublished Ph.D. dissertation. Anthropology Department, Washington State University.

Weniger, D.

1984 The Explorers' Texas: The Land and the Waters. Eakin Press, Austin.

Wilder, M. C., J. K. McWilliams, K. W. Kibler, and M. D. Freeman

2003 Cultural Resources Survey of 4,423 Acres and National Register Testing at Five Prehistoric Sites, Camp Bullis Military Reservation, Bexar and Comal Counties, Texas. Reports of Investigations, Number 135. Prewitt & Associates, Inc., Austin.

Winingham, R.

- 1982 Pool at Camp Bullis possibly POW-built. San Antonio Express, October 7, 1982.
- n.d. Infantry built swimming pool at Camp Bullis. Undated [1982?] clipping from the *San Antonio Express* in "Prisoners of War" clipping file, San Antonio Public Library, San Antonio, Texas.

Appendix A

Karl-Heinz Blumenthal Interview Transcript

Appendix A: Karl-Heinz Blumenthal Interview Transcript

Beginning in November 2003, John J. Leffler, the project historian, corresponded via email with Karl-Heinz Blumenthal, a German soldier during World War II who was captured in Africa and later held prisoner in POW camps in Texas, including those at Fort Sam Houston and Camp Bullis. In January 2004, Mr. Blumenthal agreed to answer a series of questions via email about the Camp Bullis POW camp and his experiences there. Leffler would send written questions to Blumenthal who would answer them in emails. For the following account, Blumenthal asked Leffler to edit his answers for spelling, punctuation, and grammar. Comments in parentheses are Blumenthal's own; those in brackets have been inserted by Leffler.

On January 10, 2004, Karl-Heinz Blumenthal answered the first set of questions:

Karl-Heinz Blumenthal: Dear John, I'd like to answer your questions to the best of my memory or knowledge.

John Leffler: First, was the Camp Bullis POW camp independently operated, or was it a "satellite" of the larger POW camp at Fort Sam Houston? (If it was a "satellite," I have several other questions for you.) Were the prisoners at the Camp Bullis POW camp different in any way from those at Ft. Sam Houston?

K-H.B.: Camp Bullis was a satellite camp or *ein Nebenlager* from F.S.H. [Fort Sam Houston]. When I arrived in F.S.H. in the spring of 1944 it [the Fort Sam Houston POW camp] was a working camp of about 150-200 POWs. The work assignments were in the hospital, kitchen, motor pool, laundry, golf course and more.

A small group of 10-15 POWs were transported each morning [from the Fort Sam Houston camp] to Camp Bullis. They left at 4.:30 AM to work in the kitchens. Some time in mid-summer [1944] I became one of that crew. Later that year, I don't remember when, a POW camp in Camp Bullis was built and 50 to 80 POWs [were sent there]. Some came from Fort Sam Houston and [some] from other camps in Texas. I don't think that we were treated differently than in F.S.H. or any other camps I was in.

J.L.: Second, can you give me fairly precise descriptions of the camp's tents, buildings and sidewalks, etc. (for example, size, number of rooms, construction materials, colors)?

K-H.B.: In the camp, the kitchen, recreation barracks, washshower and toilet were wood frame buildings. On the outside they had a dark gray or even a black look. Today the foundations are still partly shown. The Rec[reation] barrack was roughly 30 by 20 feet and was about 2 feet above the ground. Inside we had our PX store. Beside benches and table there was also a ping pong table in there.

Our sleeping quarters were gray or khaki-colored tents with a wooden floor and a wood burner heating stove, same as the GIs had. Four to six people occupied each tent.

[For] the sidewalk[s] we scraped the grass and weeds off with a pick and shovel and lined it out with fieldstones, picked up from our sport (soccer) field after the U.S. Army engineers had leveled it out. (Today it is still used by US soldiers.)

J.L.: Was there an American camp commander? If so, can you remember his name, rank, background, etc.? What was your impression of him at the time? What about other American soldiers you came into contact with? What was your general impression of them? What was security like at the camp? Maps I've seen don't show any guard towers. What were the fences like?

K-H.B.: The American Camp Commander was Capt. Weiss. He was in his 40th [year?]. We all respected him. He was very strict and punctual.

With my little school English I had no problems with any American soldiers. An old saying is: "The way you scream into the woods [is] the same way the echo comes back toward you."

The fences were made out of barbed wire: two lines about 6 feet apart (?) and 8 feet tall (?). [Both of the question marks are Mr. Blumenthal's own.] At night lots of spot lights lit up the area. John, I really cannot recall if there were any guard towers.

