

RINGED BY FIRE

U.S. MARINES AND THE SIEGE OF KHE SANH 21 JANUARY TO 9 JULY 1968

COLONEL RICHARD D. CAMP, USMC (RET)
WITH LIEUTENANT COLONEL LEONARD A. BLASIOL, USMC



MARINES IN THE VIETNAM WAR COMMEMORATIVE SERIES

This pamphlet history, one in a series devoted to U.S. Marines in the Vietnam War, is published for the education and training of Marines by the History Division, Marine Corps University, Quantico, Virginia, as part of the U.S. Department of Defense observance of the fiftieth anniversary of that war. Editorial costs have been defrayed in part by contributions from members of the Marine Corps Heritage Foundation.



Marines in the Vietnam War Commemorative Series

Commemorative Series Historian Paul Westermeyer

> Senior Editor Angela J. Anderson

Commemorative Series Editor Jason Gosnell

Visual Information Specialist Robert A. Kocher

2019

PCN 2019931805

n the last analysis, Khe Sanh was defended because it was the only logical thing to do. We were there, in a prepared position and in considerable strength. A well-fought battle would do the enemy a lot more damage than he could hope to inflict on us.

~ General William C. Westmoreland U.S. Army, Commander, United States Military Assistance Command, Vietnam (USMACV)

Khe Sanh Background

For many of the Marine Corps replacements in 1968, the first sight of Khe Sanh Combat Base during the siege came from the porthole of a transport helicopter flying several thousand feet above the plateau.* The base was clearly visible, set against a backdrop of red clay soil, the distinctive earth color of the plateau, and the deep green jungle surrounding the perimeter wire. Flights into Khe Sanh took on an added dimension during the siege. Similar to a thrill ride at a theme park, the aircraft were forced to execute violent maneuvers to avoid North Vietnamese antiaircraft fire, particularly the 12.7mm machine guns emplaced near the runways. Typically, the helicopter approached the base at an altitude above 3,000 feet before executing a quick dive to the runway—leaving passengers with their stomachs in their mouths and that "controlled crash" look on their faces.

As soon as the wheels touched down, the replacements scrambled out of the helicopter and sprinted to the trenches and bunkers that lined the perimeter of the runway. The North Vietnamese regularly shelled the incoming aircraft with artillery and mortar fire from positions located in the Co Roc Mountains of Laos and from hidden positions surrounding the base. Captain Steve Dickey, a pilot with Marine Medium Helicopter Squadron 262 (HMM-262) recalled, "We had just landed . . . when enemy rockets and mortar rounds started falling all around us. We all managed to squeeze into a drainage pipe just along the strip. We stayed there for the next 45 minutes while the enemy fired rounds into the zone." Sergeant T. M. Kane described his arrival, "We got off the plane and [some] guy says 'Run!' 'Run!' Well, I ran! And they [the shells] were hitting all around us." A hand-painted sign on the control tower proclaimed, "Welcome to Khe Sanh."

Khe Sanh Area of Operations

Khe Sanh Combat Base is located on a relatively flat plateau in the extreme northwestern corner of South Vietnam's

^{*}Some of the content in the following work was originally published in 1997 by Jack Shulimson, LtCol Leonard A. Blasiol (USMC), Charles R. Smith, and Capt David A. Dawson (USMC) in U.S. Marines in Vietnam: The Defining Year, 1968.



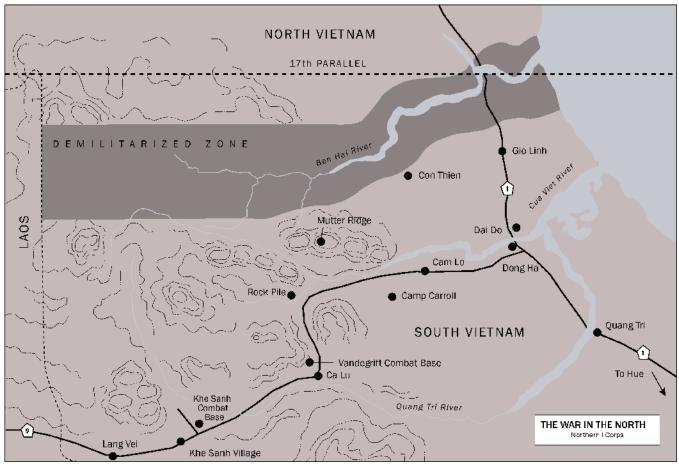
Defense Department photo

Oblique aerial photograph of the Khe Sanh Combat Base.

Quang Tri Province, part of the I Corps Tactical Zone (ICTZ). Bordered on the north by the demilitarized zone (DMZ) and west by the Laotian border, the area of operations generally encompassed all of the 1,554 square kilometers of the Huong Hoa District. The base functioned primarily as a support facility for surveillance units watching the DMZ and probing the outer reaches of the Ho Chi Minh Trail in nearby Laos. It was shaped somewhat like an irregular rectangle and covered an area approximately one mile long and one-half mile wide.

The remote base takes its name from the nearby village of Khe Sanh, a collection of nine hamlets astride National Route 9, the only east-west road in the northern province to join Laos and the coastal regions. Captain John W. Ripley's Company L, 3d Battalion, 3d Marines, was assigned to provide security for Rough Rider supply convoys. "The condition of Route 9 from Ca Lu to Khe Sanh was incredibly bad," he said. "It was pitted, holes washed out, completely overgrown in places, and rock slides had covered part of it. It was an impossible route. The road was cut into a cliff side on the north side and there were no guard rails anywhere along the road." Sharp turns and 36 narrow bridges, some dating from the French colonial era, had to be shored up or bypassed. During the monsoon season—June into November—the road often became impassible.

This crumbling one-lane macadam road ran for 63 torturous kilometers from Dong Ha to the combat base, through terrain studded with thick foliage right to the edge of the roadway that greatly restricted visibility. It was the only overland supply route to Khe Sanh. Its entire length from Ca Lu



Adapted by History Division

to Khe Sanh was a grim task for a convoy commander. "It was a tactical nightmare," Ripley said. "There was no way you could secure your position unless you had a company of infantry moving ahead of you at every step." In early August, Route 9 was shut down because of the North Vietnamese Army (NVA) ambushes. The 3d Marine Division was under severe pressure along the DMZ north of Dong Ha and simply did not have the men available to keep Route 9 open.

The terrain around the combat base is characterized by steep hills and valleys and multicanopied dense undergrowth forests. Streams flow through many of the valleys, emptying into one of two rivers. The Xe Pone River, also known as the Tchepone, located west of Khe Sanh, forms the international border between South Vietnam and Laos. The Rao Quan River north of the base flows northwest to southeast, forming a natural barrier. In addition to the two large rivers, there were many streams that were fordable in the dry season but impassible after heavy rains.

The Khe Sanh area has numerous access points. Many avenues or access points follow existing trails, along ridgelines and streambeds. However, military movement along streambeds is unsuitable during the rainy season because of swift stream currents and difficulty in crossing. Two avenues of approach enter from the northwest. One crosses the Laos/Vietnam border and moves southeast along streams and valleys that join the Rao Quan and continues southeast until it joins National Route 9, the major east-west avenue of approach across the area of operations. The second approach from the northwest crosses the Laos/Vietnam border and continues southeast along the ridgeline to Hill



Defense Department (Marine Corps) A191580

Convoy going to Khe Sanh.



Defense Department (Marine Corps) A181584

A Marine convoy moves along Route 9 between Ca Lu and Khe Sanh.

Rough Rider Ambush

On 21 July 1967, Company M, 3d Battalion, 3d Marines, sweeping ahead of an 85-vehicle Rough Rider convoy to bring M107 175mm self-propelled guns to reinforce Khe Sanh, prematurely triggered an NVA battalion-size ambush halfway between the base and Ca Lu. The company was supported by a self-propelled 40mm antiaircraft gun, called a "Duste," M55 quad mounted .50-caliber machine guns (Quad-50), and two tanks. The engagement quickly turned deadly. Several Marines were killed and wounded before additional reinforcements from 1st Battalion, 26th Marines, arrived. The convoy was held up at Ca Lu and eventually returned to Camp Carroll.

881 South and Hill 861. The approach from the southeast travels through the Da Krong Valley, which enters the area of operations and moves northwest until it reaches Route 9. An approach from the northwest enters the area of operations just south of Hill 1123 and runs southwest along the Khe Xa Bai River to a point just north of Hill 558.

From a military point of view, the thick vegetation throughout the area of operations provided excellent cover and concealment for both friendly and enemy forces. Doubleand triple-canopied forests with tree heights of between 60 to 90 feet are common. Dense undergrowth, consisting of bushes, vines, and bamboo stands limited cross-country movement and greatly reduced long-range observation. "Tall 'elephant grass' about 7-feet tall, was razor sharp and full of bacteria," Navy Lieutenant Ray W. Stubbe recalled. "Cuts on arms and hands resulted in large sores that remained infected for weeks." In general, patrols were restricted to existing trails and streams, however, periods of steady, heavy rainfall also made many of the streams difficult to impossible to cross.

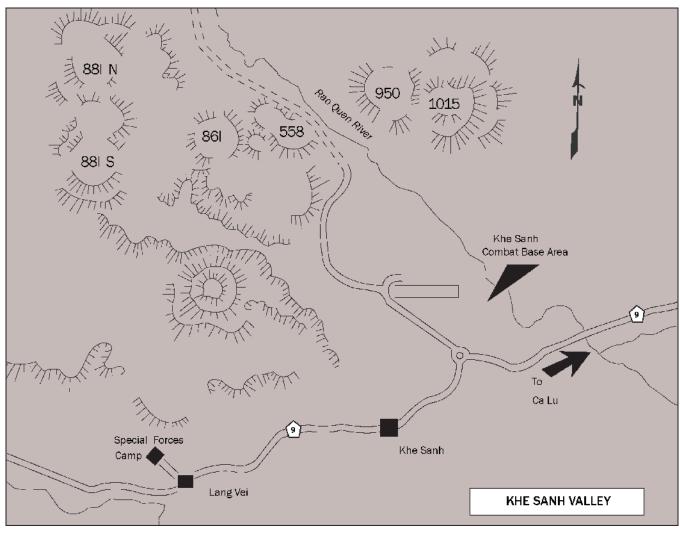
The soil on the Khe Sanh plateau consisted of deeply weathered red-brown clay mixed with basalt. Staff Sergeant James E. Haskins recalled, "The earth at Khe Sanh was red; redder than any dirt I had ever seen ... and when it rained it

made walking a new experience, with the red clay as slick as ice in a hockey rink. And when the weather was dry, the dust was [like] talc and fouled the air. Everything became red, clothes, tents, equipment, tanks, trucks, jeeps, you name it, and it was covered with red dirt. Our body hair stayed red."

