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Vietnam War: Special Schools on U.S. Military Installations Vietnam Historic Context Subtheme

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EXECUTIVE SUMMARY

Recently, an overarching historic context was developed that provides a broad historic overview of construction on Department of Defense (DoD) military installations in the United States (U.S.) from 1962 through 1975. It highlights the Vietnam War-influenced construction that created facilities on many DoD installations (Hartman et al. 2014). The historic context provides common ground for understanding the need for construction on military installations in support of the conflict in Vietnam. It also identifies several thematic areas related to stateside construction in support of the war effort under which significance can be defined.

This Special Schools report is tiered from the overarching historic context, addresses the role of special schools on U.S. military installations during the Vietnam War, identifies specific installations and resource types associated with special schools during the Vietnam War, and provides a context to evaluate the historical significance of these resources.

The Vietnam War was unlike previous wars in which the United States had participated. The environmental conditions and topography of Vietnam presented unique difficulties. Additionally, the Viet Cong and North Vietnamese fought a guerilla war that forced the U.S. military to adopt new fighting techniques and to modify existing practices. In order to meet these new challenges, the military adopted specialized training programs and schools for U.S. troops. The schools were diverse and included training in land and sea survival, electronics, new technology, engineering, construction, intelligence, transportation, guided missiles, and amphibious and mine warfare.

State-side amphibious and riverine operations, psychological operations (Psyops), counterinsurgency (COIN), intelligence, and Army and Navy engineering and construction training are addressed in the Legacy report “*Vietnam War: Special Operation Forces and Warfare Training on U.S. Military Installations Vietnam Historic Context Subtheme.*” Other Legacy Vietnam historic context subthemes address pilot and crew training, logistic and transportation training, air mobility training, and ground troops training. This Special Schools report focuses specifically on survival training, leadership (Officer and Noncommission Officer) training, Air Force engineering training, and tactics and technology that came about as a direct result of United States involvement in the Vietnam War.

The National Historic Preservation Act of 1966 (NHPA), as amended, requires federal agencies to inventory and evaluate their cultural resources, usually as they near 50 years of age. Structures constructed during the Vietnam War for training and schools are turning 50 years of age.

Since this Special Schools report provides context and typology for special schools constructed during the Vietnam War (1962–1975), this report can be used for the identification and evaluation of Vietnam War-era special schools at DoD installations. This report’s historic context provides military cultural resources professionals with a common understanding for determining the historical significance of Vietnam War-era special schools, greatly increasing efficiency and cost-savings for this necessary effort.

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1.0 INTRODUCTION

The Department of Defense (DoD) Legacy Resource Management Program was created in 1990 to assist the military branches in their cultural and natural resource protection and enhancement efforts with as little impact as possible to the agency's mission of military preparedness. The DoD Legacy Program is guided by the principles of stewardship or protection of irreplaceable resources, leadership of the DoD as the leader in resource protection, and partnership with outside DoD entities to access the knowledge and skill sets of others. The DoD Legacy Program's general areas of emphasis can be found on the "About Legacy" tab on the Legacy website. These general areas of emphasis are:

- Implementing an interdisciplinary approach to resource stewardship that takes advantage of the similarities among DoD's natural and cultural resource plans. Often, the same person is responsible for managing both natural and cultural resource plans on an installation. The DoD Legacy Program strives to take advantage of this by sharing management methodologies and techniques across natural and cultural resource initiatives.
- Promoting understanding and appreciation for natural and cultural resources by encouraging greater awareness and involvement by both the United States (U.S.) military agencies and the public.
- Incorporating an ecosystem approach that assists the DoD in maintaining biological diversity and the sustainable use of land and water resources for missions and other uses.
- Working to achieve common goals and objectives by applying resource management initiatives in broad regional areas.
- Pursuing the identification of innovative new technologies that enable more efficient and effective management.

Each year, the DoD Legacy Program develops a more specific list of areas of interest, which is usually derived from ongoing or anticipated natural and cultural resource management challenges within the DoD. These specific areas of emphasis; however, reflect the DoD Legacy Program's broad areas of interest. To be funded, a project must produce a product that can be useful across DoD branches and/or in a large geographic region. This particular Special Schools project spans all DoD branches and can be used across the nation.

1.1 OVERARCHING VIETNAM WAR CONTEXT

The DoD and its individual services must comply with the National Historic Preservation Act of 1966, as amended (NHPA), by identifying and managing historic properties that are part of their assets. In an effort to help with this requirement, the U.S. Army Construction Engineering Research Laboratories (USACERL) directed a study of DoD Vietnam War resources, many of which are about to turn 50 years old. The resulting report, which was approved in December 2014, is an overview study of construction on DoD military installations in the United States from 1962 through 1975 resulting from the United States involvement in the conflict in Vietnam.

The report was developed as an overview document from which more detailed historic contexts and other documents can be developed. This programmatic approach will ultimately lead to the efficient and cost-effective identification and evaluation of Vietnam War facilities at DoD military installations in the United States. The report identifies several significant thematic areas (subthemes) related to construction in support of the war including ground training, air training, special operation forces and warfare, schools, housing, medical facilities, and logistics facilities.

This project contributes to the broad Vietnam War context by addressing special schools and provides a framework for identifying and evaluating associated historic properties at DoD installations.

This historic context focuses on special schools on U.S. military installations during the Vietnam War, but is intended to be a companion to other contexts that address Vietnam War history in the military in a holistic sense. Specific Vietnam War subcontexts will include ground training, housing, special operation forces and warfare training, medical facilities, and logistical facilities. Vietnam War subcontexts will be posted to <http://www.denix.osd.mil/references/DoD.cfm> as they become final.

This report is intended to provide a basis from which to evaluate DoD special school resources related to the Vietnam War. When evaluating these resources, the information contained in this document should be augmented with installation-specific historic contexts to make an accurate and justified argument regarding historic significance.

1.2 PURPOSE AND METHODOLOGY

The purpose of this effort was to research and develop a historic context of special schools and training during the Vietnam War. Resource types associated with special schools and training in the United States for the Vietnam War from 1962 to 1975 is also provided. Military action is summarized to strengthen the overall context describing special schools and training in the war and how this affected the built environment on DoD installations in the United States. This information is documented in this report; however, this report is not a detailed history of military engagements and important battles of the war.

To develop the historic context researchers accessed primary and secondary sources and visited installations. They conducted research at the National Archives and Records Administration (NARA) Archives I (Military Reference Branch); NARA, Archives II (Cartography and Architectural Records Branch); University of Colorado libraries; Maxwell Air Force Base (AFB), Air Force Historical Research Agency (AFHRA), Marine Corps Base Quantico, US Army Garrison (Schofield Barracks) - Hawaii, and the Vietnam Center and Archive at Texas Tech University. Online sources of information were also consulted for the development of the historic context.

The development of the Vietnam War historic context was supported and facilitated through the assistance of several individuals. A number of individuals provided additional support to the project by assisting with data requests, site visits, and providing reports and resources related to

Vietnam War special schools and training in the DoD. They also provided general guidance and installation-specific information.

- Kate Roberts, Marine Corps Base Quantico, Virginia
- Dave Crowley, DPW Environmental Division, U.S. Army Garrison – Hawaii
- Kathleen R. Frazier, Museum Curator, Tropic Lightning Museum, U.S. Army Garrison – Hawaii
- Erwin Roemer, Midwest Regional Branch, Wright Patterson AFB, Ohio
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- Susan I. Enscore, ERDC/CERL
- Adam D. Smith, ERDC/CERL

1.3 HOW THIS REPORT IS ORGANIZED

This report is presented in five chapters. Chapter 1 provides the introduction and methodology used to prepare this report. Chapter 2 provides a summary of the Vietnam War. Chapter 3 provides a context for special schools during the Vietnam War at United States installations. Chapter 4 provides a description of the types of resources that would be associated with special schools present on U.S. installations during the war and an overview of evaluating resources under the NHPA with descriptions of evaluation criteria and integrity. Chapter 5 contains selected references. The appendixes include installation-specific histories for Marine Corps Base – Quantico, Jungle Operations Training Center at US Army Garrison - Hawaii, the report contributors, and acronyms.

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2.0 SHORT HISTORY OF THE VIETNAM WAR

Portions of this summary are adapted from Ellen R. Hartman, Susan I. Enscoe, and Adam D. Smith, *Vietnam on the Homefront: How DoD Installations Adapted, 1962–1975*, *DoD Legacy Resource Management Program*, Report ERDC/CERL TR-14-7, December 2014.

The Vietnam War conflict played a significant role in American foreign policy during much of the Cold War. However, the foundations of unrest in Vietnam (a French possession since the 1800s) were laid during World War II and were driven by a legacy of European colonialism and the exigencies of Cold War politics.

Indochina (Vietnam, Laos, Cambodia) was not a major stage during World War II, but the region fell to the German-sympathizing Vichy French government during the war. A local resistance movement known as the Viet Minh quickly rose in defiance of the Vichy. The group, led by a Vietnamese nationalist named Ho Chi Minh, gained the support of China, the Soviet Union, and the United States. The Viet Minh defied the French in Indochina until the Vichy government in France fell to the Allies in 1944. Japan filled the void left by the French and briefly occupied Vietnam between 1944 and August 1945.

The defeat of Japan and the end of World War II resulted in a power vacuum in Vietnam. Ho Chi Minh subsequently declared Vietnamese independence and established the Democratic Republic of Vietnam. He asked the United States to recognize the newly independent country. American leaders; however, were uncomfortable with Ho Chi Minh's nationalism and his political ideology, which was largely influenced by communism. Even though the Soviet Union was an American ally during the war, the specter of communism, real or imagined, came to dominate Cold War foreign policy in the late 1940s.

Meanwhile, leaders from the United States, Britain, and the Soviet Union met in Potsdam, Germany to shape the post-war world. The Potsdam Conference did not serve Ho Chi Minh's interests. Instead of acknowledging a Vietnam free of colonial control, the world leaders decided that Indochina still belonged to France, a country that was not strong enough to regain control of the region on its own. Instead, China and Britain removed the Japanese from southern and northern Vietnam, respectively.

A French colonial government took control of Vietnam by 1946, but prior to their arrival, the Viet Minh held elections in which they won several seats in northern and central Vietnam. To consolidate their rule, the French drove the Viet Minh out of the urbanized areas of Vietnam. This action triggered the First Indochina War, a guerilla campaign against French occupation. The war pivoted on a north/south axis, with the Viet Minh, who had a solid foothold in the north, maintaining control of the central and northern portions of the country and the French holding on to power in the southern part of the country.

The Cold War stakes of the First Indochina War became considerably more significant when the newly established Communist government in China recognized the Viet Minh as the legitimate government of Vietnam. American policymakers looked gravely upon these developments. They believed that United States foreign policy and aid should strive to prevent and contain the

spread of Communism, a policy termed “containment.” As a result, the United States began assisting the French in their fight against the Viet Minh. Pragmatically, President Eisenhower chose to send military supplies but not combat troops. The First Indochina War continued for another four years until the French suffered a final defeat at the battle of Dien Bien Phu, which ended colonial rule in Vietnam.

The 1954 Geneva Accords codified France’s withdrawal from Indochina but did not mark the end of Western influence in Vietnam’s governance. The treaty was negotiated among the United States, the Soviet Union, China, France, and Britain. There were no Vietnamese representatives. The accords created three countries in Indochina: Vietnam, Cambodia, and Laos. Vietnam was temporarily divided along the 17th parallel. The Viet Minh were placed in control of the north while an Anti-Communist government under Prime Minister Ngo Dinh Diem was installed in the south until nationwide elections could be held, as stipulated.¹

Subsequently, the Viet Minh held elections in the north and won by significant margins. The situation in the south was markedly different; Prime Minister Diem cancelled elections in 1955 because he was afraid the Viet Minh would win convincingly, and the United States agreed with this prediction.² To make matters worse, Diem became increasingly authoritarian. He proclaimed himself president of the Republic of Vietnam in October 1955. While he had little influence in the north, Diem’s regime was oppressive and anti-democratic in the south.

Nonetheless, the U.S. Military Assistance Advisory Group (MAAG) began training South Vietnamese soldiers in 1955. The U.S. Air Force (USAF) advisory role began even earlier than 1955. Beginning in 1951, the USAF provided a small number of Air Force advisors to support the South Vietnamese Air Force. No doubt, training played a major role in the American advisory era in Vietnam. Most training occurred in Vietnam, but by 1961, 1,000 South Vietnamese soldiers received training in the United States each year.³

By 1956, a Communist-influenced insurgency escalated in the countryside and these rebels, known as the Viet Cong, complicated United States policy in the region. In addition to containment, United States policymakers also espoused the Domino Theory which argued that if the West did not take a stand, Communism would spread from country to country like toppling dominoes. South Vietnam was ground zero in this scenario. If South Vietnam fell to Communism then Laos would be next, then Cambodia, followed by Thailand, Malaysia, Indonesia, Burma, and so forth. The United States, while not comfortable with Diem’s anti-democratic rule, considered him an ally in their fight against Communism.

By 1958, a full-scale civil war was raging in South Vietnam. The opposition to Diem received encouragement and support from North Vietnam, which, by 1959, was providing supplies and troop support to the Viet Cong. Meanwhile, the United States support of South Vietnam

¹ “Final Declaration of the Geneva Conference on Restoring Peace in Indochina, July 12, 1954,” in *The Department of State Bulletin*, Vol. XXXI, No. 788 (August 2, 1954): 164.

² Walter LaFeber, *America, Russia, and the Cold War, 1945–2002* (New York, NY: McGraw Hill, 2002): 170.

³ Ronald H. Spector. *Advice and Support: The Early Years of the United States Army in Vietnam 1941–1960* (Washington, DC: United States Army Center for Military History, 1983): 239.

continued. There were 900 advisors in Indochina at the end of the 1950s and the United States financial and material commitments to Vietnam at this time ran into the billions of dollars.

John Fitzgerald Kennedy became President of the United States in 1961. While he did not want to commit the United States to a full-scale war in Vietnam, President Kennedy was steadfast in his opposition to Communism. As a result, the American advisory and support role grew dramatically under his administration. President Kennedy initially increased support for Diem's regime and sent additional troops to Vietnam, including U.S. Army and Marine Corps units. The USAF role also increased, with the first permanent units arriving in the fall of 1961. The U.S. Navy provided critical troop transport and increased their presence in the Gulf of Tonkin.

There were over 11,000 U.S. troops in Vietnam by the end of 1962.⁴ While ostensibly there to train troops and protect villages, the soldiers found themselves involved in border surveillance, control measures, and guerilla incursions. They also supported Central Intelligence Agency (CIA) operations in the region.

The United States involvement in Vietnam increased perceptibly in the first two years of President Kennedy's administration, but did not ameliorate the crisis as events grew increasingly out of control in South Vietnam. The intractability and oppression of Diem's administration had become untenable by 1963. He rebuffed United States demands that he hold elections. Worse, he lost any support he previously had in South Vietnam. This was graphically displayed to the world on 11 June 1963, when Thich Quang Duc, a Buddhist monk, set himself on fire at a busy Saigon intersection. The self-immolation, which attracted the attention of the world, was a direct protest to Diem's anti-democratic policies and the war that was raging in the countryside.

By the fall of 1963, President Kennedy realized that as long as Diem was in power, South Vietnam could not put down the insurgency. In November 1963, the president approved a plan to have the CIA overthrow the South Vietnamese government. The orchestrated overthrow coincided with an actual coup. Diem and his brother were arrested and assassinated. Three weeks later, President Kennedy was assassinated.

The fall of Diem resulted in considerable instability. From November 1963 to June 1965, the South Vietnamese government was a revolving door. Five administrations came and went until Lt. Gen. Nguyen Van Thieu and Air Vice Marshal Nguyen Cao Ky came to power. Thieu remained president until the fall of Saigon in 1975. The years of instability; however, undermined South Vietnam's ability to counteract the Communist insurgency. The Viet Cong attracted substantial support and assistance from the Viet Minh in South Vietnam who saw the instability as an opportunity to overthrow the South Vietnamese government.

Upon President Kennedy's assassination on 22 November 1963, Lyndon Baines Johnson was immediately sworn in as president of the United States. Initially, President Johnson was not interested in expanding United States involvement in Vietnam. The crisis in Southeast Asia took a backseat to his domestic agenda, which included civil rights legislation and an ambitious package of domestic policies and laws known as the "Great Society." At the same time,

⁴ Joel D. Meyerson, *Images of a Lengthy War: The United States Army in Vietnam*, (Washington, DC: United States Army Center for Military History, 1986): 69.

President Johnson did not want United States policy and actions in Vietnam to fail. After all, the United States had spent nearly a decade supporting the South Vietnamese government in the fight against the Viet Cong and, by proxy, the Viet Minh. More importantly, he did not want the 14,000 Americans who were in the region to lose their stand against the spread of Communism.

President Johnson increased the number of advisors and other military personnel in Vietnam to 16,000 by early summer 1964, but domestic matters occupied most of his energy until August when the war in Southeast Asia forcefully became the priority.

On 2 August 1964, three North Vietnamese patrol boats fired on the United States destroyer *Maddox* in the Gulf of Tonkin. The U.S. Navy retaliated and fended off the attack. The details of the confrontation are debated; at the time, the United States claimed the U.S. Navy vessel was on routine patrols in international waters, but other sources have since suggested that the USS *Maddox* was supporting South Vietnamese troops who were raiding North Vietnamese ports.⁵ Regardless of the details, the event, which came to be known as the “Gulf of Tonkin Incident,” marked a significant shift in the Vietnam War.

President Johnson ordered air strikes on North Vietnamese bases and critical infrastructure. The retaliation strikes ordered by President Johnson destroyed or damaged 25 patrol boats and 90 percent of the oil storage facilities. This strategy eventually became a cornerstone of the air war in Vietnam.

The most important outcome of the Gulf of Tonkin Incident was the 7 August passage of the Gulf of Tonkin Resolution by the United States Congress. The resolution gave the President broad authority to prosecute the war in Vietnam by allowing him to take “all necessary measures” to defend United States and allied forces and to “prevent further aggression.”⁶

President Johnson did not immediately use his new war-making powers in any comprehensive or aggressive way. He was, after all, running for reelection as the peace candidate in opposition to Barry Goldwater. President Johnson was re-elected in November 1964, and the war in Vietnam took precedence. The President and his advisors began to initiate a forceful military response. President Johnson removed all restrictions on U.S. military involvement, allowing United States personnel to directly engage in combat without the guise of training or advising the South Vietnamese.

In February 1965, President Johnson approved a sustained aerial bombing of North Vietnam. The campaign was known as OPERATION ROLLING THUNDER. U.S. Air Force, Navy, and Marine Corps aircraft dropped hundreds of tons of bombs on North Vietnam nearly every day from early March 1965 to early November 1968. President Johnson hoped the bombings would bring North Vietnam to the negotiating table.

The President began committing combat troops to Vietnam in the spring of 1965 when he deployed U.S. Marine Corps and Army combat troops to Da Nang and Saigon, respectively.

⁵ LaFeber, *America, Russia, and the Cold War 1945–2002*, 252–253.

⁶ “Gulf of Tonkin Resolution,” Public Law 88-408, 88th Congress, August 7, 1964.

Helicopter units accompanied both the U.S. Army and Marine Corps deployments. U.S. Navy vessels transported the troops, who were tasked with the defense of airbases. The deployments brought the United States presence in Vietnam to over 50,000. The United States' first major ground offensive occurred in August 1965 when the U.S. Marine Corps, in cooperation with the South Vietnamese Army, launched an airmobile and amphibious assault on Viet Cong forces near Chu Lai.

President Johnson continued increasing troop strength in Vietnam throughout the summer and fall of 1965. U.S. military presence had increased to 175,000 by the end of 1965. This included major Army divisions and units such as the 1st Cavalry Division, 1st Brigade, 101st Airborne Division, and 1st Infantry Division. The U.S. Marine Corps Expeditionary Force accounted for nearly 20,000 troops in Vietnam by the end of 1965. Large deployments continued through the peak years of the war (1965–1968).

It became clear to military leadership that the Vietnam War required more aggressive enlistment than the existing annual average of just over 55,000. The war necessitated an annual enlistment of nearly one million. Initially, military planners attempted to meet the shortfall through recruitment. Recruitment was successful for all branches except the U.S. Army, which was not able to fill the personnel gap and resorted to the draft in 1966. Draft calls continued until 1973.

The U.S. military was now committed to defeating the enemy in direct action. There were no longer any illusions about the United States merely providing training and logistical and material support to the South Vietnamese. United States ground forces participated in more than 550 battalion-size or larger operations during 1966, and U.S. military aircraft flew almost 300,000 sorties in 1966. Ground forces also participated in more than 160 joint operations with allies. As the war in Vietnam intensified in 1966, U.S. Marine units were conducting several hundred small unit actions during each 24-hour period. These operations, which were designed to find and isolate the Viet Cong, were successful. Within a year, the U.S. Marine Corps was able to gain control of almost 1,200 square miles of Vietnamese territory. Active campaigns continued through 1967, and there were nearly 490,000 U.S. troops in Vietnam at the end of the year over 260,000 of whom were Marines and 28,000 of whom were Navy seamen.

Early 1968 brought two major battles. First, the Khe Sanh Combat Base, a garrison of 6,000 U.S. Marines and South Vietnamese Rangers, which came under attack from North Vietnamese forces in late 1967, was completely isolated by the beginning of 1968. President Johnson and General William Westmoreland were determined to hold the base at all costs. This precipitated one of the longest and bloodiest battles of the war. The base remained under siege for 77 days until mid-April 1968. Khe Sanh eventually fell to the North Vietnamese in July 1968.

The other major engagement, known as the Tet Offensive, was a surprise attack on South Vietnamese targets by North Vietnamese troops. The operation, which occurred on 30 January 1968, was a simultaneous assault on more than 100 South Vietnamese cities and military installations. The United States, South Vietnamese, and other allied troops eventually repelled the attacks, but the offensive was a public relations disaster. President Johnson and other leaders had been telling the American public that the end of the war was in sight and that the North

Vietnamese were on the defensive. The Tet Offensive appeared to belie this contention. Support for the war, which was already unpopular, eroded further.

The military reaction to the Tet Offensive was to deploy more soldiers to Vietnam. General Earle Wheeler traveled to Vietnam after the Offensive to assess conditions in the country. He was convinced that there were not enough troops in Vietnam to effectively fight the war. Therefore, the general requested deployment of 206,000 additional U.S. troops. There were already nearly 500,000 soldiers in Vietnam and the American public was not supportive of increasing that number by nearly 50 percent. President Johnson denied General Wheeler's request. Instead, he authorized a comparatively small increase of about 13,000 troops. The president also began scaling back OPERATION ROLLING THUNDER.

Khe Sanh and the Tet Offensive captured the public's attention and convinced many that Vietnam was a never-ending quagmire. Military leaders, however, were planning for the United States exit from Vietnam. Their most pressing concern was still preservation of an independent South Vietnam and they knew that the only way this could occur was if they provided modern equipment and professional training to the South Vietnamese military. A defined withdrawal plan, however, was elusive.

Meanwhile, President Johnson decided not to run for reelection in 1968. His successor, President Richard Milhous Nixon, announced a new plan called "Vietnamization" in the spring of 1969. Essentially, the plan consisted of a concomitant rapid withdrawal from Vietnam and strengthening of South Vietnamese defense capabilities. The latter would be achieved through training and the provision of military equipment. Some United States units literally left Vietnam without their vehicles and aircraft were donated to the South Vietnamese military.

The military was at peak troop strength of 543,482 when President Nixon implemented Vietnamization. Drawdowns were rapid and troop levels were down to 250,000 by 1970. Stand-downs continued over the next couple of years, reducing United States forces to only 24,000 United States soldiers in Vietnam at the end of 1972.

Vietnamization coincided with increased hostilities in Vietnam and a widening of the war. President Nixon approved secret bombings of Cambodia and Laos in 1970 due to their support for North Vietnamese troops. The United States also took part in a ground incursion in Cambodia in the summer of 1970 and supported a South Vietnamese incursion in Laos in February 1971. President Nixon ordered the mining of North Vietnam's Haiphong Harbor in 1972 to prevent the arrival of supplies from the Soviets and Chinese.

The United States and North Vietnam agreed to a ceasefire in January 1973. United States minesweepers cleared Haiphong Harbor of mines in February 1973 and the last United States combat troops left Vietnamese soil in March. The U.S. military remained in the region but reverted to its training and advisory role.⁷ The United States exit from Vietnam resulted in greater instability. President Nixon warned the North Vietnamese that the U.S. military would return if the Viet Minh broke the ceasefire. However, in June 1973, the Senate passed the Case-Church amendment prohibiting further intervention in Vietnam.

⁷ Meyerson, *Images of a Lengthy War*, 183.

President Nixon was soon consumed by his own downfall as the Watergate scandal broke. President Nixon resigned in August 1974. His replacement, Gerald Ford, was met with continued crisis in Cambodia and Vietnam.

Cambodia's long-running civil war was at a critical point in early 1975. The United States-supported Khmer Republic was on the verge of collapse as the Communist Khmer Rouge solidified control over most of the country. The Khmer Republic only held Phnom Penh and its fall was imminent. The U.S. military, therefore, conducted a helicopter-based evacuation of United States citizens and refugees from Phnom Penh on 12 April 1975.

Meanwhile, the North Vietnamese and Viet Cong had launched an offensive in early 1975. Just as they had done in Cambodia, the United States implemented an existing evacuation plan on 29 and 30 April 1975. Much larger than the Cambodian evacuation, the Vietnamese operation provided transport for over 1,300 Americans and nearly 6,000 Vietnamese (and other foreign) evacuees from the country. The evacuation provided a graphic end to the Vietnam War as United States helicopters lifted civilians off the roof of the United States embassy in Vietnam. Saigon fell to North Vietnamese forces on 30 April 1975, effectively marking the end of the Vietnam War.



Source: usnews.com

FIGURE 2-1. THE FALL OF SAIGON

One final clash occurred in May 1975 when the Khmer Rouge Navy seized a United States container ship (the SS *Mayaguez*). U.S. Navy, Marine Corps, and Air Force units launched a

rescue operation. They met heavy resistance from the Khmer Rouge. The U.S. Marine Corps suffered significant casualties during the operation, which ultimately resulted in the release of the SS *Mayaguez* and crew.