J.L.: Can you remember the names of other prisoners at the Bullis camp? If so, what were their backgrounds, etc.?

K-H.B.: I do not remember any family names from other POWs [there]. Most from us had a trained trade background like mechanic, baker or butcher and so on.

J. L.: What was the normal daily routine for the prisoners at the Camp Bullis camp? Was it any different from other camps you were in?

K-H.B.: The fellows, including me, working in the GI kitchen had to get up very early. Breakfast for the GIs started at 7:30 AM . The roll call morning count at the POW camp was at 7:30 AM, then breakfast [from] 8 AM to 8:30. Mostly everybody was picked up from a [by a?] guard to get to his work assignment. If I remember well there was a second maintenance shift at the motor pool. For myself [this was] no different than other camps I was in.

J.L.: Were there any recreational activities at the Camp Bullis site for the POWs there? The maps I have don't show any theaters, etc. there. What did prisoners do for fun and entertainment?

K-H.B.: Camp Bullis had no theater. Some POWs played guitars or mouth organs [harmonicas]. We very often got together for some sing along, sometimes outside or in the Rec hall. Table tennis. Soccer, European handball and Faustball (volleyball) attracted many American GIs on weekends to watch our tournaments. We had also chess and card play tournaments inside the rec. barrack.

J.L.: How did the POWs at the Bullis camp organize themselves? Were there any particular leaders, for example? Were there any members of the Nazi Party there? If so, did they have any influence on the other prisoners?

K-H.B.: The POWs had their own company office inside the camp. Our German company chief was a well-liked sergeant major who we respected very much. A POW interpreter was also a permanent staff member. I don't think that we had any loud speaking political person in our camp.

J.L.: Were the Camp Bullis prisoners put to work? If so, what did they do? How did they interact (if at all) with American civilians in the area?

K-H.B.: US personnel were only allowed to speak to us in English. Even so when nobody was around some spoke to us in our native language. Work assignments were mostly everything like cleanup, gardening and so on.

J.L.: Well, I have many other questions but I guess that these are enough (or more than enough!) for now. Thanks again for your help.

K-H.B.: I hope it will help you a little in your research.

On January 22, 2004, Mr. Blumenthal answered a second set of questions:

J.L.: Did the POWs at Camp Bullis ever go out and work on local farms or for local businesses? If so, can you remember any of the work they might have done there?

K-H.B.: In FSH and Camp Bullis all of us worked only on the military base. See my write-up on the web site. If I remember well you could voluntarily choose your work assignment. Example: in my case I was then only 21 years old and was always sort of hungry and applied as a kitchen helper. In addition we got paid extra pay when we were out working. I forget how much it was. As an only child my mother took me very often to her sister's restaurant to help in the kitchen. So I learned a lot of things [about] what was going on in a kitchen (P.S. Up to this day I still like to cook at home). And again with my little school English I did very well.

Each morning at the roll call it was said like: "We need 10 or so men to do some work here or there." Sometimes [these assignments] became a permanent job. In Camp Bullis most of us had permanent assignments.

J. L.: You say that the POWs weren't treated any differently than POWs in other camps. But were there any particular reasons that POWs were sent to Camp Bullis, instead of being kept, for example, at the Fort Sam Houston camp?

K-H. B.: [The] USA government treated us strictly [according] to the Geneva Red Cross rules.

John, in 1944 it was a long haul to be transported each day back and forth from FSH [Fort Sam Houston] to C.B. [Camp Bullis] The road condition was poor and partly unpaved. It was no fun sitting (herded) in a the back of a covered Army truck. (On my previous visit it was a nice wide-open road from FSH to CB). In my opinion Camp Bullis could have used more POWs to do local work on the camp site. Transferring POWs from one camp to another was very common.

J. L.: You say that the POWs at Camp Bullis had their own "office." Was this in a special building or in one of the tents? What kind of business was conducted in the office?

K-H.B.: In Camp Bullis we had one tent as an office and one tent for a quartermaster (?) to enhance clothes and shoes. The duty of the German camp officer was to keep the camp in order, keeping our personnel records actually the same way like in the US Army.

J. L.: In your website piece you mention something about a swimming pool somewhere on Camp Bullis that was built by the prisoners. Can you remember approximately where that was located? Can you remember any other projects around the camp that the prisoners helped to build?

K-H.B.: The swimming pool was near the officer's club house. Many of the Electrical light posts were replaced by POWS. Mowing grass and road work were some other kinds of work for the POWs.

J.L.: Did anybody ever try to escape from the camp? If so, what happened to them?