The soil was excellent for construction of underground fortifications and tunnels because of its cohesive properties, particularly around the airfield. The soil's composition gave it a cohesion that does not require shoring or supports. The soils covering the hills were categorized as sandy, stony soils that are shallow, particularly on the steeper slopes. On the hills, however, underground construction was limited because of the hill's sandy, stony soils. In areas of multicanopied forests, the enemy was capable of digging in artillery with maximum concealment.

Weather played a significant role in operations, particularly during the northeast monsoon season. The weather was characterized by low clouds, overcast skies, and dense fog that occurred during the hours of darkness and early morning. The monsoon rains dropped as much as 80 inches of rain. It was accompanied by the crachin, a weather phenomenon in which dense 3,000-5,000 feet thick cloud formations reached as low as 500 feet, reducing visibility below to one-half a mile. Staff Sergeant Haskins said, "The drizzle and fog would roll in from the mountains and seemed never to go away until late the next morning." These periods lasted from three to five days. Tactical air operations were limited during the periods of heavy rains and fog conditions restricted observation.

Key terrain at Khe Sanh consisted of the commanding heights (or hills), which afford observation and control over the airfield and avenues of approach to the airfield. The heights played a significant tactical role in the defense of the base. Four and a half kilometers north across the Rao Quan loomed the 1,015-meter Dong Tri Mountain, the highest peak in the area and one that dominated the entire Khe Sanh plateau. A kilometer to the west of Dong Tri lay Hill 950, which became a platoon-size observation post and radio relay station. Hill 558, located four kilometers north-northwest of the base, was occupied by the 2d Battalion, 26th Marines, on 17 January to block enemy movement through the Rao Quan Valley. Company K, 3d Battalion, 26th Marines, occupied Hill 861 four kilometers to the west, while Company E, 2d Battalion, 26th Marines,



Adapted by History Division

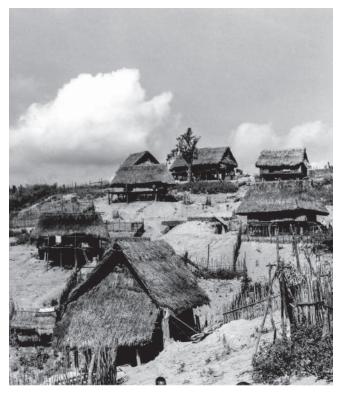
Schematic depicting the major topographical features, road network, and bases in the Khe Sanh area.

garrisoned on Hill 861A. The hills gave Marines control of the approaches from the north and northwest. Company I (reinforced by Company M's headquarters and two platoons), 3d Battalion, 26th Marines, occupied Hill 881S, seven kilometers west-northwest and dominated the approaches from the west.

Approximately 10,000 to 12,000 of the Bru, a Montagnard tribe, lived in a dozen small villages and resettlement areas in the immediate vicinity of the combat base. Army Specialist Fourth Class Robert E. Lee Shippen Jr., Special Forces medic, said, "They were still a fairly primitive tribe, still doing hunting and gathering. They didn't have a written language and they had a very simple, very primal way of being . . . they were straight forward, honest and sincere."

Many of the Bru served alongside the U.S. and South Vietnamese Special Forces as members of the Civilian Irregular Defense Group (CIDG) and the Studies and Observation Group (SOG, later the Special Operations Group) and in the District Popular Forces. "These guys [Bru] had been soldiers pretty much all their lives," Specialist Shippen remembered. "They lived in the area and were familiar with that part of Vietnam and Laos because the tribal unit didn't recognize international boundaries. They looked at the world according to river valleys and watersheds."

The Viet Cong also were organizing an administrative network among the Montagnard villages. A chairman, two secret agents, and 15 guerrillas were assigned to each hamlet.



Defense Department (Marine Corps) A190186 A Bru village from Hill 90, south of the Khe Sanh airstrip.

"We knew the district police chief was a North Vietnamese spy," Army Sergeant James Turner, 149th Military Intelligence Group, recalled. "We'd give him misinformation . . . I'm sure that there was VC [Viet Cong] that came right into the village. They probably had family there." There were also 1,200 ethnic Vietnamese in the surrounding area, as well as three French families who owned coffee plantations, two French Catholic priests, two nuns, and one American missionary family.*

American Involvement in Khe Sanh

Khe Sanh sat on an extinct volcano. The place was born in violence and heat, and that's the legacy that remained. ~ Lieutenant Ray Stubbe

Chaplain, U.S. Navy



Defense Department (Marine Corps)

Bru civilian refugees, including many children, walk toward Ca Lu along Route 9 after the fall of Lang Vei. Not having the resources to care for them and fearing the possibility of enemy infiltrators, the Marines decided against allowing the refugees into the Khe Sanh base.

American involvement on the plateau began in 1962 when a Special Forces team, A-131, established a camp at an abandoned French fort along Route 9 about two kilometers east of the village of Khe Sanh. The "Old French Fort," as it was known, served as a base of operations for the locally recruited Bru Montagnard CIDG. The CIDG camp was one of a network of border camps that served primarily to gather intelligence in the remote areas of South Vietnam. Two years later, the Special Forces camp was moved to a light-duty airstrip that had been built by the French in 1949 on the Xom Cham Plateau, which eventually became the Khe Sanh Combat

^{*}Felix Poilane, one of the French plantation owners, was killed in the crash of a Lockheed C-130 Hercules that was hit by rocket fire as it came in for a landing.



Defense Department (Marine Corps)

The hill battles in the spring of 1967 culminated in assaults on significant terrain outside the combat base. Here, on 30 April 1967, Marines of Company G, 2d Battalion, 3d Marines, catch their breath during the assault on Hill 861. That day, the company overran an NVA bunker complex.

Base. In the spring of 1964, Marine Detachment, Advisory Team 1, under Major Alfred M. Gray Jr., later the 29th Commandant of the Marine Corps, established a radio monitoring site atop Dong Voi Mep (Tiger Tooth Mountain) north of the CIDG camp. The site was where the first Marine unit conducted independent operations in the Republic of Vietnam (RVN).

In 1966, III Marine Amphibious Force (III MAF) carried out two battalion-size operations-Operation Virginia and Operation Prairie-near Khe Sanh to search for North Vietnamese units that Special Forces had reported in the area. The first unit, 1st Battalion, 1st Marines, arrived in April and, after spending a week of fruitless patrols though the jungle, marched back to the coast on Route 9. The second unit, 1st Battalion, 3d Marines, spent four months combing the hills and valleys with very little enemy contact, claiming only 15 dead North Vietnamese. During this latter operation, Special Forces personnel relocated their CIDG camp to the village of Lang Vei on Route 9 approximately 8 kilometers from Khe Sanh and 3.3 kilometers from the Laotian border. A small detachment known as Forward Operating Base 3 (FOB 3) was deployed in late 1967 to the southeast corner of the combat base, while a small U.S. Military Advisory Command, Vietnam (USMACV) advisory team was located at the district headquarters in Khe Sanh village.

In February 1967, a detachment from Naval Mobile Construction Battalion 10 began extending and improving the runway. The detachment resurfaced the old 457-meter



Defense Department (Marine Corps)

Army Gen William C. Westmoreland (center), commander, USMACV, and LtGen Cushman (left) visit a Marine battalion command post south of Da Nang. Westmoreland is the senior U.S. military commander in South Vietnam.

runway and added a new 732-meter extension and an airfield parking apron. Company B, 1st Battalion, 9th Marines, protected the project. A second company was added in late March because of increased enemy activity. During the month, Combined Action Platoon O (CAP Oscar) established its headquarters in the Khe Sanh village and began patrolling the surrounding Bru hamlets.

Sergeant Turner, of the Joint Technical Advisory Detachment (JTAD), recalled that Khe Sanh village "was a very primitive place." The main street stretched about three city blocks along Route 9 and consisted of mostly singlestory stucco or cinder block buildings, many with wooden awnings. The Huong Hoa District headquarters was located at the west end of the village. Corporal Michael Archer noted that "across the street from the district headquarters sat a long wooden shack. This was the local brothel, amusingly referred to by everyone as 'Howard Johnson's'."

On 24 April, a platoon from Company B became heavily engaged with a large North Vietnamese force near Hill 861. The 2d and 3d Battalions, 3d Marines, joined the fight. The ensuing battles to eject the North Vietnamese from the commanding terrain overlooking the combat base became known as the "Hill Battles" and lasted until 11 May before the NVA slipped over the border to rest and refit.

The fighting in the First Battle of Khe Sanh—24 April to 11 May 1967—was savage and costly for both sides. Marine casualties numbered 155 killed and 425 wounded, while the North Vietnamese left nearly 1,000 dead on the battlefield.

Decision to Hold

U.S. Army General William C. Westmoreland visited Khe Sanh in his earliest months in Vietnam and noted that "the critical importance of the little plateau was immediately apparent.... Khe Sanh could serve as a patrol base for blocking enemy infiltration into Laos; a base for (secret border crossing) operations to harass the enemy in Laos; an airstrip for reconnaissance planes surveying the Ho Chi Minh Trail; a western anchor for defenses south of the DMZ; and an eventual jumping-off point for ground operations to cut the Ho Chi Minh Trail." Later, Westmoreland defended the decision to hold Khe Sanh, stating, "had we not taken a stand in that remote area," he wrote, "our forces would have inevitably been required to fight in the more populous coastal areas where the application of firepower would have been hampered in order to protect civilians."

The III MAF commander, Lieutenant General Robert E. Cushman Jr., agreed with Westmoreland that Khe Sanh should be held because it was "a complete block to invasion and motorized supply," as well as allowing him to conduct mobile operations in the enemy's base area at a time when III MAF did not have enough troops to effectively cover all the territory near the DMZ. The next senior Marine in the chain of command, Lieutenant General Victor H. Krulak, commanding general of Fleet Marine Forces, Pacific (FMFPac), disagreed with the decision to keep Marines at Khe Sanh, because "to withdraw would save lives that would otherwise be lost ... [and] nobody ever won anything by backing away." In Tourison and Stubbe's 2006 book, *B5-T8 in 48 QXD:* The Secret Official History of the North Vietnamese Army of the Siege at Khe Sanh, Vietnam, Spring, 1968, the North Vietnamese appeared to agree with both General Westmoreland and General Krulak. The authors stated that the mission of the overall general offensive, including Khe Sanh, "was to draw the enemy out [into remote areas], pin him down, and destroy much of his men and means of conducting war." Specifically, the Khe Sanh Route 9 campaign portion of the overall offensive had several aims, including the destruction of "an important portion of the enemy's strength, primarily the American." The North Vietnamese wanted to draw the U.S. forces "out route 9, the further the better," and then "tie them down."