The Vietnam War and related military actions finally ended in the summer of 1975—over two decades since the United States began providing support to the French colonial government in their fight against a nationalist indigenous uprising. The war was a turning point for Americans and the U.S. military. It was a conflict that occurred on a complicated stage that pushed technological change and forced the military Special Operations forces to continually innovate. It was also an increasingly unpopular war that reshaped the manner in which United States civilians viewed warfare. Many became increasingly distrustful of their government and military leadership.

The war was also a quintessential Cold War conflict in which United States policymakers viewed anything branded as Communist, whether real or imagined, as a fundamental threat. Some threats were grave; others were illusory. There is no doubt that Communism shaped the war in Vietnam. Vietnam was finally unified as a single country in the spring of 1975 under a generally popular Communist regime. The country was also finally free of the divisions established by foreign governments. Vietnam, which had been colonized by Europeans since the 19th century, was finally independent, albeit not on the terms the United States would have liked.

3.0 ON THE HOME FRONT

The Vietnam War was unlike previous wars in which the United States had participated. The environmental conditions and topography of Vietnam presented unique difficulties. Additionally, the Viet Cong and North Vietnamese fought a guerilla war that forced the United States military to adopt new fighting techniques and to modify existing practices. In order to meet these new challenges, the military adopted specialized training programs and schools for United States troops. The schools were diverse and included training in land and sea survival, electronics and new technology, engineering, construction, intelligence, transportation, guided missiles, and amphibious and mine warfare. While some schools served specific military missions and Special Forces, such as amphibious and riverine operations, Psyops, COIN, intelligence, or construction, others provided training across many disciplines.

State-side amphibious and riverine operations, Psyops, COIN, intelligence, and engineering and construction training for the Army and Navy are addressed in the Legacy report “*Vietnam War: Special Operation Forces and Warfare Training on U.S. Military Installations Vietnam Historic Context Subtheme.*” Army and Navy engineers supported Army Special Forces and conducted civic and community program to prevent the development of insurgency. Other Legacy Vietnam historic context subthemes address pilot and crew training, logistic and transportation training, air mobility training, and ground troops training. Therefore, this Special Schools report focuses specifically on survival training, leadership (Officer and Noncommission Officer) training, and tactics and technology that came about as a direct result of United States involvement in the Vietnam War. This report also includes a discussion on Air Force engineering and construction that was not covered within the Special Forces report. Air Force engineers primarily constructed new and, operated and maintained, Air Force facilities and base utility systems and are included in this report. The Navy and Army construction programs were specific missions to “win over the hearts and minds” of the Vietnamese, and therefore are included in the Special Operations Forces report.

3.1 SURVIVAL, EVASION, RESISTANCE, AND ESCAPE (SERE) TRAINING

When the United States entered World War II, the problem of recovering downed airmen in the several theaters of war quickly came to the attention of Army Air Forces (AAF) officials and United States intelligence agencies. The success of British evasion and escape organizations did not go unnoticed by United States intelligence agencies. The AAF, in coordination with the Office of Strategic Services, took on the job of developing a capability that paralleled the British effort. As the scope of the war broadened in Europe, so did the business of rescuing downed airmen. With the help of well-organized underground forces, the AAF extricated 60 percent of the aircrews downed in the Balkans by late 1944. However, the task of rescuing downed airmen in the Pacific theater was far more complex and far less successful.

Most military branches incorporated escape and evasion training in their intelligence and other specialized training, but specific survival schools did not exist until after World War II. Only the Air Force established a dedicated survival school prior to 1960. After World War II, the Strategic Air Command (SAC), under Gen Curtis E. LeMay, set out to develop a more comprehensive aircrew survival capability. The first step down that road was the Arctic Indoctrination School,

established in August 1947 at Marks AFB, Alaska. A short while later, SAC established an additional survival training capability at Ladd AFB, Alaska. The school at Marks AFB provided training for aircrews exposed to the arctic environment, while the facility at Ladd AFB was more limited in scope and designed mainly for crews stationed there. Before long the survival training program outgrew the facilities available at Marks AFB, and in November 1948 the Air Force consolidated training at Ladd AFB.⁸

Arctic survival training remained there until 1960, when it moved to Eielson AFB, Alaska. On 16 December 1949, SAC opened another survival school at Camp Carson, Colorado, to teach its aircrews how to survive in mountainous terrain. Camp Carson was selected because the nearby terrain could serve as a facsimile to conditions airmen might encounter in the Soviet Union. Soon, Far East Air Forces, Tactical Air Forces, Military Air Transport Service, and the Royal Canadian Air Force were all vying for class slots for their aircrews. By 1952, the school was so popular that it had outgrown the capacity of its Colorado location. Therefore, the Air Force sought a larger training area to accommodate the increase in students.⁹

In July 1952 SAC selected Stead AFB, Nevada, as the location for its new land survival school and turned over the training area at Camp Carson to the U.S. Army. Officials in SAC believed the surroundings at Stead AFB provided a realistic setting for survival training for the Korean War. Ten miles northwest of Reno, the new center was close to the high Sierra Nevada mountains on one side and had a hot, bleak, treeless environment on the other. The school, which came to be known as the Survival, Evasion, Resistance and Escape (SERE), trained members of all military branches and the Coast Guard. The survival school remained at Stead AFB for 14 years; however, jurisdiction of the base and school transferred from SAC to Air Training Command (ATC) on 1 September 1954.¹⁰

The Vietnam War brought concerns over safety and survival to the forefront. American soldiers, especially pilots, placed themselves in hostile territory behind enemy lines. In the event of mishap or enemy attack on their aircraft, their death or capture by the enemy was a realistic possibility. Over 3,200 American servicemen were either captured or killed by the enemy; or they were presumed dead but remain unaccounted for. The Viet Cong and North Vietnamese took over 700 Americans prisoners during the war. Thirty-seven Americans escaped captivity.¹¹

During this time, survival training within the USAF was the product of a fragmented evolution rather than a well-planned, properly executed program. Several major USAF commands conducted courses that related directly or indirectly to survival of aircrew members. Many of the courses had grown from humble beginnings, intended to put refinements on the aircrew members' total educational process, to courses that resembled highly specialized training

⁸ Manning, Thomas A., Dr. Bruce A. Ashcroft, Richard H. Emmons, Ann K. Hussey, Dr. Joseph L. Mason. *History of Air Education and Training Command, 1942-2002*. (Randolph Air Force Base, Tex.: Office of History and Research, Headquarters, Air Education and Training Command, 2005). 166

⁹ Manning et al., *History of Air Education and Training Command, 1942-2002*. 166

¹⁰ Manning et al., *History of Air Education and Training Command, 1942-2002*. 166

¹¹ Defense POW/MIA Accounting Agency, Vietnam War POW/MIA List, Available at <http://www.dpaa.mil/Our-Missing/Vietnam-War/Vietnam-War-POW-MIA-List>

schools. The topic of consolidation of USAF survival training seriously begun in September 1964. A study forwarded to Headquarters USAF on 14 June 1965 showed that 14 Major Air Commands in 108 separate organizational units were operating 143 survival training courses. This potpourri of training ranged from a one-time requirement for personnel to more regular, frequent courses and from classroom orientation length to formal comprehensive field survival training. The study further demonstrated a lack of survival instructor specialists throughout the existing programs. The urgency of buildup in Southeast Asia forced interim measures to consolidate this training.¹²

On 30 June 1966, the Secretary of Defense announced the closure of Stead AFB and the transfer of all land survival school assets to Fairchild AFB, Washington. With the transfer of the school to Fairchild, ATC activated the 3636th Combat Crew Training Group (Survival) on 15 March 1966 to carry out that mission. In addition to the training provided at Fairchild AFB, other major commands also operated survival training programs during the Vietnam War. Tactical Air Command (TAC), for example, had the Deep Sea Survival School at Tyndall AFB, Florida, and the Tropic Survival School at Albrook AFB, in the Panama Canal Zone, while Pacific Air Forces had the Jungle Survival School at Clark Air Base in the Philippines.¹³



Source: Manning et al., *History of Air Education and Training Command, 1942-2002*

FIGURE 3-1. SURVIVAL TRAINING AT STEAD AFB

¹² Baird, Sidney A. "Co-location of USAF Land and Water Survival Training Programs." (Air War College Air University Report no. 5528, April 1975): 8-10.

¹³ Manning et al., *History of Air Education and Training Command, 1942-2002*. 167

TAC Sea Survival School moved from Langley AFB, Virginia to Homestead AFB, Florida in December 1966 so it could operate year-round. In a five-day course, pilots were trained in the correct procedures for sea survival. The course included instructions in the use of survival gear, how to survive on the beach, use of signaling devices, and student participation in ditching procedures.¹⁴ Homestead SAC personnel worked in cooperation with Everglades National Park including the use of the park as a survival training location.¹⁵

The proliferation of programs prompted the Air Staff to consolidate all training centers under one command. ATC became the single manager for survival training, and the 3636th Group was elevated to Wing status on 1 April 1971. By mid-1971 the Wing had completed the consolidation. It offered basic global survival at Fairchild AFB; jungle survival at Clark AFB; and arctic survival at Eielson AFB, Alaska. Subsequently, Headquarters USAF authorized the Wing to conduct tropical survival at Albrook AFB.¹⁶

A couple of years after the end of the Vietnam War, the Air Force shut down the Jungle and Tropic Survival Schools. Operations at Clark AFB ceased in April 1975, and the school at Albrook AFB closed in June 1975. The 3636th Combat Crew Training Wing continued to conduct basic survival courses at Fairchild AFB, while one of its squadrons provided water survival training at Homestead AFB and a detachment offered arctic survival training at Eielson AFB. Hurricane Andrew devastated Homestead AFB in 1992, and the subsequent devastation forced the command to relocate water survival training. The 3613th Combat Crew Training Squadron moved from Homestead AFB to Tyndall AFB, Florida.¹⁷

The command restructured its wings in 1993 and determined that the 3636th Combat Crew Training Wing should be a group. On 24 January 1993 the command redesignated the 3636th as the 336th Crew Training Group, and the 3612th, 3613th, and 3614th Combat Crew Training Squadrons became the 22nd, 17th, and 66th Crew Training Squadrons, respectively. Three years later, the group became simply the 336th Training Group, but continued its mission of providing survival training.¹⁸

The USAF SERE school influenced the operation of survival schools in other military branches during the Vietnam War. The Navy and Marine Corps established their survival school in 1962.

Marine Corps' Camp Pendleton, California, experienced exceptional growth and need for training, including survival training, during the Vietnam War. A three-day SERE course was a component of the 15-day pre-deployment training at Camp Pendleton which included practical application and formal lectures. A distillation of this SERE training was provided to officers

¹⁴ United States Air Force. Integrated Cultural Resources Management Plan Homestead Air Reserve Base. July 2017.

¹⁵ Hach, Steve. "Cold War in South Florida Historic Resource Study." (National Parks Service, U.S. Department of the Interior, October 2004).

¹⁶ Manning et al., History of Air Education and Training Command, 1942-2002. 167

¹⁷ Manning et al., History of Air Education and Training Command, 1942-2002. 167

¹⁸ Manning et al., History of Air Education and Training Command, 1942-2002. 167



Source: Hartman et al. "Vietnam on the Homefront: How DoD Installations Adapted, 1962–1975." 2014

FIGURE 3-2. THE USAF SURVIVAL SCHOOL COMPLEX AT FAIRCHILD AFB, WASHINGTON IN 1966



Source: <http://archive.ec47.com/survival.htm>, Ed Benningfield

FIGURE 3-3. PACAF JUNGLE SURVIVAL SCHOOL, CLARK AB, PHILIPPINES

attending three-day pre-deployment training. This training was frequently modified to reflect experience gained in combat in Vietnam.¹⁹ The pre-deployment SERE training for corporals included an introduction to SERE and the Military Code of Conduct rules for prisoners of war (POWs), survival in Vietnam terrain including procurement and preparation of food and water, survival medicine and hygiene in Southeast Asia, evasion, land navigation without aids, communist POW treatment, resisting communist interrogation techniques, POW compound organization, escape, the Geneva Convention of 1949, and case history, all totaling 10 hours of training. Training for lieutenant colonels through sergeants included much of the same information but only included four-and-a-half hours of lecture.²⁰

By the early 1960s, Schofield Barracks, Hawaii, was the Army's premier counter-guerrilla training center where courses were taught on jungle survival, warfare, and military tactics including rappelling from helicopters and cliffs, and Asian languages. The center had the appearance of many of the Army's other mock Vietnamese villages.²¹ The Army developed a proper SERE school by 1976.



Source: US Army Garrison – Hawai'i files, 2018

**FIGURE 3-4. JUNGLE TRAINING AT JUNGLE OPERATIONS TRAINING CENTER,
SCHOFIELD BARRACK EAST RANGE**

¹⁹ CMC Reference Notebook, Book III: Operations (Department of the Navy, United States Marine Corps, 1968).

²⁰ CMC Reference Notebook, Book III: Operation Training & Intelligence (Department of the Navy, United States Marine Corps, 1970).

²¹ Hartman, Ellen R., Susan I. Enscoe, and Adam D. Smith. Vietnam on the Homefront: How DoD Installations Adapted, 1962–1975, Department of Defense Legacy Resource Management Program, Report ERDC/CERL TR-14-7, December 2014, 78.

While soldiers trained on SERE techniques, the central focus of survival and evasion in Vietnam was personified by the members of the various helicopter-based search and rescue (SAR) units that served in the war. They were the pivotal link between the imperiled soldier and safety. Nearly all helicopter units had some responsibility for SAR. The Army and Marine Corps included SAR capabilities within their standard Helicopter units, but stand-alone SAR operations were concentrated within the Air Force and Navy. All military branches augmented each other when necessary. Helicopter training is addressed in Legacy Project #14-739, Vietnam War: Helicopter Training and Use on U.S. Military Installations Vietnam Historic Context Subtheme.

3.2 LEADERSHIP (OFFICER AND NONCOMMISSIONED OFFICER) TRAINING

3.2.1 AIR FORCE – OFFICER CANDIDATE SCHOOL

With the enormous expansion of the AAF in the early years of World War II, an increasing burden was placed on officers, especially the small group of flying officers. To ease that burden, a large number of administrative officers had to be trained to relieve the flying officers of their non-flying duties. In 1942, Lt. Gen. Henry H. Arnold, Chief of the AAF, directed Maj. Gen. Walter R. Weaver, head of the Technical Training Command, to establish an Officer Candidate School (OCS).²²

Initially the OCS course was 12 weeks in length, and the academic curriculum was uniform for all candidates. In January 1943, the curriculum was divided into two phases. The first phase involved military indoctrination and leadership, while the second prepared candidates for duty in a particular field. To handle the expanded curriculum, officials extended the OCS course to 16 weeks in June 1943. The school remained at Miami Beach until it moved in June 1944 to the Aviation Cadet Center in San Antonio, Texas. During the war, OCS had over 29,000 graduates. After the war, OCS closed for a short period of time and then resumed its 16-week course in September 1945.²³

The following February, OCS returned to San Antonio. Although only a shell of its former self, the school continued to graduate newly-commissioned reserve officers at a rate of 300-600 per year for the next 17 years, except during the Korean War when there was an increase in production of graduates. The curriculum remained substantially the same during this period, although the course was extended from 16 to 24 weeks in length. However, there were some changes in eligibility requirements. When OCS reopened in 1946, only enlisted men and warrant officers were eligible. The following year, the school was open to civilians who had at least two years of college or who passed a college-level test. In 1948 women also became eligible. Then, in 1952, the educational requirements for OCS were lowered. Two years of college were no longer necessary, and high school graduates could now enter. However, by 1955, OCS applicants were required to have completed one year of active duty.²⁴

²² Manning et al., *History of Air Education and Training Command, 1942-2002*. 148

²³ Manning et al., *History of Air Education and Training Command, 1942-2002*. 148

²⁴ Manning et al., *History of Air Education and Training Command, 1942-2002*. 149

In the late 1950s, the Air Force also modified OCS's mission. From producing primarily administrative and other nonrated officers, the school began to send about one-half of its graduates to preflight school, responding to the Air Force's need for more aircrew members. In 1959 the Air Force realized that it had to expand its officer procurement to meet its growing needs and opened Officer Training School (OTS). As a result, OCS's days were numbered. For over 21 years, OCS had afforded airmen an opportunity to earn an Air Force commission. Faced with the Air Force's increased emphasis on college graduates for its officer corps and the concomitant growth of OTS, as well as the establishment of the Airman Education and Commissioning Program (AECP) in 1960, OCS was phased out on 1 July 1963. During its existence, OCS produced over 41,000 officers.²⁵

3.2.2 AIR FORCE – OFFICER TRAINING SCHOOL

In the late 1950s, the four officer sources were the Air Force Academy, Reserve Officer Training Corps (ROTC), OCS, and direct commissioning. These sources were not producing the needed mix of skills and knowledge, especially in technical, engineering, and scientific fields. With four-year maturation periods, the Air Force Academy and ROTC were slow in responding to programmed manpower requirements. The Air Force was also reluctant to rely too heavily on direct commissioning. The solution was to tap into a significant manpower pool that had largely been ignored—graduating college seniors who had not participated in ROTC.²⁶

To train those graduates, the Air Force resurrected OTS, a concept tried during World War II. On 1 July 1959, the Air Force activated OTS at Lackland AFB, Texas. The OTS was located at Lackland Military Training Center and used facilities both on the main base and at Lackland AFB's training annex (Medina), two miles west of the main installation. In May 1968, OTS consolidated its campuses at Medina.²⁷ The first class entered OTS on 18 November 1959 and graduated on 9 February 1960. Believing that college graduates could be trained in a shorter, and more intense block, the Air Force established a three-month course for OTS (versus six months in OCS). At the same time, the newly-created AECP allowed qualified airmen to complete degree requirements and earn a commission through OTS.²⁸

The OTS system provided a more expeditious and responsive procurement system, and training costs per graduate were less. Also, OTS met the Air Force's desire to make a college degree the minimum educational standard for its officers. OTS expanded rapidly, turning out 320 graduates in fiscal year (FY)60, 2,265 in FY62, and 5,371 in FY63.²⁹

OTS soon turned into the major supplier of Air Force officers. Not only did OTS absorb OCS's production quotas after 1963, but the Vietnam War soon accelerated officer procurement. At its

²⁵ Manning et al., *History of Air Education and Training Command, 1942-2002*. 149

²⁶ Manning et al., *History of Air Education and Training Command, 1942-2002*. 134

²⁷ Manning et al., *History of Air Education and Training Command, 1942-2002*. 176

²⁸ Manning et al., *History of Air Education and Training Command, 1942-2002*. 134

²⁹ Manning et al., *History of Air Education and Training Command, 1942-2002*. 134

peak, OTS produced 7,894 officers in FY67. The unpopularity of the war on college campuses resulted in significant drops in ROTC enrollment, and OTS had to take up the slack.³⁰

Officials in OTS launched a closed-circuit television project in 1968 as a means of putting the school on a three-week entry/graduation schedule. The shortened schedule was established to meet personnel requirements in Southeast Asia. In broad terms, the project consisted of acquisition and installation of equipment, studio construction, and software development. The school began limited transmission of lessons began in December 1969. Full operation of this project was scheduled to be completed by August 1970.³¹

3.2.3 AIR FORCE ACADEMY

On July 11, 1955, the same year construction began, the first class of 306 men swore in at a temporary site at Lowry Air Force Base in Denver, Colorado. By August 1958 the U.S. Air Force Academy was ready for occupancy. After completing Basic Cadet Training at Lowry, the Class of 1962 was bussed to the north gate and marched five miles up the hill to the newly constructed cadet area. Less than a year later the Academy received academic accreditation, and then the first class graduated and was commissioned June 3, 1959.

The Vietnam War was the first war in which Academy graduates fought and died. The first Academy graduate to die in combat was Capt. Valmore Bourque, Class of 1959. One hundred and forty-one graduates died in that conflict, and 32 graduates became prisoners of war.

As the Cold War continued through the 1950s and into the 1960s, the nation's reliance on air power as the primary agent of deterrence highlighted the need for more Air Force officers. When the Air Force Academy was approved, cadet strength was set at 2,529, equal to that of West Point. The Naval Academy, however, had been authorized 4,417 midshipmen for many years. On March 3, 1964, President Lyndon Johnson signed Public Law 88-276, which authorized both the Air Force Academy and West Point to expand to the Naval Academy's strength.

The United States Air Force Academy Preparatory School was officially established in 1961 about five miles from the cadet area. The Prep School was established for applicants who do not receive a direct appointment to the Academy. The program was designed to prepare cadet candidates academically, athletically, and militarily and to develop skills and character necessary for success at the Academy.³²

3.2.4 ARMY – NONCOMMISSIONED OFFICER TRAINING

Throughout the spring and early summer of 1965, it was generally assumed both within the Department of the Army and the United States Continental Army Command, that any augmentation of the Army force structure would include a call-up of Reserve component units

³⁰ Manning et al., *History of Air Education and Training Command, 1942-2002*. 144

³¹ Manning et al., *History of Air Education and Training Command, 1942-2002*. 179

³² <https://www.academyadmissions.com/about-the-academy/history/building-a-legacy-1955-1969/>

and men. On 16 July 1965, Maj. Gen. Michael S. Davison, Acting Assistant Chief of Staff for Force Development, reported that the Department of the Army had received tentative guidance which authorized an increase of 350,000 in the strength of the Army by the end of FY66 (30 June 1967). Of this number, 100,000 spaces were to be filled by members of Reserve components.³³

Contingency plans for a manpower buildup in the Department of the Army contained the proposed call-up of Reserve components and men for a period not to exceed twelve months. Based upon experience gained during a partial mobilization in 1961, Continental Army Command plans had called for an even larger two-year activation of Reserve component units.³⁴ Experience had shown that Reserve units could be readied for deployment overseas much more quickly than could reorganized or newly-activated units in the active Army. It was the contention of Continental Army Command that approximately seven months lead time was required to prepare Reserve units for relief from active duty, and that so much lead time tended to defeat the effectiveness of an activation of only twelve months. Policies set at higher levels, however, prohibited Reserve callups of a duration greater than one year, and consequently Continental Army Command's plan could not be supported.³⁵

On 28 July 1965, President Lyndon B. Johnson announced plans for the buildup of U.S. forces in South Vietnam. United States combat forces in Vietnam would be increased immediately to 125,000 men, with additional forces to be deployed as necessary. This increase was to be accomplished, through expansion of the active Army by an increase in the draft, but no Reserve units or individuals were to be called up. Since major planning policies for expanded United States activity in Southeast Asia had been based on the assumption that a significant proportion of the necessary manpower would come from Reserve components, there would now be shortages of men with technical training and managerial ability.³⁶

Since there were critical shortages of technically trained officers and certain enlisted specialists such as equipment operators and maintenance men, new recruits in steadily rising numbers were funneled into the advanced individual training facilities at Forts Leonard Wood and Belvoir to be schooled in basic engineering skills.

When increased draft calls and a related jump in enlistments raised the number of men to be trained beyond the capacity of the existing training base, new programs had to be instituted. To bring units to full strength as soon as possible as well as to relieve some of the stress on normal training facilities, Strategic Army Forces units were assigned some of the responsibility for training recruits under what was known as the "train and retain as permanent party" system. Under this program a specialized unit could train men to fill particular positions in the unit with the prospect of keeping them to alleviate its own shortages. Because of the diversity of engineer

³³ Ploger, *U.S. Army Engineers: 1965-1970*. (Washington, D.C.: Department of the Army. First Printed 1974-CMH Pub 90-22, 2000). 1

³⁴ Ploger, *U.S. Army Engineers: 1965-1970*. 16

³⁵ Ploger, *U.S. Army Engineers: 1965-1970*. 17

³⁶ Ploger, *U.S. Army Engineers: 1965-1970*. 17

training, however, this program was of limited usefulness in bringing engineer units to full capability, particularly in the face of equipment shortages within units as they underwent training.³⁷

The relatively slow rate at which new men could be trained and made available through established training bases presented a particularly acute problem to new diverse engineer units demanding a high degree of technical expertise.

A most serious problem was the shortage among enlisted men of qualified noncommissioned officers (NCOs). Throughout the process of recruit training, stress was placed on the development of leadership qualities as well as technical proficiency. Those individuals who demonstrated talent for leadership were singled out early in their training cycles and given opportunities to qualify for advancement to positions of greater responsibility through assignment to a noncommissioned officer academy or an OCS.

Since there was a critical need to develop NCOs rapidly and continuously, academies were organized to produce competent NCOs in much the same way as the OCSs produced second lieutenants. Forts Leonard Wood and Belvoir conducted courses designed to instruct new NCOs in leadership principles and to improve their technical proficiency before they were sent to Vietnam.