K-H.B.: Nobody tried or escaped from C.B.

J.L.: Was the POW soccer field on the camp itself? If so, where (on the map that you sent me) [the same map that is now on the historical marker at the Camp Bullis POW site – see Figure 6-4 of the main report] was it located? If not, where was it?

K-H.B.: Our sport-field was on the right side on the end of the tents inside the camp. See layout [map mentioned above].

J.L.: Were you at the Camp Bullis POW camp when the war ended? How did the prisoners there react when they heard the news? How did the Americans act? Were there any celebrations that joined Germans and Americans then?

K-H.B.: The end of the war was very emotional to all of us. Not knowing what will be happening to us. Are we going home? Are our relatives still alive? Do you still have a home to go home to??? Those had been the most asked question by then. In the local newspaper and the New York Times (newspapers were available by subscription to us censored in our PX for \$ 2 cents) we could read about the progress [of the war] and the end of the war.

On the morning May 8 ,1945 roll call it was officially announced that Germany had surrendered.

Many GIs came up to us and said "now you can go back home."

J.L.: Were you at the camp when it was closed? If so, can you tell me something about that? For example, when did it happen? How were the prisoners sent away? What happened (so far as you know) to most of the prisoners? (Aside from what you've written on your website).

K-H.B.: No, I was not in the camp when it was closed up. [At the] End of January 1946 we were transported to a train station nearby and sent to New Jersey.

I lost track of all of my comrades, due to all the searches we had to go through. And some of the inspectors took lots of my (our) personal belongings, including my diary, away with my addresses of some men I [would have] liked to get back in contact [with] again after my return to Germany.

In an email dated January 25, 2004, Mr. Blumenthal addressed another set of questions:

K-H.B.: Hi John, you are lucky today. It is snowing in NC [North Carolina] and I took the time to answer your questions.

J.L.: First, from what you've said in previous messages, I get the impression that most POWs sent to the Bullis camp only stayed there for a short while. Is that true? If so, how long did most POWs stay there?

K-H.B.: Since I went to work in Camp Bullis (1944) we were always the same men. The only "newcomer[s]" I remember was when we moved into the new established POW camp at the site.

After a short while most of the "newcomers" had permanent jobs, and some, I may call them "drifters" or "floaters," were shifted around by daily demand to do all kinds of temporary work assignments on the base. I don't know when the POW camp was closed up, but it was some time in 1946.

J.L.: Were German officers ever sent to the camp? If so, did they have special accommodations there? Was a particular part of the camp set aside for them? Were they given special privileges?

K-H.B.: No, no German officers in Camp Bullis or F.S.H. One large German officer's camp in Mexia, Texas.

J.L.: I'm a little confused. Was there no designated POW leader at the camp? If there was one, how was he chosen?

How was it decided who the camp's quartermaster and recordkeeper would be?

K-H.B.: Each camp had its own German camp commander. In larger camps when we had 4 companies in one section, like Huntsville TX or Hearne TX, each company had its own company leader. All those commanders were chosen by the US camp authorities by their German ranks and/or years of service.

J.L.: What sort of clothes did most prisoners at the Bullis POW camp wear? How many changes of clothing did you have? How was laundry done?

K-H.B.: Besides keeping our own [German] uniforms, we received two sets of US army uniforms, but all dyed dark blue (except the underwear). And we had to stencil everything with a large white PW maybe five or six inches big.

In the summer time it was light khaki material and in winter it was sort of woolen material. Again, the same way like it was done in the US Army.

The laundry, we did it ourselves like in the German Army. If the clothes and shoes showed too much wear they could be exchanged by the quartermaster. In Bullis, because we were only a few men, it was also the duty of our camp commander to take care of things like that.

J.L.: What was sold at the camp canteen?

K-H.B.: We could buy, I like to use a GI expression, mostly everything "from soup to nuts," or from shoe polish to a tooth brush.

J. L.: What sort of food was served to prisoners at the camp. Did the prisoners like it, or not?

K-H.B.: [After] Working in a US army kitchen—I'd like to say that we had in the POW kitchen the same food supply except we baked our own bread and we had our own German POW cooks. [Emphasis in original]. When it came to corn or sweet potatoes, in the beginning we did not like it so much, but after a while we got used to it—to this day I still don't like sweet potatoes.

John, you've spent some time in Germany and you should know that we prepare our meals a little different, like weiner schnitzel, sauerbraten, breaded pork chops and so on. **J.L.:** Did the POWs ever get alcohol (beer, wine, etc.) at the camp? If not, did they find ways to make it themselves?