The campaign called for close coordination with other North Vietnamese and Viet Cong commands throughout South Vietnam, especially with Military Region Tri-Thien-Hue. According to the North Vietnamese documentation, the destruction of "enemy strength and coordination with other battlefields [military regions] are the most fundamental [and] important." The plan directed that North Vietnamese commanders "focus mainly on striking the enemy outside his fortifications," but "to strike the enemy in his fortifications when necessary and assured of probable victory." In effect, the North Vietnamese would take Khe Sanh if they could, but there were limits to the price they were willing to pay. Their main objectives were to kill American troops and to isolate them in the remote mountain border region of Quang Tri Province.

Comparing Khe Sanh and Dien Bien Phu

I don't want any damn Dinbinphoo.

~ President Lyndon B. Johnson

The Johnson administration focused almost obsessively on the Khe Sanh situation. The president actually pored over a detailed terrain model of the area that had been constructed in the White House situation room. A newsman noted that "the White House took on the atmosphere and trappings of a military command post just before a siege." The president repeatedly phoned the Chairman of the Joint Chiefs of Staff, Army General Earle B. Wheeler, seeking reassurances about Khe Sanh. John Prados and Stubbe wrote that "President



Defense Department (Marine Corps) A192347

Marine LtGen Robert E. Cushman, commanding general, III MAF, returns a salute during a ceremony at Da Nang. By January 1968, III MAF, the senior U.S. command in I Corps, which encompassed the five northern provinces of South Vietnam, equaled a field army in size.

Johnson was apt to call downstairs [to the White House situation room] for the latest information at any hour of the day or night; sometimes he even came down himself." The situation inevitably raised parallels to the disastrous 1954 Battle of Dien Bien Phu.

On a superficial level, the situation at Khe Sanh began to resemble Dien Bien Phu from 14 years earlier. Bernard B. Fall's *Hell in a Very Small Place*, the detailed account of the battle, was a popular read. The 1st Battalion, 26th Marines' Lieutenant Colonel James B. Wilkinson made the book required reading for all his officers. The author remembers reading a copy of the book during the siege.

Both Khe Sanh and Dien Bien Phu were remote outposts organized around small airstrips in the highlands. They were each served by a single light-duty road, which, in both cases, was cut by the enemy, and were forced to rely on air delivered supplies. Both posts were affected by the weather, which restricted air support.

General Westmoreland ordered a study prepared on the siege of Dien Bien Phu and other classic sieges to determine how Khe Sanh fit into the historical precedent. The study concluded that "the pattern of previous sieges" lay with the besieging forces rather than the defense. Westmoreland was not deterred by the gloomy results. He held that the Marines at Khe Sanh had advantages the French lacked, which were spelled out in a memorandum for the president:

Our situation at Khe Sanh as compared with the French at Dien Bien Phu is different in three significant respects. We have supporting air (tactical air and [Boeing B-52 Stratofortress] B-52s) for all-weather attack of enemy forces by orders of magnitude over that at Dien Bien Phu. We have reinforcing heavy artillery within range of the Khe Sanh area from USMC positions east of the mountains. We have multiple and vastly improved techniques for aerial supply and we are within helicopter support range for troop reinforcement, logistic support, medical evacuation and other requirements.

We have a significant capability to reinforce Khe Sanh by fire in all weather conditions by artillery, tactical air, and B-52s. There are 18 105mm howitzers[,] 6 [M109] 55mm howitzers [, and six 4.2-inch mortars] within the Khe Sanh defensive system. Additionally, 16 175mm guns are with the 3d Marine Division forces east of Khe Sanh positioned at the Rock Pile and Camp Carroll. These guns are within range of Khe Sanh and their fires can be massed as required through the use of the centralized fire direction facility at Dong Ha. In addition to this heavy artillery support, and in contrast to the French situation at Dien Bien Phu, we have a highly effective tactical air and B-2 capability. Radar or "Sky Spot" technique allows us to direct tactical air strikes either at night or in zero visibility conditions throughout the Khe Sanh area. In addition to tactical air, our B-52 strikes are also weather independent. During adverse weather in the Khe Sanh area there are frequent breaks of three or four hours, in which we could intensify the air strikes, and insert helicopter gunships into the area for additional fires as required. If the enemy masses to attack, he will be extremely vulnerable to the massed B-52s against

Dien Bien Phu

In November 1953, the French occupied and fortified the village of Dien Bien Phu in northwest Tonkin. The Viet Minh besieged the outpost, capturing it in May 1954 after a dramatic battle involving great loss of life on both sides. The fall of Dien Bien Phu was the final straw that broke the back of French colonialism in Indochina, leading to the 1954 Geneva Accords and the partitioning of the Associated States of French Indochina into autonomous countries, which included Vietnam, Laos, and Cambodia.

his supporting forces and destructive power of tactical air, gunships and artillery against his infantry. This capability of reinforcement by fire alone could have changed the course of the battle at Dien Bien Phu.

Although logistical support will present a major problem, I am satisfied we can resolve it by our multiple means of resupply. Enemy interdiction of the airfield at Khe Sanh will not deny our reinforcement and support capability by helicopters. As pointed out in a note to the President, we could also re-open Route 9 for a land line of communications.

Although not ideal, the tactical situation at Khe Sanh as well as our improved combat techniques and capabilities are considerably different from those at Dien Bien Phu.

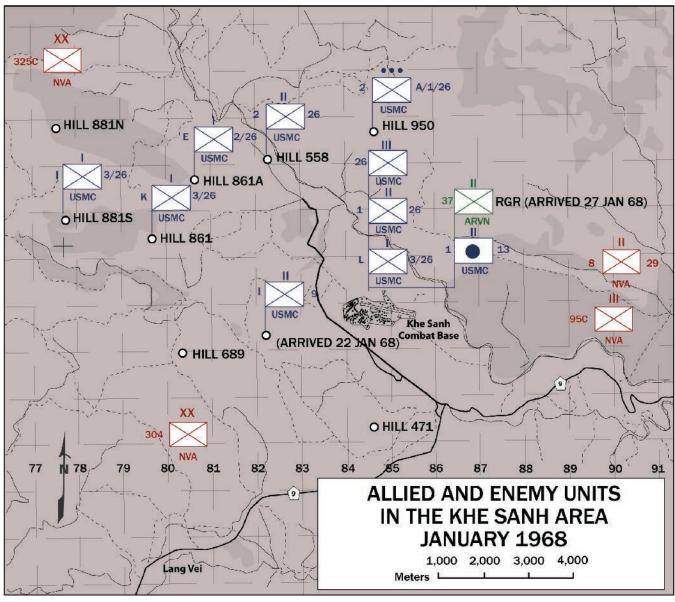
Once the decision was made to hold Khe Sanh, all that was needed were the forces to defend the base.

Buildup of U.S. and South Vietnamese Forces at Khe Sanh

Things are picking up.

~ Colonel David E. Lownds

Following the Hill Battles, operational control of the Khe Sanh area of operations passed to the 26th Marines, which they maintained for the duration of the siege. The regiment

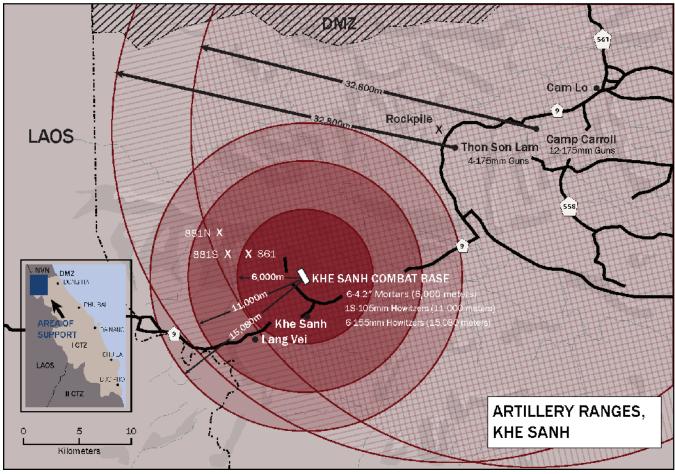


Adapted by History Division

was organized at Camp Pendleton, California, in January 1944, one of three infantry regiments in the 5th Marine Division. The regiment's baptism of fire occurred at Iwo Jima in February 1945. In 30 days of hard fighting, the regiment suffered 650 killed and 2,025 wounded in action. The regiment was disbanded on 5 March 1946. Twenty years later on 1 March 1966, it was reactivated and deployed to Vietnam in August.

Initially, the 1st Battalion was the only unit of the regiment at Khe Sanh. "We were pretty spread out," Lieutenant

Colonel Wilkinson explained. "I had a company on [Hill] 881 [South], a company on 861, and another company protecting a bridge on Route 9 because most of our resupply came by truck convoy and one company at the combat base. I also had a platoon on Hill 950 because it was the best observation post in and around Khe Sanh." At the same time, the Special Forces and Bru tribesmen from FOB 3 began running deep reconnaissance missions into Laos and North Vietnam. In June, enemy activity increased. On 6 June, the radio retransmission site on Hill 950 was overrun before the



Adapted by History Division

defenders rallied and restored the position. The next day, a platoon-size patrol from Company B, 1st Battalion, was ambushed. As a result of this increased enemy activity, the 3d Battalion, 26th Marines, was sent to Khe Sanh until mid-August when the battalion was redeployed, leaving just one battalion in the area.

On 14 August, Colonel David E. Lownds assumed command of the regiment. "It wasn't all that I had expected since there was only one battalion there," Lownds said. "There was little enemy activity at the time. . . . We kept sweeping the area looking for signs of enemy buildup."

Throughout the summer and early fall, there was only light contact with the enemy, which allowed a 75-man Seabee detachment to begin rebuilding the airstrip. On 17 August, the runway was closed and for the next three months the battalion's Seabees removed the old matting, replaced the undersurface with crushed rock quarried just outside the base, and installed solid aluminum planking, making the airstrip capable of handling the heavily loaded 60-ton Lockheed C-130 Hercules cargo planes. In early November, a small detachment from the 1st Radio Battalion established an electronic listening post in a bunker near the landing zone (LZ) on Hill 881 South. The detachment was tasked to intercept NVA high-frequency Morse code and low-level voice intercept in conjunction with South Vietnamese interpreters. The detachment also had a short-range direction finding capability.