Source: Hartman et al. "Vietnam on the Homefront: How DoD Installations Adapted, 1962–1975." 2014

FIGURE 3-5. A CLASS ON THE MACHINE GUN (M-60) IS HELD OUTDOORS AT THE NCO ACADEMY, FORT LEONARD, WOOD, MISSOURI, OCTOBER 1962 (NARA SC 599779)

³⁷ Ploger, U.S. Army Engineers: 1965-1970. 23

The expansion of the OCS system provides one of the more easily chronicled examples of the race between requirements and resources in the period of troop buildup. In the spring of 1965 the dearth of junior engineer officers was even more critical than that of NCOs. In response to this urgent need for new leadership talent, the Engineer OCS at Fort Belvoir was reactivated in the fall of 1965. The first class began on 15 November, and by 30 June 1966, 1,132 junior engineer officer graduates had been commissioned.³⁸ The number climbed steadily and when the school at Fort Belvoir closed on 1 January 1971, it had graduated a total of 10,380 second lieutenants, not all of whom entered the Corps of Engineers.³⁹

3.2.5 ARMY – NONCOMMISSIONED OFFICER’S CANDIDATE COURSE

As the Vietnam war progressed, the attrition of combat, the 12-month tour limit in Vietnam, separations of senior NCOs, and the 25-month stateside stabilization policy began to take their toll to the point of crisis. Without a call up of the Reserve forces, the Army was faced with sending career NCOs back into action sooner or filling the ranks with the most senior Private first class or specialist. Field commanders were challenged with understaffed vacancies at base camps, filling various key leadership positions, and providing for replacements. Older and more experienced NCOs, some of whom were World War II veterans, were strained by the physical requirements of the methods of jungle fighting. The Army was quickly running out of NCOs in the combat specialties.⁴⁰

Based on the proven Officer Candidate Course model where an enlisted man could attend basic and advanced training as well as OCS, it was thought that the same model could be used for NCOs. If a carefully selected soldier could be given 23 weeks of intensive training that would qualify him to lead a platoon, then others could be trained to lead squads and fire teams in the same amount of time. From this concept, the Noncommissioned Officers Candidate Course (NCOCC) was born. Potential candidates were selected from groups of initial entry soldiers who had a security clearance of confidential, an infantry score of 100 or over, and demonstrated leadership potential. Based on recommendations, the unit commander would select potential NCOs. Those selected to attend NCOCC were immediately made corporals and later promoted to sergeant upon graduation from phase one. The select few who graduated with honors would be promoted to staff sergeant.⁴¹

The NCOCC was designed to maximize the two-year tour of the enlisted draftee. The Army Chief of Staff Gen. Harold K. Johnson approved the concept on 22 June 1967, and on September 5 the first course at Fort Benning, Georgia began. NCOCC was divided into two phases. Phase I was 12 weeks of intensive, hands-on training, broken down into three basic segments. For the Infantry NCO, the course included tasks such as physical training, hand-to-hand combat,

³⁸ Ploger, U.S. Army Engineers: 1965-1970. 23

³⁹ Ploger, U.S. Army Engineers: 1965-1970. 23

⁴⁰ Elder, Daniel K. “Educating Noncommissioned Officers. A Chronological Study on the Development of Educational Programs for U.S. Army Noncommissioned Officers.” (Fort Riley, KS, July 1999).

⁴¹ Elder, “Educating Noncommissioned Officers. A Chronological Study on the Development of Educational Programs for U.S. Army Noncommissioned Officers.”

weapons, first aid, map reading, communications, and indirect fire. Vietnam veterans or Rangers taught many of the classes, but the cadre of the first course were commissioned officers. The second basic segment focused on instruction of fire team, squad and platoon tactics. Eighty percent of the over 300 hours of instruction was conducted in the field. The final basic segment was a "dress rehearsal for Vietnam;" a full week of patrols, ambush, defensive perimeters, and navigation. Twice daily, the Vietnam-schooled Rangers critiqued the candidates and all training was conducted tactically.⁴²

Throughout the 12-weeks of training, leadership was instilled in all that the students would do. A student chain of command was set up and "Tactical NCOs" supervised the daily performance of the candidates. By the time the students successfully completed Phase I, they were promoted to sergeant or staff sergeant, and shipped off to conduct a 9- to 10-week practical application of their leadership skills by serving as assistant leaders in a training center or unit. This gave the candidate the opportunity to gain more confidence in leading soldiers. As with many programs of its time, NCOCC was originally developed to meet the needs of the combat arms. With the success of the course, it was extended to other career fields, and the program became known as the Skill Development Base Program. The Armored School began NCOCC on 5 December 1967. Some schools later offered a correspondence "preparatory course" for those who anticipated attending NCOCC or had not benefited from such formal military schooling.⁴³

The "regular" NCOs and soldiers who had taken four to six years to earn their stripes had much resentment for the NCOCC graduates. Old-time sergeants began to use terms like "Shake 'n' Bake," "Instant NCO," and "Whip-n-Chills" to identify this new type of NCO. Many complained that it took years to build a noncommissioned officer and that the program was ineffective.⁴⁴

However, the graduates recognized the value of their training. Young draftees attending initial training at the time knew they were destined for Vietnam; they realized that NCOCC was a method by which they could expand their military training before entering the war. Many graduates would later say that the NCOCC, taught by Vietnam veterans who experienced the war first-hand, was what kept them and their soldiers alive and its lessons would go on to serve them well later in life. In the end, almost 33,000 soldiers were graduates of one of the NCOCCs.⁴⁵

The NCOCC graduate had a specific role in the Army; they were trained to do one thing in one branch in one place in the world, and that was to be a fire team leader in Vietnam. It was recognized that they were not taught how to teach drill and ceremonies, inspect a barracks, or how to conduct a police call. Many rated the program by how the graduates performed in garrison, for which they had little skill. But their performance in the rice paddies and jungles as

⁴² Elder, "Educating Noncommissioned Officers. A Chronological Study on the Development of Educational Programs for U.S. Army Noncommissioned Officers."

⁴³ Elder, "Educating Noncommissioned Officers. A Chronological Study on the Development of Educational Programs for U.S. Army Noncommissioned Officers."

⁴⁴ Elder, "Educating Noncommissioned Officers. A Chronological Study on the Development of Educational Programs for U.S. Army Noncommissioned Officers."

⁴⁵ Elder, "Educating Noncommissioned Officers. A Chronological Study on the Development of Educational Programs for U.S. Army Noncommissioned Officers."

combat leaders were where they took their final tests. And with this program, educating NCOs and potential NCOs was firmly in place for the Army.⁴⁶

3.2.6 MARINE CORPS – OFFICER TRAINING

Quantico's Training and Test Regiment, the unit responsible for training Marine Corps officer candidates of the various officer procurement programs, became the OCS on 1 June 1963. The following year, a couple more important name changes came about. After decades of being called the "Junior School," and the "Senior School," on 1 August 1964, Quantico's two most prestigious schools were renamed the Amphibious Warfare School and the Command and Staff College, respectively. The two schools had been called the "Field Officers Course" and "Company Officers Course," when they were first organized after World War I. By the early 1930s, they had become the "Senior Officers Course" and "Junior Officers Course" and in the years after World War II, the schools became the "Senior School" and "Junior School." To add to the confusion in names, some correspondence of the post-World War II period refers to the schools as the "Amphibious Warfare School, Junior and Senior Course." while still other reports grouped the schools as the "Command and Staff College."⁴⁷ On 1 January 1968, four years after they were renamed the Amphibious Warfare School and the Command and Staff College, the Quantico schools were organized to form the Marine Corps Development and Education Command.⁴⁸

The Junior School moved to Geiger Hall in the fall of 1947, when construction of the building was completed. During this time, the Junior School's instruction department had four divisions: Tactics, Weapons, Command and Management, and Professional Skills. The school placed emphasis on the principles, fundamentals, and techniques of amphibious operations and combat operations ashore.⁴⁹

The Senior School provided professional education for officers of the rank of major and lieutenant colonel. Its syllabus was tailored to prepare these mid-career officers for command at the Regimental and Aircraft Group level, and for staff duty at the Division, Aircraft Wing, and higher Fleet Marine Force levels. The Amphibious Warfare School provided captains and junior majors with professional education in preparation for command at the Battalion and Air Squadron levels and staff duty at the Regimental and Aircraft Group level. Not long after the schools assumed their new titles, the Marines landed in Vietnam and Quantico geared up for its wartime role.⁵⁰

⁴⁶ Elder, "Educating Noncommissioned Officers. A Chronological Study on the Development of Educational Programs for U.S. Army Noncommissioned Officers."

⁴⁷ Fleming, Lt. Col. Charles A., Capt. Robin L. Austin, and Capt. Chades A. Braley III. "Quantico: Crossroads of the Marine Corps." (History and Museum Division, U.S. Marine Corps Headquarters, Washington DC, 1975). 93

⁴⁸ John Milner Associates. "Historical Resource Survey and Evaluation Marine Corps Base Quantico, Virginia." October 2007.

⁴⁹ John Milner Associates, "Historical Resource Survey and Evaluation Marine Corps Base Quantico, Virginia."

⁵⁰ Fleming et al. "Quantico: Crossroads of the Marine Corps." 94

Another addition to Quantico occurred in February 1971, with the establishment of the Staff NCO Academy headquarters. The NCO School's objective was to produce highly-motivated and professional Marine NCOs, skilled in leadership and instructional techniques. NCO schools became necessary because of the Corps' needed accelerated promotion to the rank of sergeant as a result of the Vietnam War. Almost 180 hours were scheduled for the four-week course, and the instruction was primarily in 12 areas. At first glance, the subject matter taught at the school was similar to the training a recruit receives. There was a difference, however, in the presentation of the material and its application. Emphasis was placed on leadership, weapons, supporting arms, communication and first aid. Greater insight into the Vietnam theater of operations was also given to the classes.⁵¹

A class comprised either sergeants, corporals, or lance corporals (the ranks were not mixed), and each day found different class members alternating leadership positions. Tactics and mapping accounted for 71 hours. The mapping class culminated in a night compass march while the tactics class ended with a 14-hour field exercise in which the Marines conducted a night assault. The exercise took place in the Quantico woods, with instructors acting as the aggressors.⁵² The Staff NCO Academy was located in the Chopawansic Annex of the OCS. The academy was a course designed to educate the Staff NCO in the higher standards of professional knowledge, esprit de corps and leadership traditional in the Marine Corps. It was a six-week cram course of being a Staff NCO.⁵³

The need for broadening the general military proficiency of Staff NCOs became greater as lists grew by leaps and bounds during the mid and later 1960s. The average Staff NCO had about five years less experience than a Marine of equal rank prior to the Vietnam War build up. It had a brief trial period with two "pilot" classes. For the trial period, the Academy facilities included one barrack, one classroom, one administrative building and a mess hall. The course included leadership; effective writing; techniques of military instruction; drill, ceremonies, and inspections; physical fitness; interior guard; civil disturbance; training management; career planning; general administrative procedures; customs, courtesy, and discipline; history and tradition; logistics; uniform and clothing regulations; organization and functioning; public affairs and community relations; and personal finance management.⁵⁴

Quantico also established the Computer Sciences School in 1968 in response to rapidly developing technology that was finding an important role in the Corps.⁵⁵

⁵¹ Sauer, Ronald R., *Leatherneck*; Quantico, Vol. 52, Issue 2. Staff NCO Academy. February 1969. 30-33

⁵² Sauer, *Leatherneck*; Quantico, Vol. 52, Issue 2, 30-33

⁵³ Elliott, Jim. *Leatherneck* (pre-1998); Quantico, Vol 54, Issue 7, July 1971, page 30-35, Staff NCO Academy

⁵⁴ Elliott, Jim. *Leatherneck* (pre-1998); Quantico, Vol 54, Issue 7, July 1971, page 30-35, Staff NCO Academy

⁵⁵ Fleming et al. "Quantico: Crossroads of the Marine Corps." 96

3.2.7 NAVY – NAVAL WAR COLLEGE

The U.S. Naval War College, the oldest institution of its kind, was founded in 1884 by Rear Admiral Stephen B. Luce at Newport, Rhode Island. His leadership and vision laid a solid foundation for more than a century of professional development and research—and it all started with desire to better educate the fleet. In the early years of the 20th century, the Naval War College was the principal engine behind the creation of operational naval doctrine and the innovation of an operational staff to support flag officers at sea.

At Newport, Rhode Island, the Korean War years were marked with curriculum reorganization. In 1950, the junior-level course was replaced by a ten-month command and staff course designed to prepare young officers for command of small fleet units or major command staff billets. About 40 mid-grade Army, Air Force, Marine Corps, and Coast Guard officers and civilians were enrolled to study naval warfare techniques, weapons employment, and tactics. In 1953, a two-year course combining strategy, tactics, and logistics was introduced. However, the two-year length deterred attendance, and the course was eventually reduced to one year. In addition to the senior-level and command and staff courses, Newport offered advanced courses for flag officers.⁵⁶

In the 1950s, professional military education remained a low priority in the Navy. Operational experience rather than a graduate education still was seen as more important for promotion. During this time, moderate expansion continued at the Naval War College. In the 1950s and 1960s, the College led the Navy with innovative ideas for cooperative operations with other navies through the establishment of the Naval Command Course for senior international officers in 1956, the Naval Staff College for intermediate-level international officers in the 1970s, and the convening of regular biennial meetings of the world's chiefs of navies in the International Sea Power Symposia from 1969 onward.⁵⁷

The Naval War College, long noted for its wargaming, upgraded its capability in 1958 with the installation of an electronic wargaming simulator. The fact that professional military education remained a low priority in the Navy during an era of changing technologies did not go unnoticed. Panels convened during the 1950s observed a stagnation of postgraduate education and recommended reforms. In 1959, one ad hoc committee's conclusions included observations that the educational background of the officer corps was shockingly deficient given current conditions, and that the Navy was dedicating comparatively fewer resources to officer education than it did during the 1930s. Recommendations included requiring all naval officers to hold a baccalaureate degree at commissioning and demanding that regular commissioned officer attain some postgraduate education. While these recommendations were never fully implemented, a recommendation to expand the Naval War College and Naval Postgraduate School, along with a recommendation to establish academic standards at the Naval Postgraduate School in line with other accredited institutions, were acted on during the following decade.⁵⁸

⁵⁶ Winkler, David F. *Training to Fight: Training and Education During the Cold War*. (DoD Legacy Project 95-10092 for U.S. Army Environmental Center, Aberdeen Proving Ground, MD, 1997). 42

⁵⁷ U.S. Naval War College. "History and Campus." <https://usnwc.edu/About/History-and-Campus>

⁵⁸ Winkler. "Training to Fight: Training and Education During the Cold War." 42

During the 1960s, the Naval War College basic curriculum consisted of the Naval Warfare, Command and Staff, and Naval Command courses. Beginning in 1966, the faculty was expanded to support an electives program that allowed officers participating in one of the three basic curriculums to pursue more specific topics such as Maritime Law, Cold War Operations, and Oceanography. By 1970, the student body enrolled in these courses hovered at 300.⁵⁹

In 1972, under the leadership of Vice Admiral Stansfield Turner, a number of significant changes were instituted, including sharpening the curriculum's focus on three academic areas. Over time, the names of the courses have changed slightly, but Turner's general concept has remained with concentration on strategy and policy, national security and decision-making, and joint military operations. During this time, Naval War College established a full-time, highly qualified teaching civilian and military faculty, adopted case study methodology and a more rigorous curriculum, and emphasized individual student effort. Concurrently, student selection criteria became more stringent.⁶⁰

3.3 TACTICAL, TECHNICAL, AND OTHER TRAINING

3.3.1 NAVY – MINE SWEEP TRAINING

The Viet Cong employed thousands of mines against United States and allied naval forces throughout the conflict in Vietnam, much as they had against the French during the First Indochina War. Between 1959 and 1964, Viet Cong mines, often homemade devices, took an increasing toll of naval vessels and civilian craft on the many rivers and canals of South Vietnam. This threat ended commercial traffic on some of the country's primary waterways.⁶¹

As U.S. naval forces deployed to South Vietnam in the mid-1960s, they moved into the Mekong Delta west and south of Saigon. Steps were needed to counter the enemy's mine threat. The danger was especially acute on the waterways near Saigon, South Vietnam's most important port. Viet Cong closure of the Long Tau River would have put an enormous strain on allied logistic resources in the southern regions of South Vietnam.⁶²

As a result, on 20 May 1966 the Navy established Mine Squadron 11, Detachment Alpha (Mine Division 112 after May 1968) at Nha Be. The minesweeping detachment operated 12 or 13 57-foot, fiberglass-hulled minesweeping boats (MSB). The MSBs fought with machine guns and grenade launchers and carried surface radars and minesweeping gear for clearing explosives from the rivers. The Navy also set up three-boat sections at Danang and Cam Ranh Bay.

⁵⁹ Winkler. "Training to Fight: Training and Education During the Cold War." 67

⁶⁰ U.S. Naval War College. "History and Campus." <https://usnwc.edu/About/History-and-Campus>

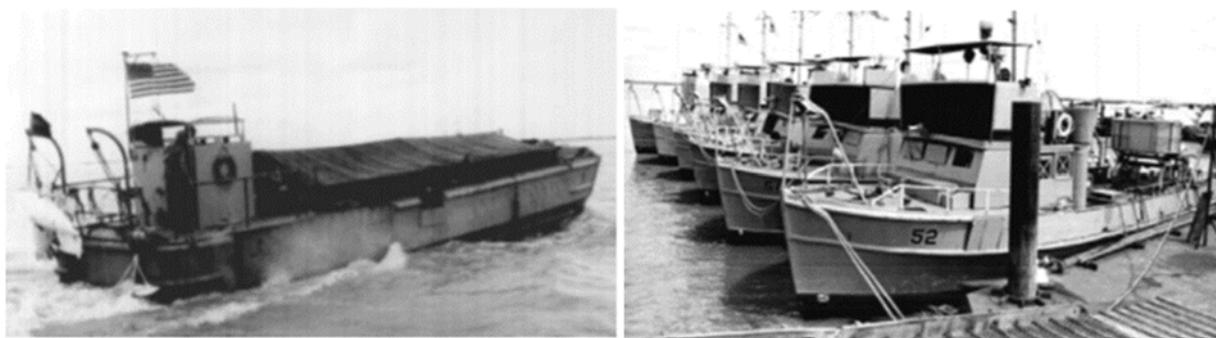
⁶¹ Marolda, Edward J. "Water Mine Warfare in South Vietnam." 26 August 2003. Accessed on <https://www.history.navy.mil/research/library/online-reading-room/title-list-alphabetically/m/mine-warfare-in-south-vietnam.html>

⁶² Marolda, "Water Mine Warfare in South Vietnam."

Detachment Alpha's strength increased in July 1967 when the first of six mechanized landing craft, minesweeping (LCM(M)) reached Nha Be.⁶³

Despite the presence on the Long Tau of Mine Squadron 11 and other river warfare forces, in the second half of 1966 and early 1967 the Communists mounted a serious effort to interdict the waterway. The Viet Cong employed mines, 122-millimeter rockets, rocket-propelled grenades, recoilless rifles, machine guns, and small arms against American and Vietnamese naval forces and merchantmen. In August 1966, Viet Cong mines severely damaged SS *Baton Rouge Victory*, a Vietnamese Navy vessel, and MSB 54. Then in November, the enemy sank MSB 54. In February 1967, Communist direct-fire weapons and mines destroyed MSB 45 and heavily damaged MSB 49.⁶⁴

By the spring of 1967, however, the tide began to turn. Allied naval units moved in force into the Rung Sat area of the Long Tau River, refined their mine countermeasures tactics, and brought better weapons and equipment into play. Vietnamese Regional Force, U.S. Army 9th Division troops, and Navy SEAL commandoes, working with helicopter, river patrol boat, MSB, and LCM(M) units, scoured the shorelines. During the next year, Communist guerrillas periodically ambushed ships on the Long Tau, but the fast and devastating reaction by allied forces kept casualties and damage to vessels relatively light. Often, the minesweeping force swept up mines before they could do damage or river patrol boat and SEAL patrols disrupted enemy attack plans. The Viet Cong were unable to cut or even seriously slow logistic traffic on the Long Tau. During 1968 and 1969, the Navy also deployed strong mine countermeasures forces to the Cua Viet River, just south of the Demilitarized Zone, and defeated the North Vietnamese Army's attempt to cut the vital waterway.⁶⁵



Source: Edward Sinclair. *The Long Tao Sweepers – MSBs in Vietnam 1965 – 1970*

FIGURE 3-6. (L.) LCM(M) ON LONG TAO SHIPPING CHANNEL AND (R.) MSBS DOCKED IN NHA BE

Naval Base Long Beach was constructed during World War II. In the immediate post-war, the base supported mothballed ships of the inactive fleet. The Navy closed the base and shipyard in

⁶³ Marolda, "Water Mine Warfare in South Vietnam."

⁶⁴ Marolda, "Water Mine Warfare in South Vietnam."

⁶⁵ Marolda, "Water Mine Warfare in South Vietnam."

April 1950. The base was reactivated in 1951 and the base hosted minesweepers and Military Sea Transport Service ships.

To support ships homeported here in the 1950s, Training Command, Pacific Fleet established a Fleet Training Center. In 1961, 109 ships homeported there were using the center. In 1966, a Mine Warfare Training Center for the Pacific Fleet was established here. In 1974, a base realignment caused the base to be downgraded to a naval support activity and dozens of ships were transferred elsewhere. Long Beach was closed with the end of the Cold War.⁶⁶

Operation End Sweep had its beginning in early 1972 with the long-standing call for the mining of Haiphong Harbor. With a ceasefire signed in 1973, the mines had to be retrieved or destroyed. Commander Mine Warfare Force as the major, and almost only, source of mining expertise was asked to assist in the planning of the mine fields to be laid by the Seventh Fleet in North Vietnamese waters. From the beginning, the possibility of U. S. forces having to sweep the mines was a factor which influenced the types of mines used, their settings, and to a lesser degree their locations. As a result, when it came time to sweep, U.S mine forces knew everything about the mines and had purposely planted mines which could be swept easily and effectively by mine countermeasures forces.

Actual preparation for the mine sweeping operation began in July 1972 when it first became apparent that mine sweeping would, as expected, be an important part of the peace negotiations. By this time, the Navy's Airborne Mine Countermeasures program was underway. Helicopter Mine Countermeasure Squadron 12 (HM-12) was operational with 13 Sikorsky Sea Stallions (CH-53). Basic training with towed sweep gear was underway. Initial deployments of units of four helicopters by C-5 aircraft to the Mediterranean and by cross country to the west coast had been made. In October, a mine field simulating those off the Haiphong Channel was planted off Panama City, Florida. Together with the Naval Coastal Systems Laboratory, a detachment of HM-12, controlled by Commander Mobile Mine Countermeasures Command, began developing tactics, equipment, and experience in how best to counter the mines.

In the year or so since the helicopter minesweepers had been activated, a great deal had been accomplished. In the pre-End Sweep exercises, considerable knowledge was acquired on countering the simulators which used the detection devices of the actual mines laid in North Vietnam. While the operational training was proceeding, staff were visiting Washington and Hawaii to firm up requirements, force levels, organizational structure, chain of command, and the myriad of details involved in establishing for the first time a major task force to support a combined surface and airborne sweep in North Vietnamese waters. After much discussion and many changes, the size of the force was fixed.⁶⁷

The airborne sweep was carried out by four Airborne Mine Countermeasures sweeping units. The surface mine sweeping force was made up of 10 ocean minesweepers. These were used principally in the deep-water approaches and as helicopter control ships. In addition, a surface

⁶⁶ Winkler. "Training to Fight: Training and Education During the Cold War." 111

⁶⁷ Naval Institute Archives. "February 6, 1973: Navy Task Force 78 Begins Operation End Sweep."
<https://www.navalhistory.org/2013/02/07/february-6-1973-navy-task-force-78-begins-operation-end-sweep>

support force was made up of two destroyers, two fleet tugs (later reduced to one), a submarine rescue ship, an LST for MSO support, and a specially configured LST to transit the Haiphong channel after sweeping had been completed in order to demonstrate confidence in the thoroughness of the sweep.

3.3.2 TECHNOLOGY INSTALLATIONS

Air Force - Keesler AFB, Mississippi

By 1960, the Cold War was fully established. Keesler AFB, Mississippi had gained a reputation for high technology training, teaching courses in electronics, communications, and radar. No longer was the school associated with aircraft mechanics as it had been prior to the Cold War. Instead, it focused on a multitude of newly emerging electronics weapons systems and on revolutionary developments in the space race.⁶⁸

Keesler AFB adapted to the challenges of technology with new courses, training methods, and facilities. To take advantage of newly-available television technology, closed-circuit television was used to teach electronics principles. Base officials directed that a television studio be built, and the studio was completed in 1962. Sensitive computers, simulators, and training aids needed modern air-conditioned facilities. Builders tore down many of Keesler AFB's small World War II-era structures and replaced them with huge new facilities, such as Bryan, Jones, Hewes, Maltby, and Cody Halls.⁶⁹

Beginning in August 1965, after President Johnson announced an increase in forces in Southeast Asia, the command put a split phase training program into operation. The basic training school at Lackland AFB, Texas, started operating on a six-day schedule. Recruits identified to attend technical school would complete four weeks of basic training at Lackland AFB and two more weeks at their technical school. Keesler AFB's basic trainee numbers remained relatively small, from a low of 489 in August 1965 to a high of 942 in December 1965. By mid-1966, ATC had discontinued the split phase basic training program.⁷⁰

A common theme of the Vietnam build-up was a shortage of instructors. The school not only had fewer instructors than it needed, but many of the new instructors were much less experienced. All over the base, the Vietnam buildup resulted in shortages in everything from uniforms to postal boxes.⁷¹

⁶⁸ Parrish, Patricia; Master Sergeant Linda C. McFarland. "Keesler Air Force Base Then and Now, For Half a Century, a Leader in Technical Training 1941 – 1991," By, Keesler Air Force Base, MS 20 May 1991, 47

⁶⁹ Parrish, "Keesler Air Force Base Then and Now, For Half a Century, a Leader in Technical Training 1941 – 1991," 48

⁷⁰ Parrish, "Keesler Air Force Base Then and Now, For Half a Century, a Leader in Technical Training 1941 – 1991," 48

⁷¹ Parrish, "Keesler Air Force Base Then and Now, For Half a Century, a Leader in Technical Training 1941 – 1991," 48

Marine Corps Recruit Depot San Diego

On 1 October 1953, the Signal School at Marine Corps Recruit Depot, San Diego, expanded and added new classes, and was redesignated Communications-Electronics School Battalion. The three main schools within the battalion were Operational Communication, Electronics, and Communication Material. There were 18 courses centered around radar and radio technologies. Technological advances made during the early 1960s in communications and electronics forced an expansion of the school. By the mid-1960s the number of departments in the school had increased dramatically, and the student population was approaching 4,000—nearly double what it had been before the Vietnam War. The school's growth demanded more classrooms and storage space than the depot could provide. Headquarters, Communication-Electronics School Battalion left San Diego on 1 February 1971 and reactivated in new facilities at Twentynine Palms on the same day.⁷²

Army - Fort Huachuca, Arizona

Army-Fort Huachuca was a product of the Indian Wars of the 1870s. It served as a training facility during World War II, was deactivated in 1947, and was reactivated in 1951. Following its closure after the end of the Korean war, this post was reopened in 1954 by the Signal Corps who found that its climate was well-suited for communication equipment tests.