K-H.B.: Yes. We could buy low alcohol "near beer." I don't remember exactly what it cost. We could drink the beer in the PX or we could take it to the tent. Some guys built a still into the tent heating stove. I think it was never found. Do not ask me how it tasted. Never had tried it.

J.L.: Where did the POWs at Bullis go for church services? Were there separate services for different denominations (Protestants, Catholics, etc.) or not? If there were services, who led them?

K-H.B.: We had church services once or twice per month in the camp. A German POW (Pastor Dunmann, he was with the German Afrika Korps) from F.S.H. POW camp came up to Camp Bullis and we all went to his service. Sometimes it was held outside or in the PX Rec. building. Pastor Dunmann was a long-time missionary in South Africa before the war.

J.L.: About how many hours a day were the POWs required to work? How many hours were "free time"?

K-H.B.: I can only talk about F.S.H. and Camp Bullis. [The work day at the] Laundry and golf course in Fort Sam Houston when I worked there for a short time was 7 hours a day.

We did not have any exact working hours in C.B. Mostly when the work was done and depending on the guard you could return to the camp. Or let's say the work details assignments were pretty much 7 hours every way.

The rest of the time you could improve your learning skills by getting some books. I believe [they] were lent by the Red Cross and some university school from ??? Or you could find some entertainment in sports activity (& that was me).

J.L.: You say on your website that the POWs built a swimming pool at Camp Bullis, but another source says it was built earlier and only repaired by the POWs. Are you sure the POWs built the pool?

K-H.B.: It is my understanding that the swimming pool was built (or rebuilt) by POWs.

J.L.: You've said that the POWs could buy newspapers, but did you have access to books, too? Films? If films, can

you remember what they were and where they were shown?

K-H.B.: Yes, we could buy censored newspapers and also dictionaries, like the one I am using now to write you this letter.

J.L.: Did any prisoners ever receive mail or packages from relatives or friends in Germany? If packages, what sorts of things were in them?

K-H.B.: Yes, with the agreement with the Geneva Red Cross we were allowed to send and receive censored mail. If some people back home in Germany could spare some goodies, they could send us small packages. But due to the censorship inspection it was opened up and never reached us in one piece.

J.L.: Where and how did prisoners at the camp get haircuts? Did the authorities at the camp trust the prisoners with scissors for haircuts, razors for shaving?

K-H.B.: In F.S.H. we had a real barber shop with two or three chairs. In full trust the US commander, his staff and some guards got some FREE haircuts from our POW barbers once in a while. In those days, [there] was nothing to fear about like today.

J.L.: Did the POWs at Bullis celebrate Christmas or other holidays? If so, how?

K-H.B.: In C. B. on Christmas eve and Christmas day we all got together and our thoughts went back home. Don't forget we were mostly young kids, not much more than 19 when we left home. It was not easy.

I believe in 1944 we had a real Tannenbaum [Christmas tree] inside the camp. Decorated with thoughtful homemade decoration.

J.L.: You kept your Camp Bullis driver's license [see Figure 3-2 in the main text] as a sort of souvenir from your time there. Do you have any other souvenirs from the camp from your time there? If so, would you share pictures of them with me?

K-H.B.: Besides my memory that is all that I have from Camp Bullis.

In an email dated January 29, 2004, Mr. Blumenthal addressed another set of questions:

K-H.B.: Hi John. It is still cold here in the North Carolina Mountains, so it is a good time to stay inside. We still have a little snow on the ground. Best regards, Karl-Heinz.

J.L.: First, I'm still not clear on how many POWs were in the camp. At one point you say about 80; other sources say maybe as many as 200 were there at the camp's peak, though they're not clear. What were the MOST prisoners there? How many tents were set up to house them?

K-H.B.: To my knowledge 1944 the POW camp in Bullis started with not more than 80 POWs. Maybe in 1945 it raised up to around 100 but not more because the POW mess hall never had more than two sittings. On the memory plaque [the map on the historical marker now at the site of the Camp Bullis POW camp] it looks like there were more tents than I remember ? John: when you mention other sources, who is it?

J.L.: On maps of the camp, the latrine is shown outside the camp fences. Was it really that way? If so, how did that work?

K-H.B.: The latrine and all the other facilities were inside the fence!!

J.L.: Were the POWs at Bullis allowed to have radios? If so, what sort of programs did you usually listen to? Were any of the radios converted by POWs so they could act as short-wave radios? If so, what was listened to?

K-H.B.: Yes, we had one or two AM radios in the camp. Some fellows smuggled the radios into the camp after they were picked up in the garbage thrown away by the GIs. No modifications were done to the radios.