Beginning in late October and into November 1967, signal intelligence units (SIGINT) detected elements of two North Vietnamese regiments, the 304th and the 320th, and three independent regiments departing their home bases in North Vietnam and moving onto the Ho Chi Minh Trail in

26th Marines Mission

The 26th Marines after action report shows that the mission of the regiment was to conduct reconnaissance and combat patrols in the assigned area to detect and destroy enemy personnel infiltrating into and through the Khe Sanh tactical area of responsibility. They also were to provide security for the Khe Sanh airfield and ancillary facilities and other vital installations in the area. Their tasks also included maintaining open and secure lines and active ground surveillance within the tactical area of responsibility, though they could also provide artillery support for the CAP company at Khe Sanh village and conduct relief or reinforcement operations for the CIDG Camp at Lang Vei.

southern Laos. This was the first time that National Security Agency analysts had seen two North Vietnamese divisions moving onto the trail at the same time. Staff Sergeant James E. Haskins, 3d Interrogation Translation Team, reported that a wounded NVA transportation group officer from the 66th Regiment, 304th Division, stated that his unit had moved into a base area west of the Co Roc Mountains in Laos. General Westmoreland believed the massive troop movement pointed to Khe Sanh as the major battleground for the upcoming winter offensive. Colonel Lownds recalled that "we received intelligence reports telling us that there was an enemy buildup in the area, so we became more cautious." While visiting the Marines on Hill 881 South, Lownds said, "Men, we here at Khe Sanh are going to be remembered in our American history books."

By mid-December, SIGINT had tracked the two NVA divisions to staging areas around the southern Laos city of Tchepone, just across the border from Khe Sanh. Enemy activity along the border region increased dramatically. Vehicular traffic on the Laotian roads and trails nearby increased from a monthly average of 480 trucks in the first nine months of 1967 to more than 6,000 by the end of December. Marine reconnaissance patrols found evidence of heavy trail usage north of



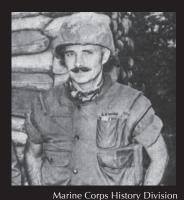
Photo courtesy of LtCol James B. Wilkinson

LtCol James B. Wilkinson, ca. March 1968, outside the command bunker of 1st Battalion, 26th Marines, 3d Marine Division.

the base, extensive night activity (lights), as well as increased infiltration activity in the west. The patrols also reported many new bunkers on Hill 881 North and new sightings and indications of heavy activity around Hill 950, which was attacked on Christmas Eve. The defending platoon from Company C had five Marines wounded but repulsed the North Vietnamese. "These were not just scouting parties," Lieutenant Colonel Wilkinson explained. "These were hard core line troops." The Marines occupying Hill 861 experienced a probing attack and Hill 881 South was subjected to increased sniper fire.

On 13 December, as a result of the increased North Vietnamese sightings and contacts around the base, the 3d Marine Division directed the return of the 3d Battalion, 26th Marines. First Lieutenant John T. Esslinger recalled, "They [the regiment] didn't have any room for us. So they sent us outside the wire to the west area a little bit. . . . We built sort of an add on, an annex to the base. We extended the wire and dug our holes and that's where we lived."

Colonel David E. Lownds



Col Lownds at Khe Sanh.

Colonel David E. Lownds was 46 from Holyoke, Massachusetts, and had been commissioned into the Marine Corps at the height of World War II. He led a platoon in the invasions of Kwajalein, Saipan, and Iwo Jima, suffering wounds in the latter two campaigns for which he would be awarded a Purple Heart. A reserve captain, Lownds was recalled to active duty for the Korean War and became a regular major in 1951. He served in various staff positions until the early 1960s, when he returned to the troops as commander of the 3d Battalion, 8th Marines, at Camp Lejeune, North Carolina. Later, he served as plans officer for the 2d Marine Division. He was promoted to colonel in July 1965. He received the Bronze Star while serving as operations officer of the 4th Marine Expeditionary Brigade during the 1965 intervention in the Dominican Republic. For his actions in Vietnam, Lownds was awarded the Navy Cross.

Navy Cross Citation

The President of the United States of America takes pleasure in presenting the Navy Cross to Colonel David E. Lownds, United States Marine Corps, for extraordinary heroism while serving as Commanding Officer of the Khe Sanh Combat Base in connection with operations against the enemy in the

Republic of Vietnam from August 1967 through March 1968. Upon assuming command of the vital combat base located in western Quang Tri Province and tasked with the responsibility of interdicting major North Vietnamese resupply routes and blocking any enemy invasion attempt from the west into the northern provinces of South Vietnam, Colonel Lownds immediately established combat outposts on Hills 881 South, 861, and 950, and launched extensive and highly effective patrol activities throughout his area of responsibility. Despite the hazardous, mountainous terrain, thick jungle foliage, and adverse weather conditions, Colonel Lownds' valiant

combat leadership and indomitable command ability were the central instrument in achieving and maintaining the superb combat posture of the base. On 28 January 1968, when North Vietnamese divisions launched a coordinated attack on the Khe Sanh Combat Base with rockets, artillery, mortar, and machine-gun and small-arms fire, and with their main attack directed at Hill 861-A, Colonel Lownds' superb knowledge

of and appreciation for the terrain and his aggressive utilization of all supporting arms minimized the effectiveness of the enemy attack and resulted in a large number of enemy casualties. During daily enemy rocket and artillery attacks, and on 23 February when the firing reached its peak with more than

> 1300 rounds impacting on the combat base, his superior tactical judgment, calm leadership, brave demeanor, and resolute endurance were an inspiration to all around him and were a prime factor in maintaining a high level of morale among his men. Giving no thought to his own safety, while exhibiting a compassionate concern for the welfare of his Marines, he gallantly and repeatedly exposed himself to hostile fire making daily visits to outlying units to observe tactical operations and to study conditions confronting his unit commanders. During the period 1 November 1967 to 31 March 1968, Colonel Lownds organized and directed Operation SCOTLAND,

a highly effective search and destroy operation throughout the Khe Sanh tactical area of responsibility, which resulted in numerous enemy casualties, the capture of several enemy, and a large number of weapons confiscated. By his gallant leadership, distinguished personal bravery, and selfless devotion to duty throughout, Colonel Lownds upheld the highest traditions of the Marine Corps and the United States Naval Service.



SIGINT

Signals intelligence (SIGINT) is intelligence gathering by interception of signals, whether between people (communications intelligence—COMINT) or from electronic signals not directly used in communication (electronic intelligence—ELINT), or a combination of the two. As sensitive information is often encrypted, signals intelligence often involves the use of cryptanalysis. Also, traffic analysis—the study of who is signaling to whom and in what quantity—can often produce valuable information, even when the messages themselves cannot be decrypted.



Photo courtesy of author

Digging a position in the 3d Battalion, 26th Marines, at Khe Sanh. Note Hill 1015 ridgeline in the background.

Shortly before Christmas, the battalion conducted a four-day sweep of a ridgeline and adjacent valley west of combat base. The sweep found ominous signs of freshly built bunkers and small caches of supplies. At the end of the sweep, Company I plus two platoons of Company M occupied Hill 881 South. Company K and two platoons of Company A, 1st Battalion, 26th Marines, held 861.

Company L remained at the base, assuming a portion of what would become the perimeter's "Red Sector." On the night of 2 January 1968, the Marines from one of the company's listening posts (LP) made contact with an enemy reconnaissance patrol. The LP was located approximately 400 meters from the western end of the airstrip and north of where Company L's lines tied in with 1st Battalion, 26th Marines. The company commander, Captain Richard D. Camp Jr., dispatched a reaction force under Second Lieutenant Nile B. Buffington to reinforce the listening post. The combined force formed a line and, under 60mm mortar illumination, started sweeping the area. A Marine in the middle of the formation spotted a dark shadow on the ground and voiced a challenge but did not receive a reply. He challenged a second time and was fired upon. The Marines opened fire

and, after receiving friendly fire, withdrew to the company's lines.

At first light, a detail was sent out to check the area and discovered five enemy dead. Using a scout dog, Gunnery Sergeant Max H. Friedlander, 17th Interrogation Translation Team, followed the trail of a sixth man, believed to be wounded:

I started walking in the direction I thought the escaped NVA had taken. It led me toward a wooded area . . . and I lost the trail, so I walked a little bit further [sic]. By then, I was about sixty yards from the bodies. I saw a large log on the right, where the tree line was, and for some reason I stopped, looked around, and walked back to where everybody was standing around. I later learned that an NVA company was in the tree line, ready to open fire on me and the Marines around the bodies if I took even one more step.

The 26th Marines intelligence officer, Captain Harper L. Bohr Jr., examined the bodies of the five enemy soldiers and came to the conclusion that one of them was Chinese, because the man "was just too big and too non-Vietnamese

looking." He sent photographs and a medical description to the 3d Marine Division in hopes of receiving confirmation of his supposition. Captain Bohr determined that at least some of the dead were officers. It appeared to the Marines that the enemy had indeed been reconnoitering the perimeter, further fueling speculation that a major North Vietnamese attack was in the making.

A CIA report dated 10 January 1968 stated: "Enemy reconnaissance and probing activity near Khe Sanh has increased markedly in the last few weeks. The Communists could be using the time between now and the Tet holidays to complete their concentration around Khe Sanh in preparation for an offensive after Tet."

Operation Niagara

During the first week of January, USMACV initiated Operation Niagara, a two-part plan to find the enemy units around Khe Sanh and to eliminate them with superior firepower. The code name Niagara was chosen because the amount of bombs and artillery shells would mimic the amount of water over Niagara Falls. Operation Niagara was designated a SLAM operation—seek, locate, annihilate, and monitor—using all available Navy, Marine Corps, and Air Force strike, reconnaissance, and electronic warfare aircraft in a massive bombing effort.

The first part of the operation, Niagara I, called for intelligence officers to mount a "comprehensive intelligence collection effort" to locate and identify enemy units and to develop target boxes for B-52 strikes. On 6 January, USMACV advised III MAF that

the anticipated build-up of enemy forces in the western DMZ area provides an opportunity to plan a comprehensive intelligence collection effort and to make preparations for coordinated B-52 and tactical airstrikes. We should be prepared to surprise and disrupt enemy plans for an offensive against Khe Sanh with heavy bombing attacks on a sustained effort.