The U.S. Army Electronic Warfare School moved to this installation in 1966. In 1971, the post also became the home of the Army Intelligence Center and School. This school had the mission of training selected personnel to perform intelligence and security duties in the fields of counterintelligence, area studies, and combat intelligence. In 1973, the school merged with the combat surveillance portion of the Electronic Warfare School which then came under the jurisdiction of the new U.S. Training and Doctrine Command.⁷³

Navy Technical Training Installations

With more sailors passing through boot camp, the number of sailors receiving technical training also climbed. Naval Air Technical Training Center (NATTC) Memphis supported some 17,000 sailors, up 7,000 from the start of the 1960s. To handle the additional activity, adjacent lands were purchased.

The increasing complexity of shipboard technology and the danger posed by Soviet naval forces forced the Navy to move more schooling ashore during the Cold War era. For example, many of the new warships commissioned in the late 1950s and 1960s were built with 1,200-pound pressure steam propulsion plants. These highly efficient and powerful units presented special

⁷² Verina, Meredith R. "The History of Marine Corps Recruit Depot San Diego." (MCRD Museum Historical Society, 1997). 116-7

⁷³ Winkler, David F. *Training to Fight: Training and Education During the Cold War*. (DoD Legacy Project 95-10092 for U.S. Army Environmental Center, Aberdeen Proving Ground, MD, 1997). 105

challenges requiring constant attention. A mistake could quickly result in permanent damage and personnel casualties.

Unlike naval aviators or submariners, naval surface line officers were not required to undergo a shore-based training pipeline before reporting to their ships. Surface line officers simply had learned on the job. On-the-job training began to change in January 1962, when the Navy Destroyer School opened at Newport with 1,200-pound plant mock-ups used to prepare prospective surface line engineering officers for duty. The first class had 39 officers participating in a 24-week class covering engineering, weapons, operations, communications, navigation, and seamanship. By 1965, almost every combatant ship had at least one graduate from the school. In 1969, the school added a course for prospective ship captains. At Philadelphia and later at Great Lakes, 1,200-pound plants allowed sailors to steam the real thing. Besides requiring more sailors to man the fleet, the Navy required more pilots to fly missions over Southeast Asia. The number of naval aviators flowing through the Chief of Naval Aviation Training pipeline dramatically increased. For example, at Naval Air Auxiliary Station, Meridian, Mississippi, the number of aviators graduating jet training jumped from 293 in 1962 to 950 in 1969.⁷⁴

3.3.3 AIR FORCE COMBAT ENGINEERING AND CONSTRUCTION

(Note: Navy Construction Battalion and Army Civil Action Program are addressed in the Legacy 16-518A Vietnam War: Special Operation Forces and Warfare Training on U.S. Military Installations, Vietnam Historic Context Subtheme)

The Air Force integrated engineering into its overall structure when it was established as an independent military branch. The Air Force initially worked with the Army Corps of Engineers on the planning design and oversight of construction projects. However, the Air Force quickly realized that they needed their own independent group of engineers. This was especially important due to the increasing complexity of jet aircraft, weapons, and guided missiles.

To meet this need, the Air Force Operations Division established an engineering division with responsibilities for base engineering, as well as the oversight of construction requirements, repairs, maintenance of base facilities, utilities, fire protection, and rescue services. The actual construction of air bases was undertaken by civilian contractors, through the Army Corps of Engineers or Navy Bureau of Yards and Docks. The division grew quickly and by 1950, Air Force engineering personnel numbered 25,572. Many of the early Air Force engineers were transfers from the Army Corps of Engineers. Engineers were assigned to all Air Force bases.⁷⁵ The Air Force undertook a variety of dynamic projects throughout the 1950s. The projects ranged from the construction of the Air Force Academy to the Distant Early Warning (DEW) line missile warning system. Air Force engineering grew into a highly technical and creative program. The Vietnam War would result in novel Air Force engineering programs and capabilities.

⁷⁴ Winkler. "Training to Fight: Training and Education During the Cold War." 66.

⁷⁵ Ronald B Hartzer, et al. *Leading the Way: The History of the Air Force Civil Engineers 1907-2012*, 88, 99, available at <https://media.defense.gov/2015/Apr/02/2001329844/-1/-1/0/AFD-150402-022.pdf>.

Air Force Engineers first arrived in Vietnam in late 1961 to support United States advisors. However, these early deployments were quite limited and temporary. Engineers constructed tent camps, support facilities, and provided facility management and maintenance support.⁷⁶

Air Force base civil engineering (BCE) deployments increased in relation to the escalation of American involvement in the war. Units rehabilitated existing French and Japanese air fields, constructed new Air Force facilities, operated and maintained existing facilities and base utility systems, and provided base fire protection. One of the most demanding and constant areas of BCE activities was the installation and maintenance of air conditioning systems in Vietnam's hot, humid climate.⁷⁷

There were 17 small BCE units in Vietnam in 1964, but they were quickly overwhelmed by the enormity of escalation after the Gulf of Tonkin incident. To make matters worse, many of the engineers were not effectively trained for work in Vietnam. Trained in the installation of new equipment, they were often unskilled in maintenance and repair. At the other end of the spectrum, there was a critical lack of effective supervisors. Finally, the Air Force engineers had difficulty communicating with, and using the resources of, the local population, which was a significant part of the labor force on the bases.⁷⁸ Air Force training and doctrine evolved during this time to meet these challenges.

In 1963, the Air Force reorganized their civil engineering to better meet combat conditions. The new philosophy and organizational structure envisioned civil engineering capabilities as falling into three interrelated categories. Engineers were expected to undertake their traditional base engineering and maintenance roles. Added to these capabilities was a focus on rapid recovery from natural disasters and enemy attacks. Training and education programs in the United States were tailored to encompass the newly expanded mission and teams trained under these new requirements were known as Prime BEEF (Base Engineering Emergency Forces) teams. Interestingly, their combat training was limited to the care of the M-16 rifle and this was the case into 1969. Instead, training focused on the operation of heavy equipment, erection of contingency structures, and the operation of water purification systems. Training occurred at Eglin AFB, Florida.⁷⁹

Prime BEEF units played a significant role in the buildup in Vietnam. Three Prime BEEF teams deployed to Vietnam in the summer of 1965. Upon arrival, they based themselves at Tan Son Nhut, Da Nang, and Bien Hoa. There were 50 teams in Southeast Asia by 1968. Together they comprised 1,400 civil engineers spread across 16 air bases. Most teams specialized in a specific activity, such as plumbing or electrical work, though they did work on all projects as needed. Traditional BCE teams provided general construction support. Unlike typical deployments, the

⁷⁶ Gary B. Louson, "Civil Engineering Combat Experiences During the Vietnam War, An Exploratory Study," Thesis, Department of the Air Force Air University, 14

⁷⁷ Lauson, Gary B. "Civil Engineering Combat Experiences During the Vietnam War, An Exploratory Study," Thesis, Department of the Air Force Air University. 1990. 15

⁷⁸ Lauson, "Civil Engineering Combat Experiences During the Vietnam War, An Exploratory Study," 16-7

⁷⁹ Lauson, "Civil Engineering Combat Experiences During the Vietnam War, An Exploratory Study," 19, 21

Prime BEEF teams usually spent four months in Southeast Asia at a time, with three tours comprising their 12-month deployment.⁸⁰

The Air Force also implemented a new civil engineering program during the war. Traditionally, the Air Force relied on Army engineers for this capability, but the Army was already overtaxed and unable to provide resources to the Air Force. It became apparent the Vietnam required the use of Air Force combat engineers.

Therefore, in August 1965, the Air Force developed an emergency construction and heavy repair capability, known as RED HORSE (Rapid Engineering Deployable Heavy Operation Repair Squadron, Engineer). The first two RED HORSE squadrons were activated in October 1965. Each squadron consisted of 400 men and had their own heavy construction equipment and supplies. Trained at Cannon AFB, New Mexico, they were instructed in engineering techniques and the use of heavy equipment. Unlike the Prime BEEF teams, the RED HORSE teams received combat training in addition to their civil engineering training. The RED HORSE units were expected to be self-sufficient combat units, so they included a wide variety of capabilities within their ranks, including vehicle maintenance, medical and food services, and logistics specialists. This organization allowed them to operate for up to 90 days without base support. The first units deployed to Phan Rang and Cam Ranh Bay in February 1966. Both locations were centers of activity where the Air Force was constructing two new air bases.⁸¹

Originally envisioned as a temporary stopgap to fill the void left by the lack of Army engineers, the RED HORSE teams quickly made their continued utility obvious. They became a cornerstone of Air Force engineering operations in Vietnam. Six RED HORSE teams deployed to Southeast Asia during the war and were based at the major air bases in the region.⁸²

After a flurry of activity between 1965 and 1968, the Air Force Engineering operations began to constrict. The last Air Force engineer units (RED HORSE) left Vietnam in 1973. However, a contingent of engineers remained in an advisory role. There was also a BCE unit still based in Thailand. However, the fall of Saigon resulted in the removal of the advisors from Vietnam in 1975. The last Air Force BCE unit to leave Southeast Asia was the 554th, which had been in the region since 1965.⁸³

⁸⁰ Lauson, "Civil Engineering Combat Experiences During the Vietnam War, An Exploratory Study," 21

⁸¹ Lauson, "Civil Engineering Combat Experiences During the Vietnam War, An Exploratory Study," 24

⁸² Lauson, "Civil Engineering Combat Experiences During the Vietnam War, An Exploratory Study," 25

⁸³ Hartzler, Ronald B., et al. *Leading the Way The History of the Air Force Civil Engineers 1907-2012*, (2012) 292.



Source: National Museum of the Air Force

FIGURE 3-7. PRIME BEEF TEAM CONSTRUCTING AN AIRCRAFT REVETMENT AT PLEIKU AB, SOUTH VIETNAM, APRIL 1966 (USAF PHOTO)

Eglin Air Force Base

Eglin AFB is located approximately three miles southwest of Valparaiso, Florida in Okaloosa County. In 1931, personnel of the Air Corps Tactical School, at Maxwell Field, Alabama, sought a location for a bombing and gunnery range. They saw the potential of the sparsely populated forested areas surrounding Valparaiso and the vast expanse of the adjacent Gulf of Mexico. In 1935, Eglin AFB was established as the Valparaiso Bombing and Gunnery Base.

In the early 1950s, during the Korean War, the Air Force began to investigate hardened aircraft shelters. In late October 1950, the United Nations forces occupied Wonson Airfield and discovered that the North Koreans had sheltered bombers in two underground hangars of heavily reinforced concrete construction with steel blast doors, covered with sod, and planted with grass and shrubs.” By 1952, the Joint Air Defense Board at Ent Air Force Base had conducted two

studies addressing possible aboveground and underground aircraft shelters. By the close of 1962, the Secretary of Defense authorized construction and test of a prototype at Eglin AFB.⁸⁴

The Air Force intended that the prototype shelter be applicable to a “limited warfare” situation, such as what was in Vietnam. The shelter, constructed on Range 56, consisted of an earth-covered steel arch structure that was 46 feet wide and 80 feet long. A concrete headwall retained the earth cover at the front of the structure and supported the mounts for the upper pivots of the shelter doors. The vertical rear wall was constructed of steel sections similar to the arch roof. A 60-inch diameter corrugated metal pipe tunnel was located at the rear of the shelter to provide people access after the shelter doors had been secured from the inside. The pipe tunnel also served as an aircraft exhaust duct (Weitz, page 233). In addition, on Range 56 in conjunction with the shelter, Eglin AFB personnel erected a fighter aircraft revetment, a revetted radar site, a revetted fuel storage site, and a revetted munitions igloo.⁸⁵

Beginning in 1965, the Air Force began sending Prime BEEF to Vietnam to direct the erection of the first revetments using troops and local labor. By mid-1967, Prime BEEF had overseen the erection of 506 aircraft revetments at 10 primary Vietnamese bases. As of mid-February 1968, more than 40 Prime BEEF teams had rotated on temporary duty to South Vietnam to build aircraft revetment.⁸⁶

Almost immediately upon completion of the final testing of the prototype shelter at Eglin AFB in 1965, and the beginnings of the aircraft revetment program in Vietnam late the same year, the Air Force moved ahead with a more comprehensive first-generation aircraft shelter program. The Air Force inaugurated a program refined specifically for Vietnam entitled Concrete Sky. The 560th Civil Engineering Squadron was charged with establishing the Civil Engineering Field Activities Center at Eglin AFB. Planning for the center began in November 1966. The previous experience of the 560th was as a RED HORSE squadron, erecting support structures and revetments in Vietnam. At Field 2, Concrete Sky was just one of multiple missions focused on infrastructure needs in Southeast Asia for the war effort. The overall objectives for Concrete Sky were to “develop and test pre-fabricated earth-covered aircraft shelters, evaluate new armor materials, develop and test an armored aircraft shelter door, and to test and evaluate new revetments.”⁸⁷

The Air Force initiated Concrete Sky in March 1966 and were erecting and testing actual prototypes shelters by 1967. Although civil contractors erected a few shelters in Vietnam, most were the responsibility of the RED HORSE, the engineering squadrons training at Eglin AFB’s auxiliary Field 2. The Air Force had activated RED HORSE squadrons for deployment to Southeast Asia in late 1965, to undertake major infrastructure for the war.⁸⁸

⁸⁴ Weitz, Karen J. “Eglin Air Force Base, 1931-1991: Installation Buildup for Research, Test, Evaluation, and Training,” (San Diego: Kea Environmental, Inc., for Air Force Materiel Command, January 2001) 230

⁸⁵ Weitz, “Eglin Air Force Base, 1931-1991: Installation Buildup for Research, Test, Evaluation, and Training,” 235

⁸⁶ Weitz, Eglin Air Force Base, 1931-1991: Installation Buildup for Research, Test, Evaluation, and Training,” 236

⁸⁷ Weitz, Eglin Air Force Base, 1931-1991: Installation Buildup for Research, Test, Evaluation, and Training,” 237

⁸⁸ Weitz, Eglin Air Force Base, 1931-1991: Installation Buildup for Research, Test, Evaluation, and Training,” 244

Wright Patterson AFB

The RED HORSE squadrons had been created to meet operational civil engineering needs in the combat zone. At the request of Headquarters TAC, the Center devised special courses to familiarize RED HORSE squadron members with subjects such as the types of soils they were likely to encounter during construction in Southeast Asia.⁸⁹

The School of Engineering was not immediately drawn into this rapid expansion. Since it was primarily a graduate school, its operations were less effected by what was happening in the field. But by the mid-1960s, the Air Force institute of Technology (AFIT) was more heavily committed to support of the United States effort in Southeast Asia. The Civil Engineering Center concentrated on preparing young officers, mostly second lieutenants, for assignment to RED HORSE units in Southeast Asia. It had started taking such classes on field trips to Eglin AFB, where RED HORSE enlisted personnel were being trained. Members of the Civil Engineering faculty served temporary duty tours in Southeast Asia, solving problems in such areas as construction and the modification of electrical distribution systems. The Civil Engineering Center was involved in Project CORONA HARVEST, an Air Force project designed to evaluate the effectiveness of air power in Southeast Asia. The Civil Engineering Center documented the role of civil engineering in the logistics support of air power in Southeast Asia.⁹⁰

3.3.4 OTHER SCHOOLS

Maxwell AFB, Alabama

Maxwell AFB dates to World War I and since 1931 it has hosted various air training programs. In 1946 the AAF School located here was redesignated as Air University with a professional military curriculum that included an Air War College and an Air Command and Staff School. Reorganization and building projects occurred here during the Korean War.

The Vietnam war caused a reduction in student enrollment as trained personnel were needed in Southeast Asia. Changes during this period included the arrival of the USAF Chaplains School in 1966 and redesignation of the Warfare Systems School as the Air University Institute for Professional Development in 1968.⁹¹

Students and faculty at Air University's schools produced numerous studies and reports for "Project Corona Harvest" on specific lessons learned in Southeast Asia from 1965 to 1968. Phased out in October 1975, it was the most ambitious effort ever undertaken by Air University to study and develop airpower "lessons learned" from a conflict in progress. With Vietnamization under President Richard M. Nixon, the U.S. military began to draw down its

⁸⁹ Walker, Lois E. and Shelby E. Wickam, "From Huffman Prairie to The Moon, The History of Wright-Patterson Air Force Base," (Office of History, 175th Air Base Wing Wright Patterson Air Force Base, n.d.), 420

⁹⁰ Walker, "From Huffman Prairie to The Moon, The History of Wright-Patterson Air Force Base," 421

⁹¹ Winkler. "Training to Fight: Training and Education During the Cold War." 99-10

forces in Southeast Asia, and the Air Force approved an increase in student enrollments for Air University's schools to 60 percent or more of the pre-1964 input level. Similarly, the Air Force increased the schools' faculties and staffs in direct proportion to the growing student population, marking a return to some degree of normalcy.⁹²

Fort Benjamin Harrison, Indiana

The Defense Information School (DINFOS) moved from Fort Slocum, New York in 1965 when the program was expanded from an Army school to a DoD-wide school. Its mission was to train military journalists, broadcasters, photojournalists, and public affairs officers for all of the armed forces and select civilians employed by the federal government.⁹³

The Vietnam War produced both a high point and a low point in the relationship between the military and the media. The high point for reporters and news organizations was that no censorship was ever imposed. Journalists were free to cover whatever they wished, subject to the availability of military operations and transportation. Their copy, photographs, and footage went out unimpeded by any security review.

The low point came when some members of the military blamed the press coverage for the loss of the war. Vietnam was called the 'first TV war,' a test of the American public's tolerance for battle brought into its living rooms. Journalists were allowed practically unrestricted access, accompanying units and freely filing stories, photographs, and film. The idea that reporters opposed to the war used this freedom to publish negative stories that contributed significantly to the final defeat quickly became standard; it was espoused by Presidents Lyndon Johnson and Richard Nixon, as well as by the United States commander in Vietnam from 1964 to 1968, General William Westmoreland. There were few restrictions on the media related to access to geographical areas, but restrictions at the source, through withheld and inaccurate information, soured the press. Press coverage was generally favorable until the Tet offensive of 1968. That dramatic campaign blasted the credibility of claims by the White House and Westmoreland that the United States and South Vietnam were on the threshold of victory. The critical tone adopted by the press thereafter confirmed the widespread view held by the public before the Tet offensive that the prospects for success were doubtful.⁹⁴

Fort McClellan, Alabama

Fort McClellan dates to 1917 but was made inactive following World War II. The post was reactivated as a training facility in 1950 with the outbreak of the Korean War. The U.S. Army Chemical School arrived at Fort McClellan in 1951. During the Vietnam era, the requirements for trained individuals capable of operating chemical and smoke equipment increased the student enrollment. To support radiation detection training, the Army built a hot cell structure and laid

⁹²(http://www.airuniversity.af.mil/Portals/10/AcademicAffairs/documents/AU_Maxwell_Heritage_Pamphlet_2016.pdf).

⁹³ Defense Information School General Catalog. Defense Information School Fort Benjamin Harrison. 1985.

⁹⁴ "Doctrinal Foundations of Public Affairs." The Defense Information School, Fort George G. Meade, Maryland. <https://dinfos.blackboard.com/bbcswebdav/library/Library%20Content/Public%20Affairs%20-%20PALD/Doctrinal%20Foundations%20of%20Public%20Affairs.pdf>

out a field with underground sources of controlled radioactivity. In 1973 the Chemical School was moved to Aberdeen Proving Ground, Maryland only to be transferred back six years later.



Source: Hartman et al. "Vietnam on the Homefront: How DoD Installations Adapted, 1962–1975." 2014

**FIGURE 3-8. GATES-LORD HALL, TV-RADIO AREA WHILE UNDER CONSTRUCTION,
FORT BENJAMIN HARRISON, INDIANA, AUGUST 1965**

In 1954 the post also became home to the Women's Army Corps Center. The center acted as a receiving, processing and training center for all female inductees to the Army. Courses taught at the center included those for Women's Army Corps officers, enlisted clerical personnel, and NCO leadership. The clerical training branch of the Center was also open to men. Women's Army Corps was disbanded in 1977.⁹⁵

⁹⁵ Winkler. "Training to Fight: Training and Education During the Cold War." 101.

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4.0 APPLICATION OF THE SUBCONTEXT IN THE IDENTIFICATION AND EVALUATION OF HISTORIC RESOURCES

This chapter presents how to apply this historic subcontext in the identification and evaluation of historic resources. The latter portion of this chapter describes the property types on U.S. military installations associated with special operation forces and warfare training during the Vietnam War. The selection of these property types was based on research and field investigations. Field data were collected at Marine Corps Base – Quantico and US Army Garrison - Hawaii (see appendixes A and B). The purpose of the field investigations was to identify real property associated with special operation forces and warfare training.

Once resources have been identified, evaluation of a property involves two steps. First, the property will be assessed against eligibility criteria for listing on the National Register of Historic Places (National Register); then it must be assessed for its integrity. The following national register publications are useful guides when evaluating Vietnam War resources:

- How to Apply National Register Criteria for Evaluation
- Guidelines for Completing National Register for Historic Places Forms
- Researching a Historic Property
- Guidelines for Evaluating and Documenting Historic Aviation Properties
- Guidelines for Evaluating and Documenting Historic Properties that Have Achieved Significance Within the Last 50 Years

These guides maybe found at: <http://www.cr.nps.gov/nr/publications/index.htm>.

4.1 NATIONAL HISTORIC PRESERVATION ACT

The NHPA is the centerpiece of federal legislation protecting cultural resources. In the act, Congress states that the federal government will “provide leadership in the preservation of the prehistoric and historic resources of the United States,” including resources that are federally owned, administered, or controlled. The NHPA requires the DoD to identify its significant resources, evaluate them for national register eligibility, and plan for the protection of the listed or eligible historic properties.

The NHPA established the National Register. The national register is a list of buildings, structures, objects, sites, and districts that have demonstrated significance to United States history, architecture, archaeology, engineering, and/or culture. The national register is maintained by the Secretary of the Interior and is managed by the National Park Service Keeper of the Register. Regulations for listing a property on the national register were developed by the Department of the Interior and are found in 36 *Code of Federal Regulations* (CFR) Part 60. The NHPA requires that federal agencies identify historically significant properties that are eligible for listing on the national register.

Section 106 of the NHPA requires the federal government to take into account the effects of its actions on historic properties prior to implementation of the action. For U.S. military installations, this requirement applies to all proposed actions on federal lands and any proposed activities that are federally supported or funded. Consultation with the state historic preservation

officer (SHPO) and/or the Advisory Council on Historic Preservation (ACHP) is a critical step in this process. Activities on lands held by an American Indian tribe with a designated tribal historic preservation officer (THPO) must be coordinated with this official. If an undertaking on federal lands may affect properties having historic value to a federally recognized American Indian tribe, such tribe shall be afforded the opportunity to participate as consulting parties during the consultation process defined in 36 CFR 800.

Section 110 of the NHPA requires federal agencies to locate, inventory, and identify all properties under their ownership or control that may qualify for the national register. It also requires that the agencies manage and protect historic properties. The Federal Agency Preservation Assistance Program provides assistance to federal agencies in meeting Section 110 historic preservation responsibilities.

Section 106 compliance can also be accomplished using agreed-upon streamlined methods and agreement documents such as programmatic agreements. The agreements, which are developed among federal agencies, the ACHP, and SHPOs to provide efficient section 106 compliance guidance for specified historic properties and/or undertakings.

Failure to take into account the effects of an undertaking on historic properties and afford the ACHP a reasonable opportunity to comment on such effects, can result in formal notification from the ACHP to the head of the federal agency of foreclosure of the ACHP opportunity to comment on the undertaking pursuant to the NHPA. A notice of foreclosure can be used by litigants against the federal agency in a manner that can halt or delay critical activities or programs.

The NHPA requires the DoD to identify its significant resources, evaluate them for national register eligibility, and plan for the protection of the listed or eligible historic properties. The Vietnam War overview historic context “Vietnam and the Home Front: How DoD Installations Adapted, 1962–1975” and this subcontext are designed to assist professionals in the field of cultural resources in identifying significant U.S. military special schools during the Vietnam War era related properties that may be present on military installations state-side. Criteria for evaluating these properties, once identified, are provided in section 4.3.

4.2 IDENTIFICATION OF HISTORIC PROPERTIES AND METHODOLOGY UNDER THIS SUBCONTEXT

The Secretary of the Interior’s Standards and Guidelines for Archeology and Historic Preservation (48 Federal Register 44716) outline the process for the identification of historic properties. The process includes developing a research design, conducting a review of archival literature, completing a field survey, and analyzing the results of the literature review and field survey.

Those conducting the identification and evaluation of historic properties must meet professional qualifications established by the Secretary of the Interior. The qualifications are divided into five subject areas: History, Archeology, Architectural History, Architecture, and Historic Architecture.

The minimum professional qualifications in history and architectural history are: a graduate degree in history/architectural history or a bachelor's degree in history/architectural history and at least two years of full-time experience in research, writing, teaching, interpretation, or other demonstrable professional activity with an academic institution, historic organization or agency, museum, or other professional institution; or substantial contribution through research and publication to the body of scholarly knowledge in the field of history/architectural history.

The minimum professional qualifications in archeology are a graduate degree in archeology or anthropology and at least one year of full-time professional experience or equivalent specialized training in archeological research, administration, or management; at least four months of supervised field and analytic experience in general North American archeology and demonstrated ability to carry research to completion.

The minimum professional qualifications in architecture are a professional degree in architecture plus at least two years of full-time experience in architecture or a state license to practice architecture. The minimum professional qualifications in historic architecture are a professional degree in architecture or a state license to practice architecture plus at least one year of graduate study in architectural preservation, American architectural history, preservation planning, or closely related field; or at least one year of full-time professional experience on historic preservation projects.