J.L.: You didn't reply to my earlier question about whether or not the POWs were ever shown movies at the Bullis camp. If any were shown, do you remember any of them? Where and how were they shown?

K-H.B.: We had no movies shown in the camp. After Germany surrendered, we had one documentary film shown to all of us about the concentration camps. It was shown at an outside theater. It was very depressing for all of us to

learn at this point and we could not understand how things like that could happen. Each of us felt very bad and sorry about that.

J.L.: Do you remember if your food allotments changed for a little while after Germany was defeated? If so, what do you remember about that?

K-H.B.: In the POW kitchen the allotment was shortened for a short while. We had more "second class" foods than we had before, such as hamburger, liver, dried eggs and powdered milk. But nobody got off hungry.

J.L.: If POWs violated camp regulations, how were they punished? Can you think of any examples of POWs who were punished for violations of camp rules?

K-H.B.: At Camp Bullis we had no COOLER. If some very bad violations happened the person was transferred back to F.S.H.? To my knowledge this only happened once when one POW started fighting with somebody else on a job assignment. I don't remember the reason for the argument they had.

On February 6, 2004, Mr. Blumenthal responded to an email sent the previous day by Leffler. This begins with the first part of Leffler's inquiry, and continues as Mr. Blumenthal addresses points as they appear in Leffler's earlier message:

J.L.: I've been putting together my history of the Camp Bullis POW camp, and just noticed something. John Mancuso [Manguso] (the curator at the Fort Sam Houston Museum) told me that he got the photo of the Camp Bullis POWs that is on the historical marker at the C.B. POW site from you. He also says that the POW near the center of the photo with the "X" marked above his head is you. But that doesn't make any sense to me.

K-H.B.: In the attachment find a picture of me standing beside the marker. I thought I had sent it to you before ? [He had; see Figure A-1] **But I am not in the group.** Those fellows [in the photo] worked in the officer's mess hall in 1944 [Figure A-2]. I did not mark an "**X**" on any of my pictures. I may have sent him a photocopy of the theater



Figure A-1. Karl-Heinz Blumenthal next to the historical site marker for the POW at Camp Bullis. Mr. Blumenthal returned to visit the site of the Camp Bullis POW camp in 1979 and again (above) in 2003. Photo courtesy of Karl-Heinz Blumenthal.

group from **F.S. Houston** where I was part of it and I am in that image.

J.L.: On your website, you mention that when you visited the [Camp Bullis] site in 2003 you remembered everyone in the photo, but it sounds to me as though you'd never seen the photo before then.

K-H.B.: On my last visit in 2003 I saw the picture for the first time. I recognized most of the guys, some by their first names.

J.L.: In one of the answers you sent me recently, you wrote that the only souvenir of the camp that you have is the C.B. driver's license. Surely you would not have given Mancuso your only photo of that time if you'd had it.

K-H.B.: I really don't understand this question. I do have one picture from me. But it was taken in Fort Sam Houston. See attachment.

J.L.: And (it seems to me) you would have pointed yourself out on the photo (if you were on it) on the website. Please help me to clear this up. Did you give Mancuso that photo, or is he mistaken about that? Is the POW with the "X" over his head actually you, or not?

K-H.B.: On my next trip to Texas I'd like to check on that picture X.

J.L.: I'll send you copies of everything I write about the camp when the job is completed, which shouldn't be very long from now. Again thanks so much for all your help; and if you ever do get back down here to Texas, please let me know. The "Blumenthal, Texas" photo should get to you sometime next week.

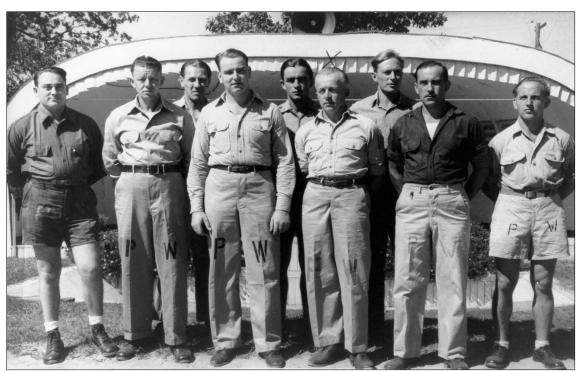


Figure A-2. A group of unidentified German POWs at Camp Bullis, probably in 1944 or 1945. Notice the "PW" stencilled onto their clothes. The photo is now on the memorial plaque at the site of the former POW camp. Courtesy Fort Sam Houston Museum.