The collection efforts resulted in the detection of two regiments of the North Vietnamese 325th Division operating north and west of Khe Sanh. At the same time, analysts monitored the 304th and the 320th Divisions surging across the border into South Vietnam. By mid-January, SIGINT

3d Battalion Command Chronology

At 2030H, the listening post Lima One spotted approximately 6 individuals . . . the reaction force was alerted and maneuvered into position to sweep the area. Under 60mm illumination the 6 were seen lying on the ground and were challenged, failing to answer, they were saturated with small arms fire. A sweep of the area netted one NVA LtCol KIA. Results were 5 NVA KIA.

showed there were three NVA division headquarters deployed around the base. USMACV tasked the U.S. Seventh Air Force to coordinate all fixed-wing assets in support of the defense of Khe Sanh.

The G-2 (intelligence) for Seventh U.S. Air Force moved quickly to establish an integrated intelligence collection and analysis effort that would compile and record information from all sources. Eight French generals, some of whom were survivors of Dien Bien Phu, were interviewed about North Vietnamese siege tactics. Using sand-table models, they spelled out in detail what was wrong with our initial plans. Within days, the planners knew that airlift would be crucial, as would the suppression and interdiction of antiaircraft guns.

Sensors

On 20 January, Sikorsky SH-3 Sea King helicopters of the 21st Helicopter Squadron dropped the first acoustic sensors, followed by another drop the next day. A total of 104 sensors were emplaced north and west of the base in the first two days. This operation was code named Muscle Shoals. The network of acoustic and seismic sensors consisted of three functional components: (1) sensing devices that were emplaced across, along, or within suspected routes of infiltration to detect enemy foot or vehicle movement, together with munitions to inhibit such movement; (2) orbiting

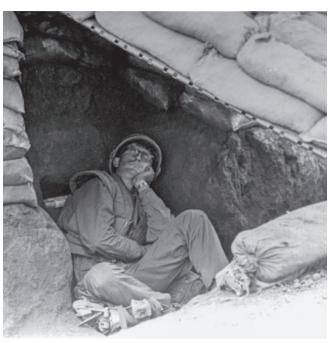
aircraft that received signals from these sensors, amplified them, and retransmitted them; and (3) an Infiltration Surveillance Center, which received the transmitted signals from the aircraft and analyzed them to produce reliable intelligence data for planning interdiction operations.

Muscle Shoals was expected to produce information on enemy vehicular and personnel movements reliably enough and quickly enough to be used for directing immediate strikes by attack aircraft against these targets as they were identified and located. It was conceived as a real-time intelligence source that would result in rapid target acquisition and attack by airstrikes. A central and crucial portion of the system was to be the Infiltration Surveillance Center, a complex of highly technical electronic equipment and highly trained personnel to operate it, located in Nakhon Phanom Air Base in northeastern Thailand.

The two main types of sensors were acoustic (Acoubuoy) and seismic (air-delivered seismic intrusion detector or ADSID). Acoubuoy was a converted Navy antisubmarine device with the hydrophone removed and replaced with a sensitive microphone that passed on actual sounds. Navy Lieutenant Bernard Walsh said,

Our particular job was to use our old Navy antisubmarine warfare patrol planes, flying at 180 knots, to lay a string of sonobuoys [Acoubuoys] along the trails to listen to troop and truck noises. Once the enemy was identified, air strikes would be called in on the trail adjacent to the listening devices. Around Khe Sanh, there weren't any trails that I could see, so I figured they just wanted a wall of buoys to give warning of infiltration.

The ADSID was a miniature seismometer that recorded minute vibrations. The sensors broadcast their readings to an orbiting Lockheed EC-121 Warning Star, which forwarded them to Task Force Alpha, code named Dutch Mills, located at Nakhon Phanom. In Thailand, analysts interpreted the readings and passed the information back to the 26th Marines, where it was used for targeting supporting arms. By the end of January, the Navy's Observation Squadron 67 (VO-67) and the U.S. Air Force 553d Reconnaissance Wing had flown 72 sorties to drop 44 strings totaling 316 sensors in 9 arrays or modules.



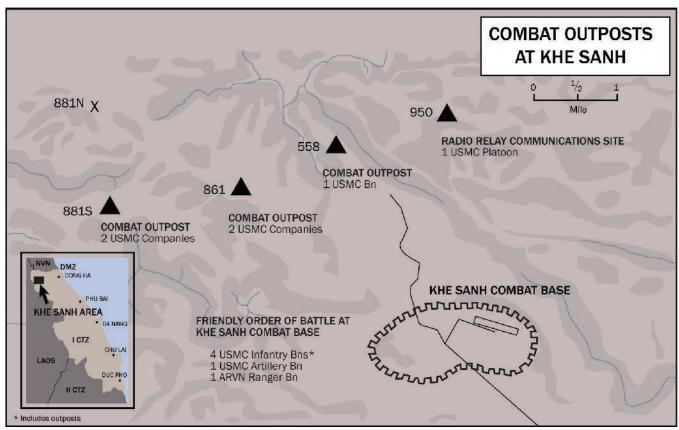
Defense Department (Marine Corps)

A Marine infantryman does not have the most comfortable sleeping position but does have safety from any enemy barrages at Khe Sanh.

The sensors were credited with being the predictors of major enemy attacks. In each case, the 26th Marines Fire Support Coordination Center was able to divert air strikes and other supporting arms to sensor-located targets, and the end result was that no significant attack ever reached the Marine perimeter. Colonel Lownds later told a congressional committee that the sensors played a significant role in the defense of the combat base by allowing for the early warning and active target acquisition of targets, and without them he might well have had twice as many Marines killed at Khe Sanh.

Reinforcements

To counter the growing threat, USMACV ordered the U.S. Army's 1st Air Cavalry Division to displace to Thua Thien Province. On 17 January, Major General Rathvon M. Tompkins, 3d Marine Division, decided that Colonel Lownds "didn't have enough people" and ordered the 2d Battalion, 26th Marines, to reinforce Khe Sanh, marking the first time in the war that all three battalions of the regiment were together. The 2d Battalion occupied Hill 558, a small



Defense Department (Marine Corps)

knob three kilometers north of the combat base, overlooking the Rao Quan River, and squarely in the middle of the northwestern approach. Its mission was to block the North Vietnamese from using the river valley avenue of approach. Company E was attached to the 3d Battalion, 26th Marines, and occupied Hill 861 Alpha west of Hill 558.

On 22 January, the 1st Battalion, 9th Marines, unexpectedly received orders to deploy to Khe Sanh. Lieutenant Colonel John F. Mitchell recalled, "Some of our units were out in the field and needed to be brought to Camp Evans by chopper to get ready that day to saddle up for the chopper flight to Khe Sanh." Mitchell's command group and two companies arrived in late afternoon. He was directed to "hunker down for the night and be prepared for immediate deployment due west." The next morning, Colonel Mitchell selected a small hill that fronted a rock quarry approximately 1,500 meters to the west by southwest of the perimeter's Red Sector. The battalion's lines curved near but did not tie in with Company L, 3d Battalion; however, the gap could easily be covered by

fire. The 1st Platoon, Company A, established a combat outpost on an even smaller hill a quarter of a mile due west of the battalion perimeter. "I thought occupying that hill would give the battalion an early warning when the attack came," Mitchell said.

The platoon was reinforced with "some machine gun teams and two 60mm mortar teams . . . in total 64 Marines and Navy Corpsmen," Mitchell explained. "That is how we came up with the name 'Hill 64.' I also called it 'Alpha Outpost'." The outpost was supported by preregistered mortar, artillery, and direct fire from tanks, M50 Ontos antitank vehicles, and air support. "We were only 500 yards from Hill 64, so we also prepared an escape route in the event the 1st Platoon needed to abandon the hill," Mitchell said.

The last reinforcement, the 300-man 37th ARVN (Army of the Republic of Vietnam) Ranger Battalion (*Biệt Động Quân*) arrived on 27 January. The rangers were assigned a position at the east end of the runway just forward of Company B, 1st Battalion, 26th Marines. In essence, they formed



Defense Department (Marine Corps) A801114

ARVN Rangers occupy a defensive trench east of the runway and just outside the main base.

a "bubble" outside of the original base defensive perimeter and had to quickly dig in. According to one source, Colonel Lownds wanted "to gain more elbow room . . . to push out the perimeter" since he had received implied criticism from superiors about the limited extent of his defenses in this sector. The ranger battalion assignment was for "psychological reasons as well as military." The North Vietnamese Liberation Radio specifically targeted the rangers, urging them to desert and mutiny: "Desert the enemy ranks, escape from your present dangerous situation, and return to our fatherland and compatriots. . . . Join the revolutionary armed forces and carry your weapons with you."

In addition to the infantry units, Khe Sanh had additional firepower, including 5 tanks with 90mm guns, 10 Ontos antitank vehicles with 6–106mm recoilless rifles each, 16 individual M40 106mm recoilless rifles, 3 self-propelled twin Bofors 40mm antiaircraft automatic cannons, and 2

truck-mounted quad .60-caliber antiaircraft machine guns, with the antiaircraft weapons capable of firing ground support as well as antiaircraft missions.

Buildup of NVA Forces at Khe Sanh

In early December 1967, the North Vietnamese Military Central Commission established the Route 9 Front, which was divided into two battlefields: east and west. The western battlefield, the primary battlefield, was controlled by one of the NVA headquarters known as B5-T8 Headquarters, located approximately 14 kilometers west of the Laotian border at Sap Lit. Its commander, Brigadier General Tran Quy Hai, had previously served as deputy chief of the NVA General Staff. John Prados, in Khe Sanh: The Other Side of the Hill, noted that Hai's assignment was an indication that Hanoi wanted to exercise an extra degree of control over the operation. Two of Route 9 Front's three divisions, the 304th and 325C Divisions, were committed to Khe Sanh. Their mission was twofold: create conditions that would be favorable for an uprising in Tri-Thien and Hue and to draw out and tie down American and South Vietnamese forces. A Military History Institute of Vietnam monograph noted, "Route 9 Front-Khe Sanh was the area into which forces were to be drawn and tied down, eliminating the American mobile units . . . so that the General Offensive and Popular Uprising could take place in the other areas."