A research design should define the purpose and objectives of the survey as well as the methodologies that will be employed to achieve the objectives. Most often, as stated above, surveys to identify historic properties are undertaken in compliance with Section 106 of the NHPA, which requires federal agencies to take into account the effect of its actions on historic properties and to mitigate adverse effects. Another driver for performing inventories is Section 110 of the NHPA that requires agencies to identify historic properties and manage them in the interest of the public. This requires the establishment of a baseline of known historic properties that must be kept updated, which is then used to develop a management plan for the properties. Depending on the driver, identification could be limited to a single property in compliance with a limited Section 106 action, or it may incorporate an entire installation in compliance with Section 110.

After the objective and scope of identification has been defined, a methodology should be developed to ensure that the identification meets the goals and also makes the best use of time and fiscal resources to guarantee the information obtained from the identification is as comprehensive as possible in anticipation of future actions that may be required. The methodology should include how to determine dates for original construction and all alterations, repairs, and additions; construction techniques and materials; history of property function; and the history of surrounding properties. These types of information are essential to place a resource within a specific historic context for the property and determining the property's historic significance and integrity.

Historic properties are identified primarily through a combination of literature and archival record reviews and field surveys. Record reviews are conducted using real property records, historic maps and aerial photographs, blueprints and construction drawings, other archival

records, and sometimes oral histories. Generally, major command headquarters, installation real property managers and departments of public works, installation historians, and one or more branches of the National Archives and Records Administration (NARA) keep these types of records. Other sources of information for resources and installation history related to specialized schools are local newspaper archives, archives at academic institutions (especially The Vietnam Center and Archive, Texas Tech University), historical societies, websites, and libraries. Previous installation and unit histories may also contain information valuable to understanding the use and history of a building or site in relation to Vietnam War special schools and training.

Field surveys should be undertaken with care to gather as much information as possible as efficiently as possible. Contemporary aerial photographs can be consulted before going into the field and used as a guide to map current features of the property and identify elements that have been added or removed. Using a current aerial photograph also could reduce field mapping time. Photographs should be taken of all elements being inventoried. These photographs should be keyed on the aerial photograph to ensure they can be properly labeled. Photographs should be taken of each building and property feature, including close-ups of unique and representative details. Even if the pictures are not used as part of an inventory report, they could be helpful to document a time line of the property's condition.

Meticulous notes should be taken during a field survey. Oftentimes, database forms or applets can be created and loaded onto data collectors (including most submeter GPS units) to standardize data collection. In this manner, data can then be linked to geospatial databases creating a useful management tool for both cultural resource managers and for facility managers who may need to know, on a moment's notice, if a property or a specific element of a property is eligible for the National Register.

4.3 CHOOSING THE CORRECT HISTORIC CONTEXT

The broader overview context contained in *Vietnam and the Home Front: How DoD Installations Adapted, 1962–1975*, can be preliminarily used in determining which properties may be significant on an individual installation by the cultural resources manager; however, the follow-on subcontexts will provide the specifics necessary for determinations of eligibility at the installation level.

Recommendations in *Vietnam and the Home Front: How DoD Installations Adapted, 1962–1975* include the development of additional subthemes for the Vietnam War. The subthemes include ground training, air training, housing, counterinsurgency warfare training, housing, medical facilities, and logistical facilities. Subthemes for each of these thematic areas should be developed to include an in-depth historic context, determination of associated property types, and character-defining features. Every thematic area may not be equally applicable to each branch of the Armed Services. Currently, the subtheme *Vietnam War-Era Ground Combat Training and Associated Facilities*; Legacy project 14-739, *Vietnam War: Helicopter Training and Use on U.S. Military Installations, Vietnam Historic Context Subtheme*; Legacy project 16-518, *Vietnam War-Era Logistics Support on U.S. Military Installations Historic Context Subtheme* and *Vietnam War Special Operation Forces and Warfare Training on U.S. Military Installations Historic Context Subtheme* are developed.

Association with special training at an installation does not automatically imply a relationship to the Vietnam War. For example, some aviation units may not have been trained to serve in Vietnam, but other parts of the world. In other cases, facilities were built previously and may have served an important role during the Vietnam War, and therefore, may have significance to more than one context.

4.4 APPLYING NATIONAL REGISTER CRITERIA FOR EVALUATION

The Secretary of the Interior has developed the National Register Criteria for Evaluation (36 CFR Part 60.4) to assist in the evaluation of properties eligible for inclusion in the national register. The National Park Service has published guidance for applying the criteria in *National Register Bulletin 15: How to Apply the National Register Criteria for Evaluation* (NPS 1991). To qualify for the national register, a property must have significance and retain historic integrity. Significance for U.S. military Vietnam War special schools and training-related historic properties can be ascertained through Chapters 2 and 3 of this subcontext.

To be listed on, or considered eligible for listing on the national register, a cultural resource must meet at least one of the four criteria that follow:

- A. Associated with events that have made a significant contribution to the broad patterns of our history.
- B. Associated with the lives of persons significant in our past.
- C. Embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction.
- D. Have yielded, or may be likely to yield, information important in prehistory or history.

In addition to meeting at least one of the above criteria, a historic property must possess integrity of location, design, setting, materials, workmanship, feeling, and association. Integrity is defined as the authenticity of a property's historic identity, as evidenced by the survival of physical characteristics it possessed in the past and its capacity to convey information about a culture or group of people, a historic pattern, or a specific type of architectural or engineering design or technology.

4.4.1 CRITERION A: ASSOCIATION WITH EVENTS

The first criterion recognizes properties associated with single events such as the evacuation of the United States embassy in Saigon, or with a pattern of events, repeated activities, or historic trends such as innovations in new military strategies, testing, and training. The event or trends, however, must clearly be important within the associated history.

The United States involvement in the Vietnam War comprised a complex series of political, military, diplomatic, and economic events and programs that affected the lives of millions of

people in the United States and Asia. The Vietnam War was an event that made significant contributions to the broad patterns of United States history; however, because the Vietnam War occurred during the Cold War-era (1947–1989), not all military properties related to special schools and training constructed from 1961 to 1975 are significant under this subcontext. The historic property(ies) being considered must have an important and specific association with events directly associated with the Vietnam war, such as mine sweeping or survival training. During the Cold War, some units were trained and readied for situations in other parts of the world.

Military properties associated with special schools and training during the Vietnam War are likely to fall under this criterion. Properties generally related to units that participated in the Vietnam War would also likely be evaluated under this criterion. To determine if a property is significant within subcontext under Criterion A:

- Determine the nature of the property, including date of construction, type of construction, dates and purposes of modifications, and function(s) from time of construction to the end of the Vietnam War (1975).
- Determine if the property is associated specifically with special schools and training and missions, events, or trends.
- Evaluate the property’s history as to whether it is associated with the Vietnam War in a significant way.

4.4.2 CRITERION B: ASSOCIATION WITH SIGNIFICANT PEOPLE

Properties may be listed in the national register for their association with the lives of significant people. The individual in question must have made contributions to history that can be specifically documented and that were important within history. This criterion may be applicable, but to only a small portion of buildings or structures, as the history focuses on events and on design and construction rather than on individuals. However, background research on a particular installation or building may indicate that it is associated with an individual who made an important contribution to special schools and training in the Vietnam War. To determine if a property is significant within this subcontext under Criterion B:

- Determine the importance of the individual.
- Determine the length and nature of the person’s association with the property.
- Determine if the person is individually significant within history.
- Determine if the property is associated with the time period during which the individual made significant contributions to history.

- Compare the property to other properties associated with the individual to determine if the property in question best represents the individual's most significant contribution.

Refer to *National Register Bulletin 32: Guidelines for Evaluating and Documenting Properties Associated with Significant Persons* (National Park Service) for more information.

4.4.3 CRITERION C: DESIGN/CONSTRUCTION

To be eligible for listing on the national register under Criterion C, properties must meet at least one of four requirements: (1) embody distinctive characteristics of a type, period, or method of construction; (2) represent the work of a master; (3) possess high artistic value; or (4) represent a significant and distinguishable entity whose components may lack individual distinction. Vietnam War special schools and training-related resources are most likely to be eligible under the first or fourth of these requirements.

National Register Bulletin 15 defines distinctive characteristics as “the physical features or traits that commonly recur” in properties; type, period, or method of construction is defined as “the certain way properties are related to one another by cultural tradition or function, by dates of construction or style, or by choice or availability of materials and technology.” Properties are eligible for listing on the national register if they are important examples, within history, of design and construction of a particular time. This component of Criterion C can apply to buildings, structures, objects, or districts.

“Significant and distinguishable entities” refers to historic properties that contain a collection of components that may lack individual distinction but form a significant and distinguishable whole. This portion of Criterion C applies only to districts.

Military properties associated special schools and training may fall under this criterion (and may also fall under Criterion A). To determine if a property is significant as an important example of distinctive characteristics of a building type or as a significant and distinguishable district:

- Determine the nature of the property, including date of construction, type of construction, major modifications (dates and purpose) historic appearance, and functions during the period of significance.
- Determine the distinctive characteristics of the property type represented by the property in question.
- Compare the property with other examples of the property type and determine if it possesses the distinctive characteristics of a specific building type construction.
- Evaluate the property's design and construction to determine if it is an important example of building type construction.

Although many military installations were impacted significantly by increases in troop levels, changing training requirements, and the engineering demands of the Southeast Asian geography, there was the lack of a unified building campaign in response to the Vietnam War's requirements (Hartman et al. 2014). While many Army, Navy, Marine Corps, and Air Force facilities were reopened, expanded, or adapted, there was no identifying architectural style used during that time. The reuse of World War II (WWII) and 1950s buildings was common, and new construction was often part of the larger modernization initiatives that were being executed by the DoD during the 1950s and 1960s.

The writers of the report, *Vietnam and the Home Front: How DoD Installations Adapted, 1962–1975*, concluded that the Vietnam War differed from previous 20th century conflicts. It was long in duration and the United States involvement was gradual. There was no need to repeat the massive WWII effort to establish and fully construct working installations in a few months. As a result, there was no major overarching construction program across the DoD as a response to the U.S. military activities in the Vietnam War. Consequently, there was also no large-scale effort to produce standardized designs to be replicated across the county. Aside from new training methods such as “Quick Kill” ranges and Viet Cong villages, construction was largely piecemeal and focused on specialized training needs (Hartman et al. 2014).

Many buildings constructed new during this period, may incorporate mid-century modern design elements. This may be significant architecture under a Mid-century Modern design theme or just a style of the time period, and not significant to the Vietnam War.

4.4.4 CRITERION D: INFORMATION POTENTIAL

Properties may be listed on the national register if they have yielded, or may be likely to yield, information important in prehistory or history. Two requirements must be met for a property to meet Criterion D: (1) the property must have, or have had, information to contribute to the understanding of history or prehistory, and (2) the information must be considered important. This criterion generally applies to archaeological sites. In a few cases, it can apply to buildings, structures, and objects if the property itself is the principal source of information and the information is important. For example, a building that displays a unique structural system or unusual use of materials and where the building itself is the main source of information (i.e., no construction drawings or other historic records) might be considered under Criterion D. Properties significant within this subcontext would rarely be eligible under Criterion D.

4.5 INTEGRITY

A historic property determined to be significant under the criteria for evaluation for the national register must possess integrity. Integrity is the ability of a property to convey its significance through retention of the property's essential physical characteristics from its period of significance. The National Register Criteria for Evaluation lists seven aspects of integrity. A property eligible for the national register must possess several of these aspects. The assessments of a property's integrity are rooted in its significance. The reason why a property is important should be established first, then the qualities necessary to convey that significance can be identified. *National Register Bulletin 15: How to Apply the National Register Criteria for Evaluation* defines the seven aspects of integrity as the following:

- **Location:** the place where the cultural resource was constructed or the place where the historic event occurred.
- **Design:** the combination of elements that create the form, plan, space, structure, and style of a cultural resource.
- **Setting:** the physical environment of a cultural resource.
- **Materials:** the physical elements that were combined or deposited during a particular period of time and in a particular pattern or configuration to form a cultural resource.
- **Workmanship:** the physical evidence of the crafts of a particular culture or people during any given period in history or prehistory.
- **Feeling:** a property's expression of the aesthetic or historic sense of a particular period of time.
- **Association:** the direct link between an important historic event or person and a cultural resource.

National Register Bulletin 15 describes the following steps in assessing historical integrity:

- Determine the essential physical features that must be present for a property to represent its significance.
- Determine whether the essential physical features are sufficiently visible to convey significance.
- Compare the property with similar properties if the physical features necessary to convey significance are not well-defined.
- Determine, based on the property's significance, which aspects of integrity are particularly important to the property in question and if they are intact.

For properties significant for their association with special schools and training during the Vietnam War on U.S. military installations, they must retain the key physical features associated with these themes. Properties significant for their design and construction must retain the physical features that are the essential elements of the aspects of the building type construction that the property represents.

In cases of active military installations, buildings are more likely to have been modified to extend their useful life. These modifications generally include adapting buildings for new

communication systems or equipment, mission and staff changes, and changes in military assets such as new aircraft models. These integrity issues will be critical in the evaluation process of significant resources.

To qualify for listing as a historic district, the majority of the properties in the district associated with the history must possess integrity and a sufficient number of properties must be retained from the period of significance to represent that significance. The relationship among the district's components, i.e., massing, arrangement of buildings, and installation plan must be substantially unchanged since the period of significance.

4.6 CRITERION CONSIDERATIONS

Certain kinds of properties are not usually considered for listing on the national register, including:

- religious properties (criteria consideration A)
- moved properties (criteria consideration B)
- birthplaces or graves (criteria consideration C)
- cemeteries (criteria consideration D)
- reconstructed properties (criteria consideration E)
- commemorative properties (criteria consideration F)
- properties that have achieved significance within the last 50 years (criteria consideration G)

These properties can be eligible for listing only if they meet special requirements called “criteria considerations.” A property must meet one or more of the four criteria for evaluation (A through D discussed in previous sections) and also possess integrity of materials and design before it can be considered under the various criteria considerations. Three of these criteria considerations may be applicable to U.S. military properties; moved properties (criterion consideration B), commemorative properties (criteria consideration F), and properties that have achieved significance within the last 50 years (criteria consideration G).

A property removed from its original or historically significant location can be eligible if it is significant primarily for architectural value or if it is the surviving property most importantly associated with a historic person or event. Properties that are moveable by their nature, such as a ship or rail car, do not need to meet this criterion consideration.

Commemorative properties are designed or constructed after the occurrence of an important historic event or after the life of an important person. They are not directly associated with the

event or with the person's productive life but serve as evidence of a later generation's assessment of the past. The significance comes from their value as cultural expressions at the date of their creation. Therefore, a commemorative property generally must be over 50 years old and must possess significance based on its own value, not on the value of the event or person being memorialized. A commemorative marker erected in the past by a cultural group at the site of an event in its history would not meet this criterion if the marker were significant only for association with the event and it had not become significant itself through tradition.

Properties less than 50 years old are normally excluded from the national register to allow time to develop sufficient historical perspective. However, under criteria consideration G, a property may be eligible for the national register if it possesses "exceptional importance" or significance. Vietnam War resources span from 1961 through 1975, so could have been built 55 years ago (at this writing), or as recently as 42 years ago. Buildings constructed before 1961 could have significance during the latter part of the Vietnam War. Criteria consideration G (properties that have achieved significance within the last 50 years) applies to buildings and structures that are less than 50 years old at the time of evaluation. This criterion also includes buildings that were constructed more than 50 years ago and that continue to achieve significance into a period less than 50 years ago or has noncontiguous periods of significance and one of which is less than 50 years ago or had no significance until a period less than 50 years ago. For buildings, structures, objects, sites, or districts that have achieved significance within the last 50 years, only those of "exceptional importance" can be considered eligible for nomination to the national register, and the finding of "exceptional importance" must be made within the specific history associated with the property. National Park Service publication *How to Evaluate and Nominate Potential National Register Properties That Have Achieved Significance Within the Last 50 Years* further describes criteria consideration G.

Properties evaluated under criteria consideration G that do not qualify for exceptional importance must be reevaluated when they reach 50 years of age under national register Criteria A through D.

4.7 SIGNIFICANCE

To qualify for the national register, a cultural resource must be significant, meaning that it must represent a significant part of United States history, architecture, archaeology, engineering, or culture. A resource may possess significance on the local, state, or national level. The significance of a cultural resource can be determined only when it is evaluated within its history. As outlined in *National Register Bulletin 15: How to Apply the National Register Criteria for Evaluation*, the following steps are taken to evaluate a cultural resource within its history:

- Identify what the property represents: the theme(s), geographical limits, and chronological period that provide a perspective from which to evaluate the property's significance.
- Determine how the theme of the history is significant to the local area, the state, or the nation.

- Determine the property type and whether it is important in illustrating the history.
- Determine how the property represents the history through specific associations, architectural or engineering values, or information potential (the national register criteria for evaluation).
- Determine what physical features the property must possess in order for it to reflect the significance of the history.

A cultural resource may be significant within more than one area of history. In such cases, all areas of history should be identified. However, significance within only one area is required. If a cultural resource is determined to possess sufficient significance to qualify for the national register, the level of integrity of those features necessary to convey the resource's significance must then be examined.

For this subcontext, resources associated with special operation forces and warfare training, including elite forces, COIN, Psyops, riverine, intelligence, civic actions programs and construction, and reconnaissance and patrolling fall under this criterion.

4.8 PROPERTY CLASSIFICATIONS

Significant properties are classified as buildings, sites, districts, structures, or objects. Sites or structures that may not be considered individually significant may be considered eligible for listing on the national register as part of a historic district. The classifications are defined as:

- A building such as a house, barn, church, hotel, or similar construction is created principally to shelter any form of human activity. "Building" may also be used to refer to a historically and functionally related unit such as a courthouse and jail or a house and barn.
- A site is the location of a significant event, a prehistoric or historic occupation or activity, or a building or structure, whether standing, ruined, or vanished, where the location itself possesses historic, cultural, or archaeological value regardless of the value of any existing structure.
- A district possesses a significant concentration, linkage, or continuity of sites, buildings, structures, or objects united historically or aesthetically by plan or physical development.
- The term "structure" is used to distinguish from buildings those functional constructions made usually for purposes other than creating human shelter.
- The term "object" is used to distinguish from buildings and structures those constructions that are primarily artistic in nature or are relatively small in scale and simply constructed. Although it may be movable, by nature or design, an object is associated with a specific setting or environment.

4.9 PROPERTIES ELIGIBLE AS A HISTORIC DISTRICT

While survival, leadership, tactics, and technology training schools and installations, as a class of resources, may be significant, not every structure associated with training and use during the Vietnam War is eligible for listing on the NRHP. The framework established by the historic context focuses on the role of training during the Vietnam War to assess its significance and the significance of its component resources. In general, training installation and facilities should first be evaluated as potential districts. These facilities typically had both classroom and field training components that contributed to the training mission.

For component structures and buildings to be individually eligible for listing on the national register with the context of Vietnam War survival, leadership, tactics, and technology training, they should individually embody a significant type of training critical to the war; or represent an example of a type or method of construction or engineering design necessary to conduct the specific type of training. Infrastructure and support buildings typically are not individually eligible.

Training facilities were typically designed and used as a complex. Each structure or element provided a vital component of the overall training mission. The overall importance of a school or range facility depends of the mission of the specific installation. For example, the first two RED HORSE units, the 555th and 554th, began their training at Cannon AFB, New Mexico, in November 1965. Each squadron was organized as a mobile, self-contained unit of 400 men with a range of skills. To ensure their self-sufficiency, each squadron included medical, food service, vehicle and equipment maintenance, and supply personnel, all requiring different types of training. Various class rooms, ranges, construction areas, and shops would have been necessary to provide this training. Individual class rooms field training areas and shops may not be individually significant. However, considered together, they represent specialized Vietnam War training and could be a significant historic district.

The dramatic increase in base populations and the number of units may have resulted in the need for additional housing and recreational amenities. Housing and recreational facilities may be contributing resources to a school campus or training installation historic district, especially if the unit was separated from other units on the base or if part of a campus designed specifically for this singular training purpose. However, they would not be considered eligible under this context without important and primary training facilities included in the district.

4.10 INDIVIDUALLY ELIGIBLE PROPERTIES

Individual properties are those whose physical attributes singularly represent or embody the Vietnam War special school subtheme. While individual properties need not be unique, they must have integrity and cannot be part of a multiple-property grouping.

For properties that are less than 50 years old to be individually eligible for listing on the national register, they should:

- Clearly and explicitly reflect an important training mission of the installation. Examples include a mock prison of war building, or a building that housed new technological or communication equipment if the equipment is still extant.
- Be regarded as symbolic of the installation or of an aspect of the training mission.
- Represent particularly significant examples of a type or method of construction or an important technological advancement.

Infrastructure and support buildings are not typically individually eligible unless they were: (1) the site of a particular event, (2) directly associated with a significant individual, or (3) of exceptional note as an example of architectural or engineering design. It is not expected that many buildings or structures would be individually eligible under this special school subtheme.

4.11 HISTORIC DISTRICTS WITH ELEMENTS LESS THAN 50 YEARS OLD

Properties less than 50 years old may be integral parts of a district when there is sufficient perspective to consider the properties as historic. This consideration is accomplished by demonstrating that: (1) the district's period of significance is justified as a discrete period with a defined beginning and end, (2) the character of the district's historic resources is clearly defined and assessed, (3) specific resources in the district are demonstrated to date from that discrete era, and (4) the majority of district properties are over 50 years old. In these instances, it is unnecessary to prove exceptional importance of either the district or of the less than 50-year-old properties.

Exceptional importance still must be demonstrated for districts where the majority of properties or the major period of significance is less than 50 years old, and for less than 50-year-old properties that are nominated individually. Some historic districts represent events or trends that began more than 50 years ago. Frequently, construction of buildings continued into the less than 50-year period, with the later resources resulting in representation of the continuation of the event. In instances where these later buildings make up only a small part of the district and reflect the architectural and/or historic significance of the district they can be considered integral parts of the district (and contributing resources) without showing exceptional importance of either the district or the less than 50-year-old buildings.

An exceptional historic district is one comprised principally of structures less than 50 years of age that are integral to understanding the unique aspects of the district's mission or association. Structures that clearly contribute to this understanding would be considered contributing elements to the district. Structures that only tangentially or marginally contribute would not be considered contributing members unless they qualify under the standard national register criteria. Since the Vietnam War and corresponding construction span a period of time that stretches from 56 to 42 years ago, there may be districts or features of districts that will fall into this category.

4.12 ONE-OF-A-KIND PROPERTIES

These are properties whose character-defining features singularly embody the special schools subtheme and that are the only known property of its type. Singularity alone does not impart exceptional importance if the property is less than 50 years old. Vietnam War special school properties that are one-of-a-kind or rare must be compared against other property types within the same theme to determine if they are truly exceptional. Although unique properties can never be precisely compared quantitatively, a qualitative comparison must take place to protect the exclusivity of the term “exceptional.”

The phrase “exceptional importance” may be applied to the extraordinary importance of an event or to an entire category of resources so fragile that survivors of any age are unusual. Properties listed that had attained significance in less than 50 years include, for example, the launch pad at Cape Canaveral from which astronauts first traveled to the moon. Properties less than 50 years old that qualify as exceptional because the entire category of resources is fragile. An example of a fragile resource is a traditional sailing canoe in the Trust Territory of the Pacific Islands, where because of rapid deterioration of materials, no working Micronesian canoes exist that are more than 20 years old.

4.13 PROPERTIES SIGNIFICANT WITHIN MORE THAN ONE AREA OF HISTORY

Properties may possess significance within multiple areas of history. A building or area may be individually significant to Vietnam War special schools support training history because of its design characteristics and may also be part of a district related to a particular training mission of an installation. For example, the Land Survival School moved from Stead AFB to Fairchild AFB in 1966. Facilities that had housed the Deep Creek Air Force Station were converted for the survival training school. A mock prisoner-of-war camp was created, and parachute-training facilities were constructed. The former Deep Creek Air Force Station buildings may have significance for events prior to the Vietnam War, while the Land Survival School, including the mock prisoner-of-war camp and parachute-training facilities, may be significant for its design and association with the Vietnam War.

Military installations should be evaluated holistically, with attention to their interrelated historic associations over time. When evaluating the significance of a military property, the period of significance should be defined based on the range of important associations over time. In districts, buildings may illustrate various dates of construction, architectural design, and historical associations. A single building may be associated with several periods of history; for example, a building may have played a vital role in both the Vietnam and Korean Wars. Significance within one historic period is sufficient for the property to meet the national register criteria for evaluation. However, all areas of significance should be identified to have a comprehensive picture of the property’s importance. For properties constructed during the period of the Vietnam War (1961–1975), other Vietnam War subtheme reports should be referenced on (www.denix.osd.mil) as available.

4.14 PROPERTY TYPES ASSOCIATED WITH SPECIAL SCHOOLS DURING THE VIETNAM WAR ON U.S. MILITARY INSTALLATIONS

The Vietnam War was unlike previous wars in which the United States had participated. The environmental conditions and topography of Vietnam presented unique difficulties for the U.S.

military. Additionally, the Viet Cong and North Vietnamese fought a guerilla war that forced the military to adopt new fighting techniques and to modify existing practices. In order to meet these new challenges, the military adopted specialized training programs and schools for U.S. troops.

The installations presented in this subcontext report include those that provided training in leadership; SERE; engineering; and tactics and technology. Training required the construction of both indoor and outdoor facilities. Buildings and structures do not necessarily need to have been built during the Vietnam War period (1962–1975); they may have been previously constructed and repurposed for the Vietnam War. For example, many Vietnam-era construction projects augmented existing WWII-era infrastructure that became heavily reutilized in support of the Vietnam War. Furthermore, the financial demands of the Vietnam War came to overshadow most stateside military decisions and operations. Therefore, mobilizing and supporting the war slowed stateside military construction and led to a piecemeal approach of reactive construction efforts that corresponded to the immediate and ever-changing combat requirements (Hartman et al. 2014).

In general, building types that were most important based on this subcontext include those constructed to meet the need for specially-trained troops and officers during the buildup of the war. An influx of trainees paired with the unique tactical demands and technological advancements during the Vietnam War also influenced the construction and renovation of classrooms, libraries, auditoriums, laboratories, simulators, and other indoor training spaces as well as outdoor tactical training spaces and testing areas. Other building types include those constructed to accommodate and house more troops and officers during the buildup of the war. Building types that could accommodate these needs included barracks and other housing as well as recreation buildings and administrative buildings.

For buildings and indoor spaces used to support special schools and training, the Vietnam War-era did not feature an identifiable, unified architectural style that was unique to the time; as such, many buildings associated with the subtheme were constructed using standard designs that do not make them readily-distinguishable for this specific period or training mission. Instead, new construction was often part of larger modernizing initiatives (Hartman et al. 2014). For example, if a specific unit was stationed in its own area of a base, the housing and support buildings (i.e., mess, offices, etc.) would likely have been similar in design to other housing built around the same time.

Because there is no identifying architectural style that defines special schools and training during the Vietnam War, buildings would not be evaluated for listing on the NRHP under Criterion C (see section 4.4.3). Many DoD buildings constructed during this time were influenced by architectural Modernism. Modernism covers several architectural movements and styles. If the building was constructed during this period and possesses an architectural style beyond utilitarian, refer to Legacy Project Number 11-448, *Historic Context for Evaluating Mid-Century Modern Military Buildings*, (Hampton, et al, 2012) to determine if it would be eligible and to assess character defining features for the various architectural movements.

The following provides a brief description of buildings, structures, and landscape features that are associated with special schools and training on U.S. installations during the Vietnam War.

Individual properties need to be investigated at the installation level to determine if they are eligible for listing on the NRHP under Criteria A (see section 4.4.1). Additionally, the omission of a property type in the following sections does not automatically exclude it from potential significance under this subtheme as a contributing resource of a historic district. These types of buildings, structures, and landscapes may also be associated with other types of specialized training that occurred during the Vietnam War. Specialized training that has already been addressed under prior subcontexts includes Special Forces, logistics, and fixed-wing and helicopter pilot training.

ACADEMIC BUILDINGS

Academic buildings, classrooms, and auditoriums provided venues for lectures on various military operations and strategies, technology, skills, and applications of these skills and theories. Examples of lecture topics included at these various special schools included leadership and officer training; technical training; engineering and science; tactical and weapons skills; first aid; language and customs of Southeast Asia; new technology and equipment including electronics, communications, and radar; tactics, strategies, and techniques for survival, escape, surviving capture; land navigation and map reading; and patrolling strategies. Indoor academic training facilities accommodated classrooms, studios, laboratories, libraries, gymnasiums and pools, simulators, shops, and mock ups for formal lectures and practical applications. Other buildings and rooms provided space and equipment for hands-on training. These spaces include laboratories and workshops. Specialized equipment includes technology for language courses, medical training and first aid, communications (radio operator and repair), and chemical/gas training, and computer simulation facilities.

The war build-up may have resulted in the expansion of an existing facility. For example, at Marine Corps Base Quantico, during a trial period, officer training facilities included one barrack, one classroom, one administrative building and a mess hall. Increases in the number of Marines being trained for the war necessitated the expansion of these academy facilities.



Source: Fleming et al. *Quantico: Crossroads of the Marine Corps*

**FIGURE 4-1. CHOPAWMSIC CREEK AREA, A PORTION OF WHICH HOUSED THE MARINE CORPS STAFF
NONCOMMISSIONED OFFICERS' ACADEMY**

Character Defining Features

These facilities include those constructed or adapted and heavily used during 1962–1975 and were directly related to providing special training. This property type will vary in size, shape, and design, and may include an entire building, a portion of the building, or designated classrooms. Buildings may be of similar design to other installation buildings constructed during the same period, may be former World War II temporary or permanent structures, or may be of a one-off design (see section 4.4.3). Interior features include original floor plans, furnishings, and training equipment and materials. Exterior features include finishes and construction materials. Equipment may include audio visual equipment and close circuit televisions; radio and other communication equipment; simulators; and rescue equipment.



Source: Manning et al. *History of Air Education and Training Command 1942-2002*

FIGURE 4-2. STUDENTS AT CHANUTE TECHNICAL TRAINING CENTER RECEIVE HANDS ON ELECTRICAL TRAINING

Evaluation and Integrity

As discussed in section 4.4.3, there was no identifying architectural style used specifically for Vietnam War construction. Therefore, Criteria C would not be applicable for evaluating properties under this subcontext. However, many DoD buildings constructed during this time were influenced by architectural Modernism. Modernism covers a number of architectural movements and styles. If the building was constructed during this period and possess an architectural style beyond utilitarian, refer to Legacy Project Number 11-448, *Historic Context for Evaluating Mid-Century Modern Military Buildings*, (Hampton, et al, 2012) for character defining features for the various architectural movements.

Properties may be eligible under Criterion A (see section 4.4.1). Many installations supported special training programs. These programs included officer training and, during the Vietnam War, the expansion at some installations was driven by an increased demand for officers. OTS was opened at Lackland AFB in 1959 to expand USAF officer procurement. During the Vietnam war, all officer procurement was accelerated, but officer procurement through the OTS system provided expedited and responsive procurement at lower cost per graduate and, with drops in ROTC enrollment, OTS picked up the slack for officer training. In 1968, OTS was consolidated at Lackland's Medina training annex. At this time, OTS launched a closed-circuit television project to create an accelerated three-week entry/graduation schedule in order to meet personnel requirements. The project necessitated the acquisition and installation of equipment, studio construction, and software development at this installation. This represents a significant military event under Criterion A.

National Register Bulletin 15 states that for each property, there are essential features that must have been retained for the property to have integrity and be able to convey a sense of the significant place and time with which it is associated. Without these features, a property could no longer be identified as a product of the place and time from which it came. As discussed in section 4.4.3, there was no identifying architectural style used specifically for Vietnam War construction. However, many DoD buildings constructed during this time were influenced by architectural Modernism. Modernism covers a number of architectural movements and styles. If the building was constructed during this period, also refer to Legacy Project Number 11-448, *Historic Context for Evaluating Mid-Century Modern Military Buildings*, (Hampton, et al, 2012) for character defining features for the various architectural movements.

These properties may be individually eligible if they still contain unique equipment. Some buildings of this type may be individually eligible due to the program it supported. Others may have provided support functions and individually are not significant but do contribute to a district (see section 4.9) under this subcontext for Criteria A.



Source: Manning et al. *History of Air Education and Training Command 1942-2002*

FIGURE 4-3. OTS AT LACKLAND AFB, A DISCUSSION ON THE MILITARY CODE OF CONDUCT

OUTDOOR TRAINING AREAS

Outdoor facilities include spaces that were constructed, underwent a major expansion, or were adapted and heavily used during 1962–1975 and were directly related to special schools and training for the war.

Outdoor training areas include tactical instrument training courses, firing ranges and targets, demonstration areas, bombing ranges, and construction sites. These properties might be in a variety of settings including woods, beaches, water bodies, jungles, or clearings. For example, marines conducted a night compass march and a night assault in the woods at Marine Corps Base Quantico. Outdoor areas were also used for larger, unit-scale platoon exercises including patrols, ambush, defensive perimeters, and navigation.

Other areas were needed for honing amphibious operation techniques and combat operations ashore. Mine sweeping required training to plant and sweep mines and to develop other mine countermeasures. Sweeping could be airborne, deep-water, and riverine. These properties would not likely be individually eligible.



Source: National Archives

FIGURE 4-4. U.S. NAVAL SUPPORT ACTIVITY NHA BE REPUBLIC OF VIETNAM. RIVER MINESWEEPER (MSM) 18 OPERATES ON A RIVER AT NHA BE

USAF engineering training required space to learn and perform oversight of construction, repairs, maintenance of base facilities, utilities, fire protection, and rescue services. Training focused on the operation of heavy equipment, erection of contingency structures, and the operation of water purification systems. Engineering unit training also included vehicle maintenance, medical and food services, and logistics specialists. For example, upon deployment

to Vietnam, RED HORSE Squadrons had the heavy equipment and training necessary for total bare base development in Vietnam. These properties would not likely be individually eligible.



Source: National Museum of the Air Force

FIGURE 4-5. RED HORSE WORKERS OF THE 820TH CIVIL ENGINEERING SQUADRON COMPLETING AIRCRAFT SHELTERS AT DA NANG AB IN JANUARY 1969

Survival schools provided concept demonstrations, hands-on training, and developed specialized skills, all of which required constructed outdoor spaces. Survival schools taught the Military Code of Conduct rules for POWs as well as survival in Vietnam terrain. Survival training included the procurement and preparation of food and water, survival medicine and hygiene, evasion, land navigation without aids, resisting communist interrogation techniques, POW compound organization, escape, the Geneva Convention of 1949, and case history.

Demonstrations and skits were performed to illustrate these skills. At the TAC Sea Survival School at Homestead AFB, the course included instruction on the use of survival gear, how to survive on the beach, use of signaling devices, and student participation in ditching procedures. Part of the training occurred in the Everglades National Park. In 1966, when USAF land survival schools were consolidated at Fairchild AFB, facilities were converted for the survival training school. A mock prisoner-of-war camp was created, and parachute-training facilities were constructed. Training undertaken at this facility is credited with saving the lives of many pilots and crews shot down over Southeast Asia during the war in Vietnam.



Source: Headquarters 25th Infantry Division APO 25. *Code of Conduct Techniques of Communist Interrogation Escape and Evasion*

FIGURE 4-6. POW'S TRAINING IN ESCAPE TECHNIQUES AT REPLICA POW COMPOUND AT SCHOFIELD BARRACKS

When the Jungle and Guerilla Warfare Training Center opened at Schofield Barracks, Hawaii in 1962, there were nine outdoor training stations. The stations included land and compass navigation, water crossing, guerilla operations, anti-guerilla operations and ambush, first aid and hygiene, shelters and field craft, rope techniques, rappelling, and survival. The stations included a river and reservoir, steep slopes, clearings for demonstration areas, and dense jungle areas. Structures were as simple as a rope bridge, platform, or lean-to (Hawaii Lightning News, 1962). In 1962, the G2 Code of Conduct field training station was an authentic replica of a Communist prisoner of war compound. It was a small fenced clearing between two dirt roads that was constructed from abandoned buildings on the east range. Three stilted wooden watch towers, located outside and adjacent to the fence, provided viewing vantage points of the compound. The compound contained four wood framed buildings with gabled roofs. These buildings were repurposed from existing abandoned structures (US Army, Headquarters 25th Infantry Division, APO 25, 1962). Tents provided additional shelters. The original training was approximately five hours in length and the buildings and structures provided stages and props for various demonstrations. Other parts of the Jungle Training Center still exist; however, this POW compound was demolished sometime prior to 1985.

Character Defining Features

Amphibious and underwater training would have included various water bodies (lakes, rivers, oceans) and could have associated shore facilities, such as docks, wharves, and piers. Underwater training may include submerged equipment, vessels, or a navigation course. Water bodies may have been used for boat handling skills or river crossing training.

For physical endurance and skills development, training areas may include obstacle courses, rappelling towers, jump towers, and structures for chemical and gas training.

Property types for training could also include natural areas for repelling, water crossings, and mine sweeping; clearings or forested areas; ranges and targets; landing zones; or mock villages. Marine training may include wharves, piers, docks, shores and open water.

The most elementary requirement for training may be a forested area or clearing. These properties and features would not likely be individually eligible and would more likely to be part of a district or landscape. These same training areas could also have been used for Special Forces personnel. For more information about Special Forces training during the Vietnam War, refer to Legacy Project Number 16-518A, *Vietnam War: Special Operation Forces and Warfare Training on U.S. Military Installations Vietnam Historic Context Subtheme*.

Ranges and training areas were designed to served different training programs, therefore features from one range to another may vary. Some ranges were designed as replicas of the military infrastructure of Vietnam.



Source: Headquarters 25th Infantry Division APO 25. *Code of Conduct Techniques of Communist Interrogation Escape and Evasion*

FIGURE 4-7. CODE OF CONDUCT FIELD TRAINING STATION, REPLICA POW COMPOUND AT SCHOFIELD BARRACKS

Evaluation and Integrity

Installations may have supported special training programs. However, these features would not likely be individually eligible. The U.S. Army Corps of Engineer (USACE) guidance (Archibald et al. 2010) regarding the significance of individual features states:

No individual building/structure/element [within a training range] will ever be significant. ... Military training ranges need to be researched and evaluated as a whole landscape, including all the buildings/structures, firing lines, target mechanisms, etc. and not evaluated as individual elements that sit on the range. Military training ranges were originally designed and intended to be utilized as a whole complex.

Properties may be eligible under Criterion A (see section 4.4.13) as a historic district. Under 36 CFR Part 60, a historic district is defined as a “Geographically definable area, urban or rural, possessing a significant concentration, linkage, or continuity of sites, buildings, structures, or objects united by past events or aesthetically by plan or physical environment.” In addition to being recognizable, a district must also be significant. The significance of a historic district may be achieved if it also meets NRHP requirements under Criterion A (see section 4.4.1). Replica villages and POW compounds serve as exceptions that might also be eligible under Criterion C, provided that they retain their integrity, because they were uniquely designed to replicate a Vietnam experience.



Source: Hartman et al. “Vietnam on the Homefront: How DoD Installations Adapted, 1962–1975.” 2014

FIGURE 4-8. VIEW OF SOUTHEAST ASIAN VILLAGE CONSTRUCTED AT THE BASIC SCHOOL, QUANTICO, VIRGINIA, JUNE 1966 (NARA 127-GG-957-A556414)

ADDITIONAL SUPPORT FACILITIES

Building types that are also associated with this subcontext include those constructed to meet the need for more specially-trained troops and officers during the buildup of the war. An influx of trainees paired with the unique tactical demands and technological advancements during the Vietnam War also influenced the construction and renovation of classrooms, libraries, auditoriums, laboratories, simulators, and other indoor training spaces as well as outdoor tactical training spaces and testing areas.

To support the special schools and training mission, additional buildings may have been built or renovated to house additional and necessary support functions. These may have included headquarters and offices, maintenance and testing shops, flight line or waterfront facilities, barracks and housing, and morale/welfare/recreation facilities.

Character Defining Features

These facilities include those that were constructed or adapted and heavily used between 1962–1975 and were directly related to supporting special schools or training. This property type will vary in size, shape, and design and may include entire buildings, portions of buildings, or may only include specific and unique man-made features. Buildings may be of similar design to other installation buildings constructed during the same period, may be former World War II temporary or permanent structures, or may be of a one-off design (see section 4.4.3). Interior features include original floor plans and exterior features include finishes and construction materials. Equipment may include audio visual equipment and close circuit televisions; radio and other communication equipment; simulators; and engineering equipment.

As discussed above under Academic Buildings and in section 4.4.3, there was no identifying architectural style used specifically for Vietnam War construction. Many of the buildings were constructed using modern designs and are not necessarily unique in architectural design or style to a training mission or to the Vietnam War. A special unit could have been stationed in a separate area of a base; however, the housing and support buildings (mess, offices, etc.) may have been of a similar design to other housing built around the same time. Therefore, Criteria C would not be applicable for evaluating properties under this subcontext. However, many DoD buildings constructed during this time were influenced by architectural Modernism. Modernism covers a number of architectural movements and styles. If the building was constructed during this period and possess an architectural style beyond utilitarian, refer to Legacy Project Number 11-448, *Historic Context for Evaluating Mid-Century Modern Military Buildings*, (Hampton, et al, 2012) for character defining features for the various different architectural movements.

Evaluation and Integrity

Properties may be eligible under Criteria A (see section 4.4.1). Installations may have supported special training programs. Some buildings of this type may be individually eligible due to the program it supported. Others may have provided support functions and individually are not significant but do contribute to a district (see section 4.9). These properties would not likely be individually eligible (unless of a unique design and under a different historic context) but could be a contributing resource to a historic district if the special school or training area was a distinct area within the installation.

For example, Marine Corps schools at Marine Corps Base – Quantico (MCBQ), underwent reorganization during the Vietnam War. During this time, a number of World War II-era buildings were adapted to meet the educational needs of these reorganized schools. Buildings included traditional lecture facilities that would be appropriate examples for “Academic Buildings” above. But these buildings also include Geiger Hall, a self-contained teaching facility

that also housed a cafeteria, gymnasium, and barbershop as well as Building 3078 which transitioned to serve as Staff Non-commissioned Officer Academy Headquarters in 1971. In 2007, John Milner Associates, Inc. (JMA) conducted a survey and evaluation of the resources at MCBQ; Appendix A of this report provides additional details of this survey in the context of a Vietnam-era education mission at this installation.

National Register Bulletin 15 states that for each property, there are essential features that must have been retained for the property to have integrity and be able to convey a sense of the significant place and time with which it is associated. Many of these properties would not likely be eligible unless they have not been significantly altered since the end of the Vietnam War. Additional billeting/housing, offices, and other buildings may have also been necessary to provide lodging and support for an influx of military students and faculty. These areas may have been separated from other base areas or integrated into the overall installation. Buildings and structures did not necessarily need to be constructed during the Vietnam War period (1962–1975); they may have been previously constructed and repurposed for the Vietnam War.

4.15 CONCLUSIONS

This project developed a historic context to evaluate the historical significance of resources constructed on military installations as they pertained to special schools and training during the Vietnam War. The goal of this historic context was to provide military and cultural resource professionals with a common understanding for determining the significance of DoD buildings and structures within this context to increase efficiency and cost savings in evaluating historic resources. The context outlined special schools and training that occurred in the U.S. Army, Navy, Air Force, and Marine Corps as necessitated by the Vietnam War and provided examples of installations where this training was conducted. Finally, it provided a means for applying the special schools subcontext for the identification and evaluation of historic resources at these and other military installations. As stated, these building types could include those constructed as a reaction to dramatic increases in troop levels including barracks and other housing as well as recreation buildings and administrative buildings. Additionally, construction was also based on the changing training requirements, unique tactical demands, technological advancements, and environmental conditions and geography demands of Vietnam and Southeast Asia.

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**APPENDIX A:
MARINE CORPS BASE – QUANTICO**

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Marine Corps Base – Quantico

Marine Corps Schools – Brief Historic Overview

The history and development of Marine Corps Base – Quantico (MCBQ) has always been closely associated with the Marine Corps schools. Through the years the Marine Corps schools have undergone extensive growth and have experienced numerous periods of restructuring. A brief history of the schools at MCBQ follows. This section is summarized primarily from a survey and evaluation conducted by John Milner Associates, Inc. (JMA) in 2007, and augmented with information from additional sources.

When the United States declared war on Germany, in 1917, the school for Marine officers was moved to MCBQ. Although the school did not function during the war, in 1919 it was reopened at Quantico and renamed Marine Officers' Training School. By 1920 the Marine Officers' Infantry School was established. This new school was combined with the Marine Officers' Training School to form the new Marine Officers' School (John Milner Associates, Inc., 2007).

When the Marine Corps School reorganized at Quantico after World War I they used whatever buildings were available. By the mid-1930s, overcrowding and lack of facilities made it clear a building was needed to serve the Marine Corps School. Building No. 2076, Breckinridge Hall, was constructed in 1939 to serve this purpose. By the mid-1930s, officer training at Quantico had evolved into a logical progression. New officers would begin their education at The Basic School (TBS) where they learned their duties as an officer. Upon completion of TBS and several years of active service, the officer would enroll in the Junior Course, also called the "Field Officers Course," which was followed by the Senior Course, also called the "Company Officers Course" (John Milner Associates, Inc., 2007).

Marine Corps Schools at Quantico operated seven courses during World War II. Early in 1944, the name of each course was changed, and courses were identified as schools: Officer Candidates' School, Reserve Officers' School, Field Artillery School, Ordinance School, Correspondence School, Command and Staff School, and Aviation Ground Officers' School (John Milner Associates, Inc., 2007).

The ending of the war led to a period of demobilization and further reorganization of the schools. Completely reorganized by 1946, the school system emerged once again as a three-tiered educational system: The Basic School, the Junior School, and the Senior School. The Basic School moved to Brown Field in 1947 with new training facilities being constructed in the Guadalcanal area. Geiger Hall was constructed in 1947 to be used for the Junior School and the Senior School moved into Breckinridge Hall. Studies, during 1967, included emerging war technology and the role of the Marine Corps in the future of warfare (John Milner Associates, Inc., 2007).

The National Security Act of July 1947 reinforced the role of the Marine Corps by formally assigning them the mission of developing tactics, techniques, and equipment for amphibious warfare. During the Cold War, the mission at Quantico continued to serve the education and research and development needs of the Corps. In 1950, "the Marine Corps Schools were

reorganized to include two major divisions. The Marine Corps Educational Center assumed the duties of providing instruction in the various schools. The Corps Development Center was charged with the development in coordination with other agencies, of tactics, techniques and equipment for use by the Marine Corps forces” (John Milner Associates, Inc., 2007).

In 1964, the Junior School was redesignated the Amphibious Warfare School and the Senior School became known as the Command and Staff College. Four years later, on January 1, 1968, the MCBQ schools were organized to form the Marine Corps Development and Education Command (MCDEC). Another addition to Quantico occurred in February 1971, with the establishment of the Staff Noncommissioned Officer (NCO) Academy headquarters (John Milner Associates, Inc., 2007).

The Basic School (TBS)

When initially established in 1922, The Basic School (TBS) was one of three schools under the Marine Officers’ School. TBS was the first step in the training process for new Marine officers. The school involved a basic four-month course, a course formed specifically for the new officers at Quantico. Founded and administered by MCBQ, TBS was soon relocated to Marine Barracks Philadelphia, the relocation was reportedly due to space issues; specifically, the lack of quarters and classroom space at Quantico. However, The Basic School was moved back to Quantico in 1946. Its first home was Building D which had been built as enlisted housing ca. 1930. The next year the school was temporarily moved to Brown Field while new facilities were being completed in the Guadalcanal area (John Milner Associates, Inc., 2007).

TBS headquarters remained at Brown Field until 1955 when it was relocated to Camp Upshur. Shortly after TBS relocated to Camp Upshur, ground was broken at Camp Barrett for the construction of the first permanent buildings built exclusively for TBS (John Milner Associates, Inc., 2007). At Camp Barrett, Heywood Hall had four huge, modern classrooms, and supporting education facilities and offices. It cost \$849,00 to construct and totaled 60,000 square feet. Another new building, O’ Bannon Hall, cost over \$2 million and had 450 rooms for live-in lieutenants, a dining hall for 1,000 people, plus lounges, a snack bar, game room, and reference library. The Basic School completed its move from Camp Upshur to Camp Barrett in early 1958. Despite this new construction, TBS continued to expand. Ramer Hall, housing a gymnasium and swimming pool, was opened in August 1963. An additional wing was later added to O’ Bannon Hall, and permanent enlisted quarters and an exchange-cafeteria building was constructed (Fleming, 1975).

Today, TBS is considered a formal school within Training Command. The current mission of TBS is [To] train and educate newly commissioned or appointed officers in the high standards of professional knowledge, esprit-de-corps, and leadership required to prepare them for duty as company grade officers in the operating forces, with emphasis on the duties, responsibilities and warfighting skills required of a rifle platoon commander. TBS is a six-month program after which the officers select their Military Occupational Specialty (MOS). The responsibility of TBS is to educate Marine officers, not to screen or evaluate potential officers. The screening process occurs in the Officer Candidates School (OCS) (John Milner Associates, Inc., 2007).



Camp Barrett 1958 (John Milner Associates, Inc, 2007)

Officer Candidates School (OCS)

Officer Candidates School is a formal school, responsible for training, evaluating, and screening officer candidates; “to ensure they possess the moral, intellectual and physical qualities for commissioning and the leadership potential to serve successfully as company-grade officers in the Operating Forces”. Located in the area historically identified as Brown Field, some form of OCS has been at Quantico since 1935 (John Milner Associates, Inc., 2007).

There are two officer programs located within OCS; the Platoon Leader Class and the Officer Candidate Class. The Platoon Leaders Class (PLC, initially identified as the Platoon Leader Course) was developed by the Marine Corps in 1935 and the Officer Candidate Class was developed in 1940. At this point, OCS was still considered part of TBS. When TBS headquarters were relocated to the Guadalcanal area, the training responsibilities for officer candidates of the various officer procurement programs remained at Brown Field and became part of a newly formed unit called Training and Test Regiment (T&T). In 1963 this regiment was redesignated the Officer Candidates School. PLC consists of either two, six-week training sessions during the summer for college freshman and sophomores or one, ten-week training session during the summer between an officer’s junior and senior year. OCS consists of one, ten-week training session during either the fall or spring for college graduates or other qualified candidates. Upon graduation from OCS, candidates are considered commissioned Marine second lieutenants. OCS graduates are then able to attend TBS for further training (John Milner Associates, Inc., 2007).

Junior School (Amphibious Warfare School)

Following World War I, it became apparent that a new form of warfare was necessary. With this understanding, the Marine Corps began to study and test amphibious warfare techniques. An emphasis on amphibious warfare helped distinguish the role of the Marine Corps in the United States Military since, at the time, many of their duties overlapped those of both the Army and the Navy. The Junior School, redesignated the Amphibious Warfare School in 1964, was one of three schools retained after World War II. The Junior School moved to Geiger Hall in the fall of 1947, when construction of the building was completed. At that time, the Junior School's instruction department had four divisions: Tactics, Weapons, Command and Management, and Professional Skills. The school placed emphasis on the principles, fundamentals, and techniques of amphibious operations and combat operations ashore (John Milner Associates, Inc., 2007).

Senior School (Command and Staff College)

The Senior School, redesignated the Command and Staff College in 1964, was one of three schools retained after WWII. This school was designed for field grade officers and captains selected for promotion to major. Like the Junior School, the Senior School consists of a nine-month program (John Milner Associates, Inc., 2007).

Vietnam War Era

There were no drastic changes at Quantico as the Corps enlisted strength was increased from about 193,000 to 223,000 and the number of officers was raised by an additional 3,000. Since World War II experience of curtailing officers training above the basic level, Quantico had developed a sufficiently flexible education system to continue its primary mission without great disruption. The existing system was merely expanded to pick up the increased load and adjusted to incorporate the educational and developmental lessons coming out of the conflict (Fleming 1975). Officer Candidates School and TBS both substantially increased the number of students handled and the TBS course was reduced from 26 weeks to 21, while the work week lengthened through Saturday to pick up the necessary hours of training (Fleming 1975).