Preparation of the Battlefield

A study of the battle by the South Vietnamese Joint General Staff and the CIA provided insight into the NVA construction and logistics activities. The CIA estimated that it would take 32–37 tons of supplies each day to sustain NVA forces in the Khe Sanh area. To support this supply effort, the NVA constructed two new roads paralleling Route 9 through Laos to the South Vietnamese border. The two roads were known to the Marines as the "Santa Fe Trail." Numerous supply depots, distribution points, and waypoints were constructed close to the border. The movement of supplies, equipment, and personnel was the responsibility of *Transportation Group 559*. The South Vietnamese identified at least 13 transportation companies, two battalions of civilian laborers, and more than 700 trucks to support the effort. Based on trailwatchers' observations, the CIA estimated that the NVA

had stockpiled enough supplies, equipment, and ammunition to support the 22,000 troops in the Khe Sanh area for 60–90 days of combat.

Military Units

The formidable B5-T8 forces included the *304th* and the *325C Infantry Divisions*, one battalion and one company of local force, two artillery regiments (*675th* and *45th*), one anti-aircraft artillery regiment (*241st*), one (PT-76) light amphibious tank battalion minus one company, one platoon and one company of engineers, one reconnaissance battalion, one signal battalion, one light flame thrower company, and six transportation battalions.

The 304th (Glory) Division was formed in 1951 and was one of the oldest in the Vietnam People's Army (VPA). It was known as one of the first "Steel and Iron" divisions of the army. It had participated in the French defeat at Dien Bien Phu and was considered an elite "home-guard" unit. The 9,800-man division consisted of three infantry regiments (the 9th, 24th, 66th), the 68B Artillery Regiment, and the 14th Antiaircraft Battalion.

The division's artillery group also included the 2d Battalion, 675th Artillery Regiment, with 24 122mm guns. The artillery units were equipped with 122mm and 85mm guns. Elements of the division had fought the Americans before. In November 1965, the 66th Regiment was involved in the Battle of Ia Drang Valley, the first battle between regular North Vietnamese soldiers and the U.S. Army. South Vietnamese analysts established that the three regiments deployed from North Vietnam in November, traveled down the Ho Chi Minh Trail, and arrived in the Khe Sanh area in late December. The division was commanded by General Hoang Dan, who had established his command post near Lang Troai Road on the border south of Lang Vei.

The mission of the 304th Division was to concentrate its forces to attack and seize the Huong Hoa District, eliminate the Laotian garrison at Huoi San, seize the Special Forces camp at Lang Vei, and invest Khe Sanh to draw in reinforcements.

The 8,000-man 325th "Gold Star" Division was formed in 1953 and was one of the Steel and Iron units that fought at Dien Bien Phu and the Street Without Joy. It consisted of the 101st, 95C, and 18th Regiments. The 95th Regiment

General Tran Quy Hai

Tran Quy Hai was born in Tinh Chau in Quang Ngai Province, French Indochina (now Vietnam), and he followed the Viet Minh (*Viet Nam Doc Lap Dong Minh Hoi*, English League for the Independence of Vietnam) in the early stages of the movement. During the French war, he fought them in Laos and central Vietnam, became commander of the *101st Regiment*, and finished the war as the *325th Division* commander. In the early 1960s, he served as chief of the People's Army of Vietnam (PAVN) advisory team in Laos. In 1972, Major General Tran Quy Hai became the commander of the Quang Tri Front during the Easter offensive. After Khe Sanh, he switched to politics, becoming a Politburo member (executive committee for the Communist Party), and ended his public life as vice minister of defense during the 1980s. He retired as a lieutenant general and died in 1985.

entered South Vietnam in December 1964, the 101st and the 18th soon followed, making the 325th the first combat division to enter the war. In addition to its own artillery regiment, the 45th Regiment (36 rocket tubes), one battalion of the 675th Regiment (12 122mm DKZ-B surface-to-surface rockets) was attached. U.S. analysts believed the division was also augmented by the 4th Battalion, 84th Rocket Artillery Regiment, and two antiaircraft battalions, the 74th and 75th, with their 14.7mm machine guns and 74mm, 80mm, and 100mm antiaircraft guns. By 1967, the division had fought several battles against U.S. forces and knew that superior firepower rested with the Americans. The lead elements of the division arrived in the Khe Sanh area in late December.

The mission of the 325th Division was to eliminate the enemy on Hill 861, envelope Hill 881 South and Hill 950, and to attack enemy forces landing by air to the north and northwest of Khe Sanh.

John Prados, in *Khe Sanh: The Other Side of the Hill*, wrote that

during the last week of 1967, the 325C Division under Col. Chu Phuong Doi moved to the vicinity of Ca

Lu, about halfway along the mountainous segment of Route 9 that stretched to Khe Sanh.... On January 12, he set up a new command post at a point close to the Laotian border. Col. Hoang Dan's NVA 304th Division, recently reequipped in North Vietnam, moved down the Ho Chi Minh Trail to the Khe Sanh front.

The units were augmented with artillery and engineer units and some local guerrillas. Their present-for-duty strength numbered approximately 27,000 men, which included 9,000 riflemen, more than 500 light and 100 heavy machine guns, about 40 recoilless rifles, and some 180 mortars—Type 31 light mortars (60mm) and RGP2 rocket launchers (82mm)—were scattered around the proximity of the combat base in a roughly 2,000–3,000 meter radius. Assorted antiaircraft guns—42 37mm AA guns and an additional dozen 57mm caliber guns, along with their 130 antiaircraft machine guns and rockets—also ringed the base.

The North Vietnamese employed the Soviet-built 122mm rocket to advantage by positioning them on the long axis of the base in line with the runway so that longs or shorts would be "in the ball park." Most of the rocket positions were located on the slopes of Hill 881 North. During the siege, approximately 5,000 122mm rockets hit the base from this location. Heavy artillery support included a total of 212 weapons, among them 8 152mm guns, 16 130mm guns, 36 122mm guns, 8 105mm howitzers, and 12 100mm guns. Most of the heavy artillery was emplaced in tunnels and caves in the Co Roc Mountain and Area 305, so-called because it was on a bearing of 305 degrees (west-northwest) from Hill 881 South at a range of about 10,000 meters. Sixty to 70 percent of the rounds that struck the base were from Area 305.

Both sites were beyond the range of Marine counterbattery fire from Khe Sanh. The NVA 152mm gun had a range of 17,260 meters, about 16.9 kilometers. The 130mm gun fired a 74-pound shell out to 31,000 meters, almost 30.6 kilometers. The heaviest Marine artillery piece at Khe Sanh, the 155mm howitzer, ranged to 14,955 meters, about 14.5 kilometers. The NVA took advantage of the range disparity by emplacing their guns in positions that were impervious to Marine counterbattery fire but were vulnerable to air attack. As a result, the North Vietnamese concealed the positions from aerial observation through the masterful use

of camouflage and cautious employment. The NVA gunners fired only a few rounds every hour so that continuous muzzle flashes did not betray their positions and, after each round, quickly covered the guns with mats and screens. The weapons in the Co Roc Mountains were mounted on railroad tracks and wheeled in and out of caves to conceal their location.

First Lieutenant Tomas F. O'Toole, the VMO-6 aerial observer, found a North Vietnamese artillery piece inside Laos firing its big gun at the base and ran several air strikes to knock it out. O'Toole explained that

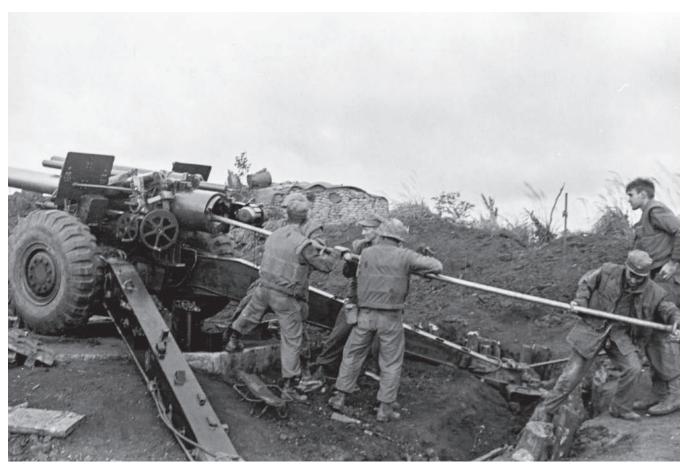
a big hole square opened. It was a big bamboo mat that had fallen off to the side from this string of bombs when the overpressure blew stuff around. And sticking out of this hole was a 130mm gun. Apparently what they were doing was rolling the gun out, firing a round or two and then rolling it back in, putting this cover back on top and being relatively impervious to aerial observation . . . out in Laos . . . probably seven or eight kilometers beyond the Vietnamese border.

Lieutenant O'Toole described the North Vietnamese artillery tactics: "The North Vietnamese emplaced their guns in single gun positions on the gun-target line, so that in order to hit Khe Sanh all they had to do was adjust for range, not for deflection. And once they cranked in that range adjustment for each gun, which remained constant, since Khe Sanh wasn't going to move, they could fire in battery fire . . . they emplaced their guns at about 500-meter intervals, with the rear guns probably close to maximum range, which is 27,000 meters for the 130mm field gun—then forward from there."

"Arty," "Arty," "Arty."

From the heights of Hill 881 South, Captain William H. Dabney's Marines could see all three of the NVA's firing positions—Hill 881 North, Area 305, and the Co Roc Mountain. When the NVA fired, alert observers on the hill could often see the muzzle flash or hear the rounds come overhead. Dabney said, "Virtually all rocket sites the NVA used during the siege were within two kilometers of our hill, several close enough for us to hit with machine gun fire, and all within easy range of our mortars. We 'hosed them down' regularly."

Rocket sites were high on the list of targets for the aerial observers that circled overhead. Air Force Captain Charles



Defense Department (Marine Corps) A190292

Marines of Battery W, 1st Battalion, 13th Marines, load a 155mm howitzer before blasting the North Vietnamese around Khe Sanh.

Rushforth spotted a site. "I really got excited about those rocket positions," he said. "I saw the smoke in the trees, and then the *whoosh*, and the dust." He called in several flights of fixed-wing aircraft to attack the site:

The [North American F-100 Super Sabre] F-100s really did the job. They bombed and strafed for twenty-five minutes: really zapped them. It was like an endless chain of fighters, rolling in high, glinting in the sun, down through the clouds and blue, disappearing as the trees blended the camouflage, and the target erupted; then zoom, up through the clouds again. The last plane pulled off to the right, buzzed Hill 881 South, then pulled straight up in an arching right turn. What a bunch of hot shots!