The Vietnam conflict and needed expansion of military facilities had placed significant demands on the Military construction funds in all areas across the United States. In fiscal year 1967, Congress eliminated important construction projects from Quantico's budget, which included construction of new barracks and bachelor officer's quarters. In lieu of a new Command and Staff College building, the Marine Corps education center was moved to Barrett Hall, to provide increased student loading space in Breckenridge Hall. Breckenridge Hall was also altered to accommodate the Amphibious Warfare School (Commandant of Marine Corps memorandum, 20 September 1967).

Education and the training of officers was Quantico's single most important mission in the Vietnam era. Quantico Schools Demonstration Troops dropped its mission of training artillery officers during the opening days of the Vietnam conflict and assumed another assignment as an organization designed to combat civil disturbances. Training in this new job began immediately and the unit was alerted on numerous occasions for service in Washington D.C (Fleming, 1975).

Troops of this unit also helped build one of the more unique additions to Quantico during the Vietnam years, the construction of the Southeast Asian Village near Camp Barrett. Completed in August 1966 by TBS and Schools Demonstration Troops personnel, “Xa Viet Thang,” Village of Vietnam Victory, authentically reproduced a small Asian Village to provide invaluable training for those that would deploy (Fleming, 1975). (Also see report Military Training Lands Historic Context - Training Village, Mock Sites, and Large-Scale Operations Areas, available on Denix).

Xa Viet Thang included bamboo houses, mud huts, rice paddies, pagodas, pigs and chickens, and villagers. Every day, ninety Marines would enter the village with the responsibility of ridding it of possible Vietcong by conducting house-to-house searches, all the while being careful to avoid the snipers and booby traps. By May 1967, more than three thousand students from TBS had been introduced to warfare at Xa Viet Thang (Germand, 2004).

Resource Types

As stated previously, JMA conducted a survey and evaluation at MCBQ in 2007. The purpose of the survey was to determine the eligibility for inclusion of specific resources in the National Register of Historic Places. The reconnaissance level survey consisted of an evaluation of 156 pre-1957 resources that are part of MCBQ; 50 resources located within Mainside and 106 resources located in the Guadalcanal area. The buildings that are relevant to educating and training Marines for the Vietnam War are presented below. The descriptions are summarized from the JMA 2007 Draft Final report.

Building No. 2077, Geiger Hall

Architectural Description:

Building No. 2077 is a two-and-a-half-story brick building. The buildings’ dominant feature is a five-bay entrance, with metal and glass doors and windows, and the name, Geiger Hall, located above the entrance. Concrete steps lead to the entrance which is centered on the buildings’ façade. The façade faces south, toward Quantico Creek. Additions, constructed primarily of glass, have been added onto each end of the symmetrical building; despite these additions the building is not severely altered due to its highly intact façade. Overall the two-story building features an irregular plan. Limestone banding accentuates the window sills and cornice. The buildings’ one-over-one windows feature metal frames, currently painted brown.

Statement of Significance:

Junior School (Amphibious Warfare School) moved to Geiger Hall in the fall of 1947 when the building was completed. Geiger Hall was designed as a lecture facility with all the latest technology of the time. It was a self-contained teaching facility with a cafeteria, gymnasium, and barbershop.

Building No. 2077, Geiger Hall, does relate to the established context of the existing Quantico historic district under the theme of education. The building was built during a period of

reorganization for the Marine Corps Schools at Quantico. It served a particular function during the reorganization as the Junior (Amphibious Warfare) School.



Building No. 2077, Geiger Hall

(Source: John Milner Associates, Inc. 2007)

The building retains its original design intent, displaying the exceptional qualities of integrity necessary for inclusion in the National Register of Historic Places. Therefore, JMA concluded that Building No. 2077, Geiger Hall, relates to the established context of the National Register Quantico Marine Corps Base Historic District and should be considered as contributing to the established district.

Building No. 3078, Staff NCO Academy Headquarters

Architectural Description:

Building No. 3078 is an irregular plan, brick building. The building features very simple architectural details. In addition to a brick dentil at the cornice, the gable-ends of the building feature wooden cornice returns. Asphalt shingles cover the gable roof. The building is primarily two-stories with a raised basement and the foundation is not visible. A major alteration to the building is the construction of a large addition on the west wing. The addition, which appears to primarily serve as a new entrance, includes exterior entrance ramps. This newer portion of the building has the appearance of recent construction.

Building entrances at both the northern and southern ends have also been altered. Portions of the building, including former window and door locations, have been bricked-in. Ramps have also

been added to several existing entrances, in addition to the primary entrance ramp. Despite the appearance of recent construction (for the addition), the building currently appears to be vacant.

Statement of Significance:

Constructed in 1943, Building No. 3078 historically functioned as Public Quarters for Majors. Documentation indicates that Building No. 3078 was one of four identical buildings built in a row along Moreell Avenue. The other three buildings have since been demolished.



Building 3078 Staff NCO Academy Headquarters

(Source: John Milner Associates, Inc. 2007)

Other buildings constructed in this area during the 1940s include Building No. 3080, Academic General Instruction Building, also constructed in 1943; and Building No. 3094, Administration Building, constructed in 1944. Documentation indicates that baseball fields were also located within the area at this time. The construction of these buildings was part of a much larger building campaign. With the outbreak of World War II, Quantico, like many military installations, had a vast influx of manpower and increased training demands. Numerous buildings including barracks, classrooms, shops, and warehouses, were constructed to help serve these needs. Training areas were also expanded during this time, along with the development of new schools.

Today, Building No. 3078 is identified with the Staff Non-commissioned Officer Academy Headquarters; a program initially established at Quantico in February 1971. In addition to this building, the Academy Headquarters also uses neighboring Building Nos. 3080 and 3094. Building No. 3078 is significant as the only extant building from a series of former World War II buildings. Constructed to support the military during this particularly momentous period of military history, Building No. 3078 represents a particular period and style of standardized plans occurring at MCBQ.

Although the large new entrance addition has severely altered the façade of the building, this addition is a removable element. It is evident that the building has contributed to the historical significance associated with MCBQ. The building does possess the level of integrity necessary for inclusion in the National Register of Historic Places and should be considered a contributing resource to a historic district.

Building No. 3080, Staff NCO Academy Classrooms

Architectural Description:

Building No. 3080 is an irregular plan, brick building with a side gable, asphalt shingle roof. The building currently includes several rear additions as well as replacement windows. This altered building includes a six-column brick overhang at the primary entrance. The entrance also includes two pairs of double doors (the original center opening – which would make the third pair of doors – is currently bricked-in). Large boards of plywood are positioned behind the glass on the interior side of the windows.



Building No. 3080, Staff NCO Academy Classrooms

(Source: John Milner Associates, Inc. 2007)

Statement of Significance:

Constructed in 1943, Building No. 3080 historically functioned as an Academic General Instruction Building. Other buildings constructed in this area during the 1940s include, Building No. 3078, Public Quarters for Majors, also constructed in 1943; and Building No. 3094, Administration Building, constructed in 1944. Documentation indicates that baseball fields were also located in the area at this time. “The academy offers noncommissioned and staff noncommissioned officers the requisite professional military education leadership training that enhances their professional qualifications in preparation for assuming duties of greater responsibility.”

The construction of these buildings was part of a much larger building campaign. With the outbreak of World War II, Quantico, like many military installations, had a vast influx of manpower and increased training demands. Numerous buildings including barracks, classrooms, shops, and warehouses, were constructed to help serve these needs. Training areas were also expanded during this time, along with the development of new schools. Today, Building No. 3080 functions as classrooms for the Staff Non-commissioned Officer Academy; a program initially established at Quantico in February 1971. In addition to this building, the Academy Headquarters also uses neighboring Building Nos. 3078, and 3094.

Building No. 3080 is not architecturally notable; a point which is amplified by the numerous alterations and additions to the building. Additionally, there is no evidence of the buildings' significance in association with notable events and or persons. Therefore, JMA concluded that this resource does not display the exceptional qualities of integrity (location, design, setting, materials, workmanship, feeling, and association) necessary for individual listing on the National Register of Historic Places (DOI 1997, 4), nor does it contribute to the significance associated with MCBQ. Building No. 3080 would not be considered as contributing to a historic district.

Building No. 2189, Headquarters

Architectural Description:

This building features brick construction with an asphalt shingle, hip-style roof. The primary entrance is located on the south elevation (facing Fleming Street). The entrance features a canopy roof and double glass doors with metal frames. Large double hung windows with wooden frames, painted white, are located on each elevation. Although some of the windows are single, there are also paired windows with as many as 10 in a row. The building features an irregular plan. The plan and the fenestration pattern give evidence that additions have been made to the building.

Statement of Significance:

Constructed in 1945, Building No. 2189 historically functioned as an administration building. Today the building is used as the Headquarters for OCS. Administrative buildings tend to be built as a major architectural piece of the overall planning of the installation.

The headquarters building is a major building type that may possess significance because of historical associations with significant events or individuals or because of architectural merit. As the administrative center, the headquarters building is associated closely with the historical significance of the installation and its role in United States history.

Building No. 2189 has been altered to the extent that it is difficult to even distinguish the historic core of the building. It is not architecturally notable; a point which is amplified by the buildings' numerous alterations and additions. The building does not possess the required integrity for inclusion in the National Register of Historic Places. Therefore, JMA concluded that Building No. 2189 lacks the architectural or historical significance necessary for inclusion in the National Register, either as an individual resource or as a resource contributing to a historic district.

Conclusion

The buildings described above were not surveyed with a specific Vietnam historic context in mind. Nor were these buildings constructed specifically to address the needs of the Vietnam War. However, they were used in training Marines that were deployed during the war and lessons learned from fighting in Southeast Asia directly influenced the training curriculum at the schools.

The buildings are included here as examples of possible resource types for the special school context.

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**APPENDIX B: Jungle Operations Training Center –
U.S. Army Garrison - Hawaii**

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Brief History of the Schofield Barracks

In 1873, Lieutenant General John M. Schofield was secretly tasked by then Secretary of War William Belknap to study the strategic potential and advantage of a U.S. military presence in the Pacific. In his report, Schofield recommended a U.S. presence in Hawaii, stating that it was an ideal place to station warships in the Pacific in response to the possible threats from countries in East Asia (<http://armybases.org/schofield-barracks-hi-hawaii/>).

In his recommendation, Schofield stated that the U.S. must establish a Naval base on the island of Oahu, next to Pearl Harbor. In 1875, The U.S. entered a Reciprocity Treaty with the Hawaiian Kingdom and, in 1887, the U.S. acquired exclusive rights to operate, maintain, and use Pearl Harbor. Massive construction began in 1908 to expand Pearl Harbor for accommodating warships. Construction of Schofield Barracks began in 1909 to house the service men at Pearl Harbor and the U.S. Army's cavalry, artillery, and light infantry (<http://armybases.org/schofield-barracks-hi-hawaii/>)

Prior to and during World War II, the Schofield Barracks served as the base for the soldiers and servicemen who maintain Pearl Harbor. The barracks were also the primary base for the defense of the island of Oahu and were a post for chemical and biological defense training.

Distinct areas of Schofield Barracks serve different purposes that are essential for the operations of the base, and the support of the Naval base at Pearl Harbor. Main Post contains most of the quad-style barracks of the base, as well as the commissary, the library, the uniform clothing store, and entertainment. Soldiers and their families are housed west of the Main Post, and the officers housing areas are located north of the Main Post. Area X is the training grounds of the Schofield Barracks and includes expansive open-air fields for air assault operations. Area X also houses the range control office, firing ranges, and other combat training grounds. East Range Training Area accommodates urban warfare training. Most of the training and testing are done in the East Range Training Area (<http://armybases.org/schofield-barracks-hi-hawaii/>)

Jungle Training

Within six months of the surprise Japanese attack on Pearl Harbor on the morning of 7 December 1941, the number of soldiers on Oahu climbed from 43,000 to over 135,000. By June of 1945, as the U.S. prepared for an offensive against the homeland of Japan, troops on Oahu numbered 253,000. Jungle training and coordinated Army-Navy amphibious landings were practiced in anticipation of the island-hopping battle strategy of the western Pacific. The Jungle Warfare Training Center was established to teach soldiers survival and fighting skills in tropical environments (US Army Garrison-Hawai'i 2018). By 1945, the center had trained more than 300,000 Soldiers for jungle fighting prior to deploying throughout the Pacific (Koester 2015). In addition to the Army soldiers, Navy, Marine Corps and Air Force personnel have participated in jungle training. On average 14,000 students were being trained yearly at the station (US Army, Headquarters 25th Infantry Division, APO 25, 1962).

During the next several decades, the Army jungle training center existed under several different names. During World War II, the Jungle Warfare Training Center was also called the Pacific Combat Training Center. In the 1950s and 1960s, this same installation was home to the Jungle

and Guerilla Warfare Training Center. It became the Recondo School from 1971 to 1979, while most of the jungle-specific training was transitioned to Fort Sherman, Panama. The United States' Asia-Pacific Rebalance Strategy (2011), which acknowledges the rise of China as a world power, and prepares for possible conflict with China, necessitated an increased priority in jungle warfare training for the U.S. Military. The Jungle Operations Training Center (JOTC) reopened at its original location in Oahu in 2013, in part, due to closure of the Fort Sherman, Panama jungle training center in 1999 (Koester 2015). Hawaii was again chosen as the location for JOTC due to its climate, geography, capacity, and operational history of jungle training within the Pacific.

Jungle training was originally located on the northeast of Oahu. Areas on Oahu that had been taken over by the military at the onset of World War II were developed as training areas (U.S. Army Garrison-Hawai'i 2018). The Army initially leased 485.25 acres in Kahana Valley in November 1944 and acquired an additional 1,781.52 acres in the neighboring Punaluu Valley by 1947. Kahana and Punaluu Valleys, along the northeast coast of Oahu, were mostly undeveloped, rugged, and densely forested land with mixed residential, agricultural, and recreational uses. Elevations range from near sea level to approximately 2,000 feet above sea level in the mountainous interior regions. Parcels in Kahana Valley were returned to previous landowners in August 1946. The leases, licenses, and permits for parcels in Punaluu Valley terminated between April 1945 and November 1950 and reverted to the previous owners (Huikala, LLC. 2013).

Following World War II, the Army went into demobilization and experienced severe cutbacks in funding. Changes in military technology, particularly related to the development of nuclear weapons, caused shifts in military strategies and organizations. Much of the land that the Army had acquired in 1941 was no longer needed, and several posts were considered for closure. Wheeler Field was declared obsolete with its runways too short to handle new jet-powered aircraft. In 1949, funding restrictions placed many Army installations on stand-by status, with Army activities in Hawaii limited primarily to the major posts on Oahu (US Army Garrison-Hawai'i 2018).

However, when the 25th Infantry Division returned to Schofield Barracks from Korea in 1954, Schofield Barracks once again became an active post. The influx of troops and their families put a strain on housing (US Army Garrison-Hawai'i 2018). Therefore, the Army dramatically increased family housing by transforming virtually the entire western portion of the Schofield Barracks cantonment from athletic fields, open space, and training areas into new housing. In 1956, 240 acres of former Kahuku Plantation lands were acquired for the Kahuku Training Area; subsequent leases expanded the original training area to over 9,600 acres (US Army Garrison-Hawai'i 2018).

The 25th Infantry Division began jungle training at the Schofield Barracks East Range (SBER) in November 1957. SBER was originally established as a training range after the battle of Midway in 1942 (U.S. Army Garrison-Hawai'i 2018). SBER is presently used for small-unit dismounted maneuvers and reconnaissance, as well as a designated engineer training area. SBER is the location of the Lightning Academy, the JOTC, and a confidence obstacle course (US Army Garrison-Hawai'i 2018).

Jungle and Survival Training During the Vietnam War

After the Korean War, a five-year study of the effect of Communist indoctrination on those held prisoners of war in Korea was conducted and, in 1959, Eugene Kinkead published his findings in a book titled *In Every War but One* (Kinkead, 1959). The following, concluded from the 1959 Kinkead report, was the basis for the establishment of “Resistance to Communist Methods and Techniques of Interrogation and Indoctrination, and Escape and Evasion” training at the mock Prison of War (POW) Compound, SBER:

“Twenty-one Americans captured during the Korean War decided to remain with the enemy – the only time in history that American soldiers have chosen not to return home because they preferred the enemy’s form of government to our own. What was even more shocking (for, after all, these twenty-one could be regarded as ideological cracks or malcontents) was the fact that almost one out of every three American prisoners in Korea was guilty of some sort of collaboration with the enemy! Add to this the fact that during the entire Korean conflict not one of our men escaped from a permanent enemy prison camp and successfully made his way back to our lines. And finally, 38 percent of them, about 4 of every 10, dies in captivity – the highest prisoner death rate of any of our previous wars. This is not a record of which we can be proud. What happened? How do you explain facts such as these? What was the matter with us?” (US Army, Headquarters 25th Infantry Division, APO 25, 1962).

The training fulfilled the requirements as prescribed in AR 350-225, dated 21 February 1958. Soldiers learned skills such as jungle survival, communication, navigation, waterborne operations, and more (Friberg, 2016). The cornerstone on which all training was based included organization, teamwork, and chain of command. Topics included Communist methods, the Code of Conduct, resistance to Communist interrogation techniques, and escape and evasion. The training reinforced that the senior man is in command and that there would always be a chain of command when more than one man was involved (US Army, Headquarters 25th Infantry Division, APO 25, 1962).

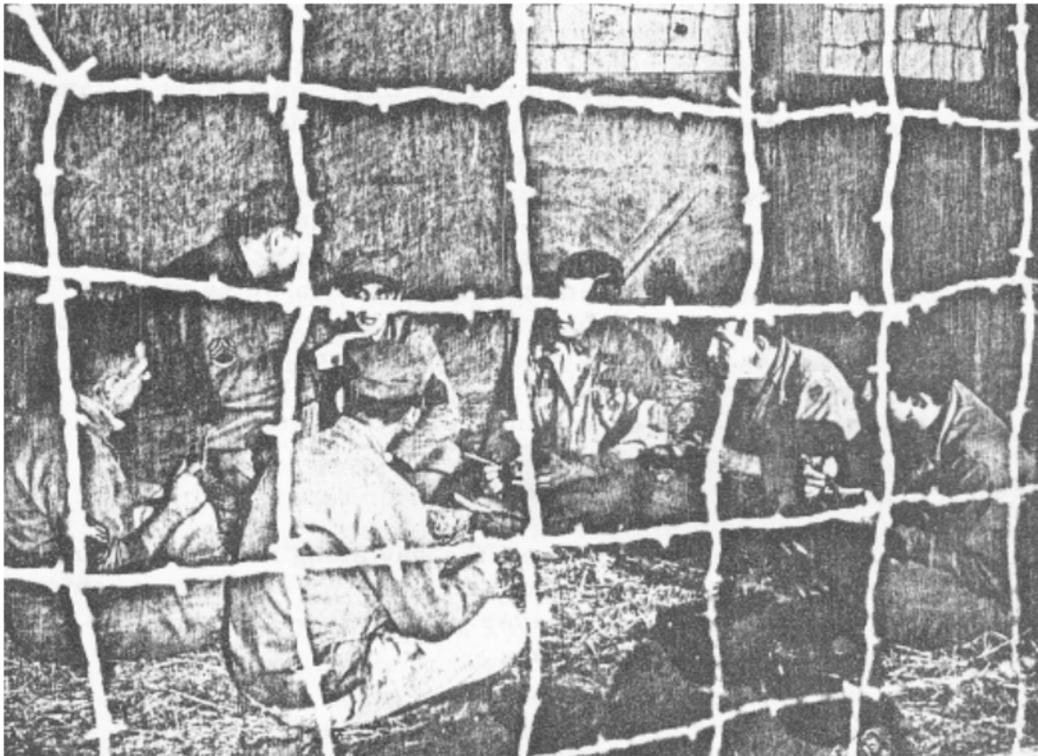
By the early 1960s, training directives required annual attendance at the Jungle and Guerilla Warfare Training Center by all officers and men of the 25th Infantry Division in addition to a mandatory four hours of Code of Conduct training and six hours of Escape and Evasion training that all personnel were required to undergo annually at unit level (US Army, Headquarters 25th Infantry Division, APO 25, 1962).



Review of Code of Conduct

Source: Tropic Lightning Museum, U.S. Army Garrison – Hawaii

Evasion training included lessons in travel and navigation. Soldiers were taught that the best time to travel was at night; training included avoiding populated areas and staying off skylines to provide cover and concealment. Soldiers would practice stop and go movement and were taught to use the sounds of streams, high winds, rain, trains, trucks, etc. to cover the sound of their own movements. Communication was by hand-and-arm signals or sounds that could not be identified as human-made. Soldiers were taught to eliminate anything that may rattle or make a noise. Soldiers were taught not to wear anything that reflects light, to conceal tracks, and not to leave a trail of broken branches or cigarette butts. Navigation by sun and stars was taught in the event that map and compass were not available. Soldiers learned to use rivers, streams, and prominent terrain features as guides to maintain course. Soldiers were also taught that escape was an ongoing effort and to begin immediately and never stop trying (U.S. Army, Headquarters 25th Infantry Division, APO 25, 1962).

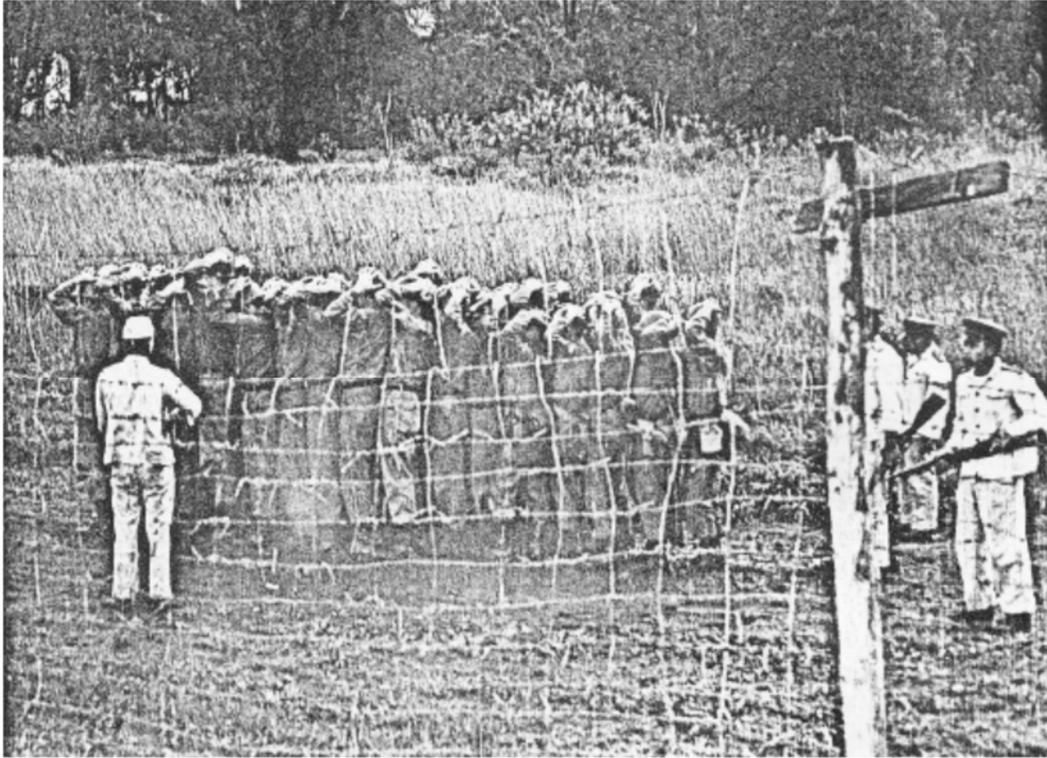


Planning Escape

Source: Tropic Lightning Museum, U.S. Army Garrison – Hawaii

During the 1960s, the 25th Infantry Division controlled the Jungle and Guerilla Warfare Training Center and used it as a guerilla or aggressor POW compound on all major field unit field exercises. Captured personnel were held between 48 hours and five days and were exposed to austere rations, minimum comforts, constant interrogation, and closely-guarded conditions (U.S. Army, Headquarters 25th Infantry Division, APO 25, 1962).

Training materials from 1962 indicate that the training was initiated as the troops, usually a group of 60-80 trainees, were double-timed to the compound gate. They were herded inside the compound with considerable shoving and pulling and were formed into three columns. The prisoners were faced by an arrogant compound commander. Behind him was a row of poles with four U.S. prisoners pinioned on them “Indian style.” Off to one side was an NCO, writhing on the ground and moaning, his arms tied to a long stick behind his back (U.S. Army, Headquarters 25th Infantry Division, APO 25, 1962).



Prisoner Interrogation

Source: Tropic Lightning Museum, U.S. Army Garrison – Hawaii



Prisoner Harassment

Source: Tropic Lightning Museum, U.S. Army Garrison – Hawaii

Today, soldiers spend 12 days in the jungle as part of the current course. The first nine days are spent training in areas such as tropical medicine, waterproofing and waterborne tactics, mobility in the jungle, tracking, survival, squad lanes and how to spot improvised explosive devices. The Soldiers spend the final three days taking part in a culminating exercise in two platoons. Each platoon has its own mission as they move through the thick Hawaiian vegetation (Koester 2015).



Jungle Training Operations Center, Water Crossing

Source: DPW Environmental Division, U.S. Army Garrison - Hawaii



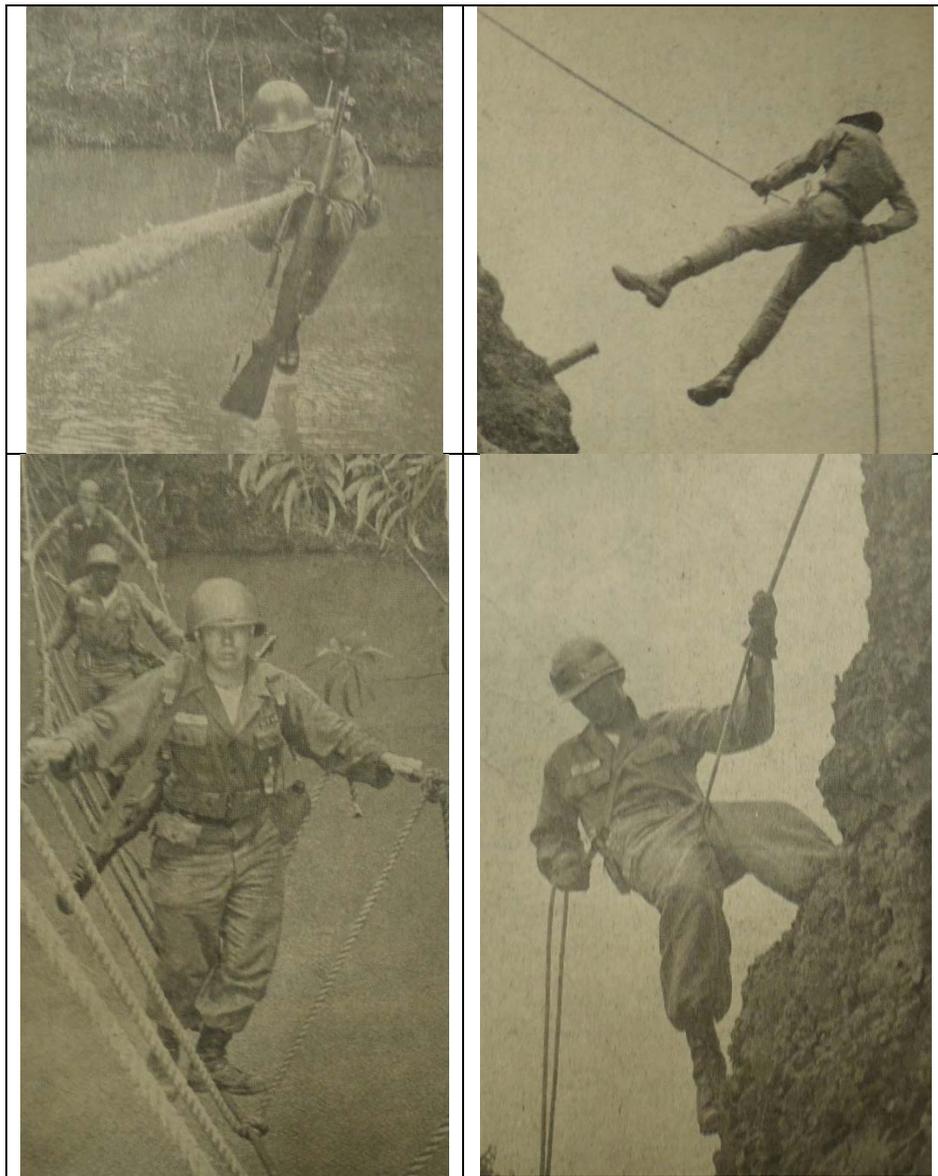
Jungle Training Operations Center, Outdoor Demonstration

Source: DPW Environmental Division, U.S. Army Garrison – Hawaii

Description/Resources

In the 1950s, based on USGS topographical maps, the area that is the present-day JTOC and former the POW compound appears to have been a housing development.

When the Jungle and Guerilla Warfare Training Center opened in 1962, there were nine outdoor training stations. The stations were used to teach land and compass navigation, water crossing, guerilla operations, anti-guerilla operations and ambush, first aid and hygiene, shelters and field craft, rope techniques, rappelling, and survival. The stations included a river and reservoir, steep-sloped areas, clearings for demonstration areas, and dense jungle areas. Structures and features were as simple as a rope bridge, booby traps, platform, or lean-to (Hawaii Lightning News, 1962).



Jungle Training – Rappelling and Water Crossing

Source: Hawaii Lightning News, May 17, 1962

The Code of Conduct field training station was an authentic replica of a Communist prisoner of war (POW) compound. In 1962, the POW compound was a small fenced area in a larger clearing between two dirt roads. Three stilted wooden watch towers, located outside and adjacent to the fence, provided viewing vantage points of the compound. The compound contained four wood framed buildings with gabled roofs. The buildings were repurposed from abandoned buildings on the east range. (U.S. Army, Headquarters 25th Infantry Division, APO 25, 1962). Tents provided additional shelters. The compound has four tall poles near one building for tying up prisoners. The buildings and structures provided stages and props for various demonstrations and skits. The compound main entrance was along the northeast fence. A large 4' x 12' sign was mounted above the main entrance. The letters on the outside read "Remember to only give your name, rank, service number, and date of birth" (U.S. Army, Headquarters 25th Infantry Division, APO 25, 1962).



Communist Prisoner of War Compound 1962

Source: Tropic Lightning Museum, U.S. Army Garrison - Hawaii

The POW compound is still extant as of the 1972 and 1977 aerial photographs. The surrounding area remained cleared of trees. By 1977, a cluster of buildings existed in the northeast area of the training station along the main access road. The POW compound is no longer visible on a 1985 aerial photograph.



1977 Aerial of Jungle Training Center

Source: <https://earthexplorer.usgs.gov/>

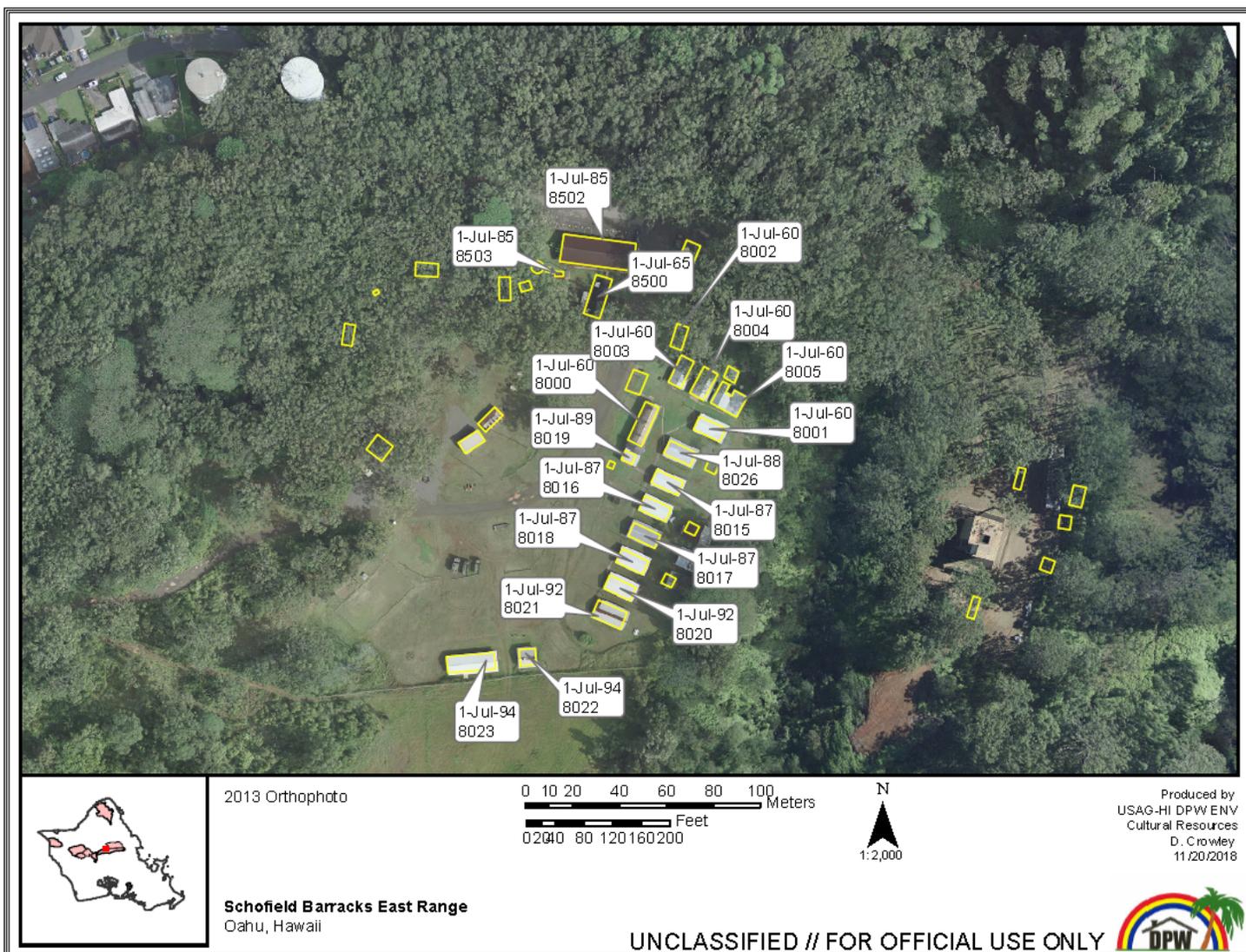
On a 1979 map, the POW compound and Buildings 8500 and 8501 are identified within an area labeled as Recondo and Jungle Training. Other training stations in the immediate surrounding area are labeled Station 6 training area, Station 5 ambush course, Station 4 sanitation course, Station 3 survival course, and Station 2 mines and booby trap course.



Jungle Training Operations Center Looking West (at 8000 and 8500 series buildings)

Source: J. Aaron, November 2018

Buildings listed as part of the jungle training center on the 2018 real property list include buildings # 8000, 8001, 8002, 8003, and 8004 as classrooms, 8005 is listed as a toilet/shower building, and 8500 is a Quonset hut used for storage. The construction dates for these buildings are listed as 1960. Building 8500 is listed as constructed in 1965. These buildings appear in their current location on 1977 aerial photograph. Buildings # 8502 (1985), 8503 (1985), 8019 (1989), 8016 (1987), 8018 (1987) 8021 (1992), 8023 (1994), 8022 (1994), 8020 (1992) 8017 (1987), 8015 (1987) and 8026 (1988) were all added at later dates, and many are currently being remodeled.



Significance

The jungle training area reflects an important aspect of the military mission to train and prepare soldiers for deployments to jungle environments. The training center is associated with World War II, Vietnam War, and/or the Cold War, in general. During the Vietnam War, the Jungle and Guerilla Warfare Training Center, learning from the results from the lack of the specific training during the Korean War, prepared soldiers for jungle combat and surviving capture. Under NRHP Criterion A, this landscape contributing features have a strong and direct association with this training program to ensure that soldiers are prepared and have confidence in their ability to carry out their unit's mission, to provide individual soldiers with the skills and knowledges to oppose hostile forces, whether in combat or as a prisoner.

Architecturally, the Jungle Training Center, whether considered individually or as a group, does not warrant significance under NRHP Criterion C. The buildings have been repurposed and renovated and are strictly utilitarian buildings that do not represent significant achievements in architecture or engineering. There were also no challenges presented by the site that would allow the center to be considered significant engineering feat.



Jungle Training Operations Center – Booby Traps, 2018

Source: J. Aaron, November 2018



Jungle Training Operations Center – Survival (Fire Making and Knots), 2018

Source: J. Aaron, November 2018

The individual features and structures that make up the jungle training center would not likely be individually eligible. The U.S. Army Corps of Engineer (USACE) guidance (Archibald et al. 2010) makes the following argument for training ranges regarding the significance of individual features states:

No individual building/structure/element [within a training range] will ever be significant. ... Military training ranges need to be researched and evaluated as a whole landscape, including all the buildings/structures, firing lines, target mechanisms, etc. and not evaluated as individual elements that sit on the range. Military training ranges were originally designed and intended to be utilized as a whole complex.

This argument would be valid for this type of training facility as well. The features, structures, and landscape may be eligible, however, under Criteria A (see section 4.413) as a historic district. Under 36 CFR Part 60, a historic district is defined as a “Geographically definable area, urban or rural, possessing a significant concentration, linkage, or continuity of sites, buildings, structures, or objects united by past events or aesthetically by plan or physical environment.” In addition to being recognizable, a district must also be significant.

The period of significance for the Vietnam War is 1962 – 1975. National Register Bulletin 15 states that for each property, there are essential features that must have been retained for the property to have integrity and be able to convey a sense of the significant place and time with which it is associated. Many of the structures, features, and landscape that would be directly

associated with training during the Vietnam War have been altered or removed. The POW compound is no longer extant. Many of the training stations contain modern structures and features. Therefore, the changes of the landscape, removal of the POW compound, and the additional modern features and structures greatly impedes the ability of this area to convey a historical visual aesthetic related to jungle training during the Vietnam War.

Note: this assessment is only considering the period of significance of the Vietnam War, integrity could exist for a long period of significance that includes the Cold War era.

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U.S. Army Garrison- Hawai'i. An Integrated Cultural Resources Management Plan for The U.S. Army Garrison - Hawai'i Oahu Island, April 2018

**APPENDIX C:
CONTRIBUTORS**

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Jayne Aaron, LEED AP Environmental Planner / Architectural Historian

Education

- Master of Environmental Policy and Management, University of Denver
- Bachelor of Environmental Design (Architecture and Planning), University of Colorado, Boulder

Summary

Ms. Aaron has over 20 years of hands-on experience as a project manager, architectural historian / cultural resources specialist, and NEPA specialist. Ms. Aaron meets the qualification of the Secretary of the Interior for Architectural Historian. She has been involved in all aspects of Section 106 compliance for cultural resources, including the evaluation of US Coast Guard vessels, campgrounds, civil works projects, numerous military installations, and other buildings and structures. She has also designed innovative strategies and management plans to integrate new and existing regulations, policies, and guidance, and cultural and natural resource management activities into single planning and compliance programs, including NEPA, Environmental Justice, and the NHPA, and Native American Graves Protection and Repatriation Act of 1990. As part of her compliance responsibilities, Ms. Aaron has participated in consultation and meetings with a variety of stakeholder groups, including state and federal regulators, Indian tribes, environmental consultants, and the public. She has written public releases, given presentations, responded to public comments, and facilitated meetings for various sized groups. She has also designed and developed training courses and has taught in numerous educational and training programs.

As an Architectural Historian and Cultural Resources Specialist, she has extensive experience evaluating a large variety of historic properties for many federal agencies, developing management plans and strategies, and, when necessary, completing mitigation strategies for historic buildings, structures, and districts. The following are just a few project examples to illustrate this experience:

Project Experience

Vietnam War: Helicopter Training and Use on US Military Installations Vietnam Historic Context Subtheme, Legacy 14-739. Ms. Aaron was the project manager and principal investigator to develop a historic context and typology for Vietnam War (1962–1975) helicopter-related resources on Department of Defense (DoD) installations in the United States. The report can be used to identify and evaluate Vietnam War helicopter-related facilities at DoD military installations in the United States. This report’s historic context provides military cultural resources professionals with a common understanding for determining the historical significance of Vietnam War helicopter-related facilities, greatly increasing efficiency and cost-savings for this necessary effort.

Wake Atoll Hurricane Damage Assessment, Cultural Resources Inventory, and HABS Documentation for Air Force, Wake Island. Ms. Aaron was the project manager and principal investigator for the survey and evaluation of 128 buildings and structures for listing on the National Register of Historic Places (NRHP). Ms. Aaron also assessed 139 features that comprise the Wake Island National Historic Landmark for damage caused by Typhoon Ioke in 2006. Upon completion of the inventory, Ms. Aaron prepared the HABS documentation for the air terminal on Wake Island. The package included 123 black and white 4 x 5 photographs of the exterior, interior, and architectural details, and architectural drawings and a Level II report.

Project Manager / Principal Investigator. DoD Legacy Project. A National Historic Context for the Hush House (Test Cell) on Current Department of Defense (DoD) Installations Nationwide and Evaluation of a Representative Sample of Extant Hush Houses on DoD Installations. Ms. Aaron was the project manager and principal investigator for the development of a historic context, survey, and evaluation of a sample of ANG and other military branch hush houses. Ms. Aaron led a team of researchers to develop a context detailing the military development and use of the hush house at installations throughout the United States, spanning from WWII through the Cold War. The report provides an understanding of the evolution of test cell structures and technology from propeller testing rigs to jet engine development and maintenance. The context further examines different types of hush houses with attention being paid to technical demands, their spatial arrangement on the landscape, function, and other influences, such as fire considerations, military construction and design regulations, federal FAA regulations, aircraft changes with related maintenance practices, and requirements based on surrounding population density and “good neighbor” policies. The report includes examples of hush houses from all military branches, addressing similarities and differences based on service branch, function, and aircraft.

Principal Investigator. Determination of Eligibility and Determination of Affect for Building 2050, Fairchild Air Force Base, Spokane Washington. Ms. Aaron developed a Determination of Eligibility and Determination of Affect for a World War II-constructed hangar at Fairchild Air Force Base in support of an environmental assessment. The project was on a short time schedule and both the DOE and DOA were conducted simultaneously and presented in the same report. The entire process, including consultation with the SHPO and the Spokane County Historic Preservation Office, was completed in less than four months.

Project Manager / Principal Investigator. Cultural Resource Evaluations for the Air National Guard. Ms. Aaron was the Project Manager and Technical Lead for aboveground cultural resources on the development of four Air National Guard Base (ANGB) installations. The installations are Camp Perry ANG Station and its subinstallation Plumbrook ANG; Alpena ANGB and its subinstallation Grayling Weapons Range; Klamath Falls ANGB; and Des Moines ANGB. The team is identifying significant cultural resource properties and making recommendations on potential National Register of Historic Places eligibility, special protection requirements, and management requirements. Ms. Aaron evaluated over 275 buildings and structures at these four installations.

Project Manager, Case Study for Preserving a DoD Historic Building and Achieving LEED Certification for Renovation Project. Ms. Aaron was the project manager for a Legacy project to determine the feasibility of renovating a DoD historic building to achieve LEED certification and preserve the historic integrity of the building. The purpose of this feasibility study is to apply existing guidance and other studies and involve military and industry experts into an actual renovation scenario to determine whether preservation, sustainability, and energy conservation goals can be incorporated, and to understand the costs, benefits, and tradeoffs of doing so. The building is Indiana Army National Guard (INARNG), Indianapolis Stout Field Building 5. Building 5 was built in 1941 as a National Defense Project funded by the federal New Deal Works Projects Administration. The feasibility study and information provided as part of this project will be used by the INARNG in the design and construction phases of the renovation of Building 5.

Project Manager / Principal Investigator. Historic American Engineering Record (HAER) for the Northwest Field, Andersen Air Force Base, Guam. Ms. Aaron is managing, designing, and developing the HAER for the Northwest Field Complex at Andersen Air Force Base, Guam, which is eligible for listing on the National Register of Historic Places. The final HAER documentation is mitigation for the proposed adverse effects to the field. The package will record five historic contexts, including large format photography and drawings to depict the critical role that the field played in World War II and the firebombing of Japan.

Historical and Architectural Overview of Aircraft Hangars of the Reserves and National Guard Installations from World War I through the Cold War, DoD Legacy Project. Ms. Aaron was the project manager for the development of a nationwide historical and architectural context for US Military Reserve and National Guard installations. The report provides a context for understanding the history and design of Reserve and National Guard hangars, an inventory of hangars, and methodology for applying the context to hangar evaluations.

Regional Cold War History for Military Installations, Including Air Force, Navy, and Army in Guam and the Northern Mariana Islands, DoD Legacy Project. Ms. Aaron was the project manager for the development of a Regional Cold War Context for US military installations in Guam and the Commonwealth of the Northern Mariana Islands (CNMI). The report presents a framework for determining NRHP eligibility within the definitive context. This context focuses on the specific relevance of US military installations on Guam and CNMI, with emphasis on two primary events when the Cold War went “hot,” namely, the Korean and Vietnam Wars and the proximity of Guam and CNMI to these war fronts.

Steven Christopher Baker, PhD, Historian

Education

- Doctorate, History, University of Colorado, Boulder
- Master of Arts, New Mexico State University
- Bachelor of Arts, History, Texas Tech University

Summary

Dr. Baker has over 15 years of experience as a professional historian. His proficiency spans several sub-disciplines, including traditional historical research and analysis, cultural resource management, and litigation support.

Dr. Baker has conducted specialized studies of water and agriculture in the Southwest, especially as it relates to the construction of reclamation (dam) projects. Other projects he has worked on include studies of the Manhattan Project and Nuclear West, migrant railroad labor during World War II, and the role of the United States / Mexico border and the US military during the Mexican Revolution.

Dr. Baker has also undertaken a wide range of projects related to the identification and management of historic resources. He has conducted cultural resource management documentation and impacts assessments; evaluated historic buildings, districts, and structures; developed cultural resource management plans and mitigation; and designed innovative strategies to integrate new and existing regulations, policies, guidance, and resource management activities into single planning and compliance programs. Dr. Baker has performed these tasks on projects in 19 states for NASA, the Army National Guard, US Army Corps of Engineers, Department of Defense, the US Fish and Wildlife Service, National Park Service, United States Forest Service, United States Geological Survey, General Services Administration, Air National Guard, US Coast Guard, US Air Force, Colorado Springs Utilities, and Denver Housing Authority. Dr. Baker's projects include a national context study of National Guard and Reserve aircraft hangars and statewide contexts and evaluations of Cold War assets of the Georgia and Washington State Army National Guard Installations. He has also worked with the National Park Service to determine the national significance of potential NPS sites in Colorado and Texas. Dr. Baker has conducted National Register of Historic Places eligibility determinations for single buildings, boats, water conveyance structures, districts of over 200 buildings, administrative facilities, and other buildings and structures.

Dr. Baker also has experience providing expert witness services in litigation associated with federal cases relating various aspects of public lands management, rights of way (especially RS 2477 disputes), water rights, mineral management, navigability determinations, mining, and Indian policy. In this capacity, he advises attorneys on the historic aspects of the questions that the litigation encompasses.

Project Experience

Vietnam War: Helicopter Training and Use on US Military Installations Vietnam Historic Context Subtheme, Legacy 14-739. Dr. Baker was a contributing author to develop a historic context and typology for Vietnam War (1962–1975) helicopter-related resources on Department of Defense (DoD) installations in the United States. The report can be used to identify and evaluate Vietnam War helicopter-related facilities at DoD military installations in the United States. This report’s historic context provides military cultural resources professionals with a common understanding for determining the historical significance of Vietnam War helicopter-related facilities, greatly increasing efficiency and cost-savings for this necessary effort.

Historical and Architectural Overview of Aircraft Hangars of the Reserves and National Guard Installations from World War I through the Cold War, Department of Defense Legacy Resource Management Program. Dr. Baker is a historian on the development of a national historic context for aircraft hangars serving the Army National Guard, Air National Guard, and Army, Air Force, Navy and Marine Reserves. The project includes the development of a historic context related to the national guards and reserves, narrative of hangar and aircraft development over time, analysis of building forms, explanation of NRHP evaluation criteria, and a database of hangars that might fall under the context.

Historian, Cultural Resources Evaluations Redmond and Camp Murray, WA. Dr. Baker was the lead historian and conducted historic structures evaluations of buildings at Washington Army National Guard facilities at Camp Murray and in Redmond. The project involved record searches at the Washington State Historic Preservation Office and the Washington Army National Guard Headquarters. Thirty-three buildings were evaluated and recorded. Dr. Baker was also lead author of the Historic Structures Evaluation Report, which covered the results of the evaluations as historic properties and/or Cold War resources, photo-documentation, historic context, management recommendations, and applicable historic structure evaluation forms.

Cultural Resource Specialist and Project Manager, Integrated Cultural Resource Management Plan, New Jersey Army National Guard, NJ. Dr. Baker was the Cultural Resource Specialist and lead author on the integrated cultural resources management plan, which was developed using a newly developed integrated ICRMP template. The plan addressed all known cultural resources and inadvertent discoveries, including preservation, survey, and mitigation recommendations. This New Jersey project also included the development of a photographic database of character defining elements of the state’s 10 historic armories. This photo database was eventually expanded to include all potentially historic properties and objects and was integrated into the New Jersey National Guard’s GIS database.

Historian, Integrated Cultural Resource Management Plan, Alaska Air National Guard, AK, and Integrated Cultural Resource Management Plan, Oklahoma Air National Guard, OK. Dr. Baker was responsible for the development of historic contexts for the management, conducted the historic structure evaluations and photo-documentation, and wrote pertinent portions of the management plans.

Historian, Cultural Resources Evaluations, Washington Army National Guard, WA. Dr. Baker was the lead historian in a project with a team of cultural resource specialists that conducted a historic structures evaluation of Washington Army National Guard facilities throughout the state. The project involved record searches at the Washington State Historic Preservation Office and the Washington Army National Guard Headquarters. Fifty-six buildings were evaluated and recorded. Mr. Baker was also the lead author of the Historic Structures Evaluation Report, which covered the results of the structure evaluations as historic properties and/or Cold War resources, photo-documentation, historic context, management recommendations, and applicable historic structure evaluation forms.

**APPENDIX D:
ACRONYMS**

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AAF	Army Air Forces
ACHP	Advisory Council on Historic Preservation
AECP	Airman Education and Commissioning Program
AFB	Air Force Base
AFHRA	Air Force Historical Research Agency
ATC	Air Training Command
BCE	Base Civil Engineering
BEEF	Base Engineering Emergency Forces
CERL	Construction Engineering Research Laboratories
CFR	Code of Federal Regulations
CIA	Central Intelligence Agency
COIN	Counterinsurgency
DEW	Distant Early Warning
DoD	Department of Defense
ERDC	Engineer Research and Development Center
FY	Fiscal Year
LCM(M)	Mechanized Landing Craft, Minesweeping
MAAG	Military Assistance Advisory Group
MSB	Minesweeping Boats
NARA	National Archives and Records Administration
NCO	Noncommissioned Officer
NCOCC	Noncommissioned Officers Candidate Course
NHPA	National Historic Preservation Act of 1966
OCS	Officer Candidate School
OTS	Officer Training School
PSYOPS	Psychological Operations
RED HORSE	Rapid Engineering Deployable Heavy Operation Repair Squadron, Engineer
ROTC	Reserve Officer's Training Corps
SAC	Strategic Air Command
SAR	Search and Rescue
SERE	Survival, Resistance, Evasion, and Escape
SHPO	State Historic Preservation Office
TAC	Tactical Air Command
THPO	Tribal Historic Preservation Office
U.S.	United States
USACERL	U.S. Army Construction Engineering Research Laboratories
USAF	U.S. Air Force

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