We could also hear the guns out west across the

border.... We were on the gun-target line. The rounds going over sounded like squirrels running through dry leaves. The radio operator would then broadcast a short radio message over the 3d Battalion tactical radio net: "Arty, Arty, Arty, Co Roc" or "Arty, Arty, Arty, 305." The battalion would then pass the warning to the 26th Marines COC [Combat Operations Center] and immediately horns and sirens would sound throughout the base. A resourceful motor transport mechanic took a horn from one of the trucks and tied it in the top of a tree. He jury-rigged the lead wires to two beer can lids. When the message was received, a Marine, who monitored the radio, pressed the two lids together and the blaring horn gave advanced warning of the incoming rounds. The noisy alert gave the men on the base

anywhere from five to eighteen seconds to find cover. One base radio operator responded after the rounds landed with a cryptic, "Roger India, Splash."

North Vietnamese Opening Moves

As the North Vietnamese tightened their noose around Khe Sanh, one of the first skirmishes occurred near Hill 881 South.

Hill 881 South

Captain Phillip F. Reynolds's Company B, 3d Reconnaissance Battalion, was billeted in several Southeast Asia huts along the main road in the center of the base, adjacent to the runway. It was a good location because it was close to the regimental intelligence officer, whose office was located just a short distance away in the underground concrete bunker that served as Colonel Lownds's command post. The location made it easy for the teams to be briefed before and after missions. The site was also just a short walk from the logistics support area (LSA) where the teams linked up with the helicopters that flew them back and forth on missions. In mid-December and early January, the reconnaissance teams were sighting more and more large groups of NVA troops moving into the area around the base. Contact was becoming more frequent. In the last two weeks of December, three reconnaissance Marines were killed.

On the afternoon of 18 January, reconnaissance team Dockleaf was ambushed on Hill 881 North. The team leader, Second Lieutenant Randall D. Yeary, and his radioman, Corporal Richard J. Healy, were killed and the remaining five men were wounded. Captain Dabney recalled, "The recon team needed help with emergency extraction because they didn't have enough able-bodied men left to carry their wounded." Second Lieutenant Thomas D. Brindley's 3d Platoon, Company I, was sent to help them. "Do whatever you have to do to get there as quickly as you can and get back to the hill by dark," Dabney ordered. "They shucked their helmets and flak jackets . . . booked to the ambush loaded for bear." The platoon reached the trapped reconnaissance team only to discover that whatever NVA had been there were gone. They evacuated the wounded before making their way back to Hill 881 South. Later, Dabney was notified that a radio and shackle sheets (classified radio code sheets) had been left behind by the reconnaissance team.



Defense Department (Marine Corps) A189356

Shell-scarred Hill 881 South, shown here in an aerial view, became a combat base for Company I, 3d Battalion, 26th Marines.

At dawn on 19 January, Second Lieutenant Harry F. Fromme's 1st Platoon set out to retrieve the missing communication gear. The platoon was heavily reinforced with machine guns, a 60mm mortar squad, and an 81mm mortar forward observer. About noon, the platoon reached a finger of land that led to the crest of Hill 881 North, when it was taken under fire from several bunkers by an unknown number of the enemy. While maneuvering against the complex, the platoon suffered three casualties and was forced to pull back. Private First Class Leonard L. Newton covered the withdrawal until he was killed.* The platoon did not find the missing radio or the code sheet.

Something Was About to Happen

After two days of enemy contact, Captain Dabney, Company I's commander, requested to conduct a reconnaissance-inforce to Hill 881 North with his entire company. Dabney had a premonition that "something was about to happen." The 3d Battalion staff, two platoons, and a company command group from Company M, 3d Battalion, was helo-lifted to the hill to guard the perimeter during Company I's absence. At 0500 on 20 January, Company I, along with a seven-man

^{*}For his courageous act, PFC Newton was posthumously awarded the Silver Star.



Defense Department

The ambush of a Marine reconnaissance team near Hill 881 North on 18 January 1968 was the prelude to the opening battle three days later.

reconnaissance team, left the perimeter and marched into the fog-shrouded valley that separated Hill 881 South from its neighbor to the north. Dabney split the company into two columns, which moved along parallel fingers about 500 meters apart—Lieutenant Fromme's 1st Platoon on the left, Lieutenant Brindley's 3d Platoon and the seven reconnaissance team members on the right. The company command group and Second Lieutenant Michael H. Thomas's 2d Platoon followed behind the 1st Platoon.

At 0900, the fog lifted as the company crossed the narrow valley and began climbing up the jungle-covered slopes of Hill 881 North. "We moved silently away from the hill, keeping our intervals as we slipped through the waist-to-head-high elephant grass," Hospital Corpsman Third Class Michael Ray recalled. He described the atmosphere in great detail:

We followed the trail down from our vantage point into the valleys and sloughs and then edged along the ridges of the lower hills. We came down through the fog cover. As we went deeper, the bright sun durned into a faint glow. Then in time, we were in a gray, overcast world . . . moving as slowly and cautiously as we did, it took quite some time to get completely through the fog.

Four small knolls formed a line perpendicular to their advance. As the 3d Platoon approached one of the knolls, it received heavy fire and was pinned down. Captain Dabney explained that "we got about half-way to 881 North, maybe about 1,000 [meters] from 881 South when the s—thit the fan in every sense of the word." Fromme's 1st Platoon attempted to flank the enemy, but it too was stopped

by NVA fire. With the forward momentum halted, Dabney called for fire support and medical evacuation for his casualties. A Boeing Vertol CH-46 Sea Knight medevac helicopter from HMM-262 responded. "As the medevac aircraft approached the zone, it was hit by a burst from an antiaircraft weapon and immediately caught fire," Dabney recalled. "The pilot, apparently realizing the consequences of crashlanding a burning aircraft in a landing zone where several wounded men were staged, sheared off into a gully and made a controlled crash about 200 meters west of the zone. Two crewmen leaped from the burning aircraft. The pilot and copilot managed to escape seconds before it became totally engulfed in flames and were rescued by a helicopter from another squadron."

Dabney's fire support—artillery, helicopter gunships, and fixed-wing aircraft—enabled Brindley's platoon to continue the assault. Hospital Corpsman Third Class Ray recalled that "jets started coming in. They were so close, they almost gave me the impression I could reach out and touch them." As Brindley reached the crest of the hill, he was mortally wounded by a sniper and his platoon went to ground, low on ammunition, with many casualties and under heavy machine gun fire. Dabney committed Thomas's 2d Platoon as reinforcement. The platoon reached the beleaguered Marines and immediately organized a rescue effort to evacuate the wounded and locate several men who were missing. Thomas worked his way down the hill to where the casualties were. Lieutenant Esslinger was watching him through his binoculars from Hill 881 South and said, "He [Thomas] picked up one of the casualties and carried him up to the top of the hill. He started down after another one of the wounded and dropped like a rock. . . . He took a .50 caliber machine gun bullet right between the eyes."*

The battalion commander requested reinforcements to support Company I's attack. Colonel Lownds denied the request and instead ordered Company I to break contact immediately and return to Hill 881 South. Captain Dabney recalled, "A message suddenly came through from battalion directing us to break contact and return to Hill 881 South immediately." Lieutenant Esslinger remembered that Dabney did not like the idea of being called back: "It took

about a half hour to cajole and order him to come back." The company backed down the face of Hill 881 North under fire. Air strikes and artillery support covered its withdrawal. "[They] finally came trudging up the hill," Lieutenant Esslinger said. "We were utterly exhausted," Dabney recalled. The daylong engagement cost Company I 4 men killed in action and another 39 wounded. It was estimated that at least 100 North Vietnamese were killed.

Chieu Hoi (Open Arms)

While Company I battled the enemy on Hill 881 North, a fortuitous event occurred on the northeastern side of the perimeter. At 1400 on 20 January, the 2d Platoon, Company B, 1st Battalion, spotted an NVA soldier waving a white flag in front of their position. Captain Kenneth W. Pipes was walking the lines when he was notified of the sighting. Pipes recalled, "With an Ontos covering us, a fire team from the 2d Platoon, the Ontos officer, and I moved some 500 meters outside the wire. The NVA soldier initially disappeared, so I shouted 'Marine dai-uy [captain]' several times as we proceeded. He reappeared and surrendered." Pipes took the soldier into custody and turned him over to Gunnery Sergeant Friedlander, 17th Interrogation Translation Team, who interrogated him. "When we got to my bunker, the first thing I did was to offer him a cigarette and ask him if he was hungry," Friedlander explained. "I got him something to eat and he devoured it quickly." The chieu hoi turned out to be Lieutenant La Thanh Tonc, the commanding officer of the 14th Antiaircraft Company, 95C Regiment, 325C Division. He freely provided Friedlander with detailed information on the enemy's dispositions and plan of attack for Khe Sanh.

One of the most startling revelations that Tonc made was that the North Vietnamese were going to attack Hill 861 that very night. Friedlander briefed Colonel Lownds, who sent him to Lang Vei with the information. An officer courier was dispatched to inform Major General Tompkins, commanding general, 3d Marine Division at Dong Ha, of Tonc's information. Tompkins accepted the information at face value because "we had nothing to lose and much to gain." Colonel Lownds ordered Company I to break contact and return to Hill 881 South. "This is not very frankly, easy to do with a Marine unit . . . have a guy break contact and give up a battle that he thinks he's winning," Lownds

^{*}Lts Brindley and Thomas were both awarded posthumous Navy Crosses for their actions.

explained. "So my judgment was that I should get my troops in a defensive position." He also ordered the base to be placed on high alert—flak jackets and helmets to be worn at all times, 50 percent alert on the lines, and everyone was to sleep in their fighting positions. When Tonc's revelation reached the 3d Battalion, it made Company I's withdrawal order understandable.

Hill 861

We're being overrun!

~ Radio message flashed to 3d Battalion COC from Hill 861

Hill 861 was a bomb-cratered bare knob approximately 50–60 meters wide at the top. The grass-covered slope angled gently to the jungle floor. Bunkers and sleeping shelters had been dug along the trench line even though the "soil on the hill did not lend itself to digging," according to Lieutenant Colonel Wilkinson. "In fact," he said, "the trench line had been washed away so often during the monsoon that we finally were able to get some 55 gallon drums and we placed them all around the hill to form a sort of gutter to drain the trenches." The Marines turned to with a will and dug a chesthigh trench that ran around the crest of the hill. The digging occasionally unearthed the bones of dead NVA killed during the previous year's hill battles. The Marines tried to cut logs to build bunkers, but there was so much shrapnel in the trees that it made the chain saws worthless.

First Lieutenant Jerry N. Saulsberry bid farewell to Company L on the morning of 20 January and walked down the dirt road in the center of camp to the flight line for transportation to his new assignment as the executive officer of Company K on Hill 861. Saulsberry had been Company L's weapons platoon commander when the orders came through. It would be his second assignment since arriving incountry after washing out of flight school. He arrived on the hill by midmorning and took up his responsibilities, never realizing that a few hours later he would command a company in extremis.

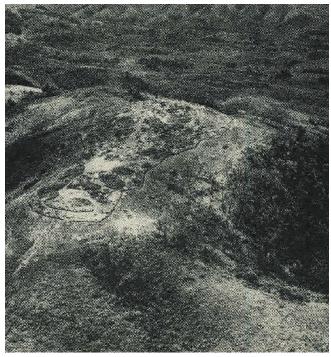
Corporal Dennis M. Mannion recalled that "at about 2030, after it got really dark, word came up from one of the platoons that they could hear the North Vietnamese outside

Friedlander's Interrogation Notes

Hill 881N is presently surrounded. There is a company of sappers deployed in the general area of 881N. This sapper company will be the company used against Hill 861. Once Hill 861 has fallen, the general attack against the Khe Sanh Combat Base will begin. This will consist of a reinforced regimentalsized force from the direction of Hoan Tap by way of Hill 861, where they will link up with the occupying force there. Once linked up, Khe Sanh Combat Base will begin receiving heavy artillery fire and rockets from unknown positions, but from [a] northwesterly direction. When this occurs, the first regiment will move to assault positions under cover of fire. One mortar platoon on northeast side of Hill 1915 will cover the Marine heavy weapons on Hill 950. One mortar platoon will begin 82mm mortar barrage on parked helicopters and airstrip. Each of the mortar platoons has one 12.7mm antiaircraft gun platoon in their adjacent areas to cover them from counter air attack. If the first and second regiments are forced to withdraw, they will link up with the third regiment (position unknown) and commence another attack on Khe Sanh Combat Base. This will occur before Tet.

Source: Gunnery Sergeant Max Friedlander's notes for Lieutenant La Thank Tonc interrogation

the wire, down in the ravine off the northwest corner of the hilltop." Mannion investigated, saying, "I could hear the NVA outside the wire. They were talking and giving commands. I could hear the wire being cut, could hear the tinny sound when the wire sprang back in both directions." Private First Class Elwin Bacon said, "We started hearing noises on a ridge to the west of us . . . the g—ks were not being all that quiet." Sergeant Mykle E. Stahl said that one of the new men asked if he thought the NVA would attack. "There isn't a North Vietnamese within a hundred miles of here," he



Defense Department (Marine Corps)

Hill 861 clearly showing the outline of the Marine outpost in July 1967.

replied. "Just as I said that, the first RPG [rocket-propelled grenade] slammed into the hill."

Shortly after midnight on 21 January, the hill was blanketed by NVA mortar rounds. Second Lieutenant Linn Oehling's 2d Platoon manned the southwestern perimeter. "We took incoming," he said, "[but] kept our heads low and wherever we heard movement ... we threw grenades." Two red star signaling flares soared into the black sky. Immediately, North Vietnamese infantrymen from the 6th Battalion, 95C Regiment, 325th Division, launched an attack against Hill 861. Striking from attack positions within 100 meters of the crest, the enemy blasted holes in the protective wire with Bangalore torpedoes and quickly advanced, supported by mortars targeting Company K's bunkers and trenches. Private First Class John Lewis said, "The enemy had put satchel charges in our wire ... and set them off. They got through our lines, just like that."

Lieutenant Saulsberry explained that "they crept as close to our lines as possible under the cover of supporting arms, then began to throw sticks of dynamite over the wire to simulate mortars . . . then the enemy mortar fire lifted. However,

a good many of our men still believed we were under mortar fire and were seeking cover ... this enabled the enemy to get much closer to our lines than they would normally have been able to." The action was close and fierce, with North Vietnamese penetrating the perimeter and overrunning the company's landing zone. "Once the wire had been breached," Saulsberry explained, "the bunkers that had been knocked out served as a very good bridge for the NVA to jump the trench lines. Their flat roofs furnished a flat runway for them to leap across." The NVA moved through sections of the Marine position, heaving satchel charges into bunkers and forcing the defenders back. Sergeant Stahl recalled, "We lost three bunkers right off the bat."

Lieutenant Saulsberry took command when Captain Norman J. Jasper Jr., the company commander, was seriously wounded and forced out of the fight. The company gunnery sergeant was killed and First Sergeant Stephen L. Goddard was severely wounded when the command bunker was hit by an 82mm RPG. Goddard recalled, "They hit us with RPGs . . . and then they let us have it with 82mm mortars. They walked those 82 mortars right up the line, up and down the hill, and they were goddam effective, very accurate." First Sergeant Goddard made his way out of the damaged bunker and collapsed against an outer wall. A passing corpsman stopped the blood flow with medical scissors and told the badly wounded senior noncommissioned officer (NCO) to hold it tight if he wanted to live. Goddard survived and was evacuated the next morning.

The North Vietnamese penetrated the southwest side of the company's perimeter and forced the defending platoon from its positions. Sergeant Stahl singlehandedly counterattacked, distracting the enemy while other Marines recovered casualties. As he advanced up the trench line, three North Vietnamese attempted to capture him. Stahl killed two but suffered a bayonet wound. When his rifle malfunctioned, another Marine killed the third man. Stahl then picked up an enemy AK47 assault rifle and attacked a third bunker, killing three of the enemy and capturing three others. When the Marines reoccupied the positions, Stahl, although wounded three times, manned a .50-caliber machine gun and continued the fight.*

^{*}For his actions, Sgt (later captain) Stahl was awarded the Navy Cross.

During the deadly fight, Company I's two 81mm mortars on Hill 881 South fired an astonishing 680 rounds in support. "We could get at the NVA because our fires weren't masked," Dabney said. Hill 861 was at the mortar's maximum range. "The guns got so hot that they glowed," he recalled. "Over time when the gunner dropped the round down the tube the increments would cook off before it got to the bottom of the tube." The mortars became so hot that the men cooled them with water, then fruit juice, and finally, by urinating on them. Dabney said that "[it] smelled a bit rank in the gun pits!"

At first light on 21 January, Company K's Marines launched a counterattack, supported by three Douglas A-26 Invader aircraft and three North American T-28 Trojans, and by 0530, the enemy onslaught had spent itself. SIGINT personnel reported hearing the NVA commander beg for reinforcements. But it was too late. Company K hit the enemy with a final blast of fire, driving them off the hill but leaving bodies scattered on the slopes and in the perimeter wire. Private Duong Van Ha, 1st Company, 4th Battalion, 95C Regiment, was captured. Ha confirmed the intelligence Tonc provided to Gunnery Sergeant Friedlander.

Corporal Lofton's helicopter responded to Company K's request to evacuate the wounded: "I remember looking at [Hill] 861, seeing bodies in the wire, large numbers of NVA dead, Marine[s] dead as well.... We circled for what seemed like an eternity until finally the shelling died down and we went in, picked up the wounded and whatever dead they could throw on, and we pulled out of there."

Khe Sanh Combat Base

No sooner had the NVA assault on Hill 861 been stopped than a massive bombardment struck the combat base. At 0530 on 21 January, enemy artillery, mortar, and rocket fire smothered the airstrip and its surrounding bunkers and trenches. Sergeant Glenn E. Prentice was walking to the mess hall when "I noticed some streaks of light coming in. They [rockets] started impacting on the road. One hit the mess hall. Another rocket hit the ammunition dump." Within minutes of the opening salvo, enemy shells hit the ammunition supply point (ASP-1), located between the airstrip and the artillery battalion positions. A large quantity of ammunition had been stored outside the revetments because

3d Battalion, 26th Marines Command Chronology

At 0030, Company K received heavy mortar, RPG, and small arms fire. Thirty minutes later, approximately 300 NVA assaulted the hill. The [perimeter] wire was initially breached by sappers armed with Bangalore torpedoes and satchel charges. Assault troops made a small penetration of the lines before the attack was repelled. Results were 4 USMC KIA, 11 WIA, 45 NVA KIA and 1 NVA POW.

Source: "3d Battalion, 26th Marines Command Chronology," 1968. National Archives and Records Administration

it was filled to capacity. The enemy shells set off more than 1,500 tons of ammunition, about 98 percent of what was stored there, which began exploding, throwing fragments and unexploded rounds, some of them on fire, through the air to land in and around the Marines' fighting positions.

Corporal Kreig Loftin, a helicopter crew chief with HMM-226 on overnight duty to provide emergency support, recalled, "We started receiving incoming rounds . . . and the ammo dump was hit. There was a massive explosion and the concussion almost knocked the air out of you." The barrage also cratered the runway and destroyed two HMM-262 aircraft in the revetments. Loftin recalled that "we assembled the air crew and made a mad dash completely across the combat base, which was probably three football fields wide, running from hole to hole, trying to dodge the incoming. All the hills were calling for medevacs as we launched." The shelling hit several 55-gallon drums of o-chlorobenzylidene malononitrile (CS or tear gas) riot control agent, sending choking clouds of CS gas rolling through the trenches and bunkers, forcing the men to don gas masks.

Lance Corporal Ernie Husted, 3d Reconnaissance Battalion, wrote, "The shelling started, and they were rockets because we you could hear them scream all the way in and then hit. Shortly afterwards they hit the ammo dump and from then on, we couldn't tell what was incoming or our own stuff blowing off. There was CS tear gas going off, large



Defense Department photo



Defense Department photo

Top: This aerial view of the Khe Sanh Combat Base looking west was taken during the siege. The runway of the airstrip can be seen below. In the top right of the picture is what appears to be a rocket pod hanging below the aircraft taking the picture.

Bottom: An Air Force Fairchild C-123 Provider transport is about to land just beyond the leveled ammunition dump at Khe Sanh, bringing in much-needed supplies.

amounts of artillery shells, plastic explosives, and so we were getting hit by our own ammo cooking off and producing shrapnel, plus everything that they were firing at us. It was just unbelievable."

Captain Kenneth Pipes explained, "A steady stream of 105mm rounds were hurled through our command post bunker's entrance by the continuous explosions in the adjacent dump. Many of them were smoking when they landed. One of my Marines cradled each one in his arms and ran outside with them. Many of those rounds exploded after he left them in the open." Lieutenant Colonel Wilkinson said that "Company B had to displace its CP [command post] at least twice because burning shells were landing in or near it."

The artillerymen of 1st Battalion, 13th Marines, had to contend not only with the bombardment but also the exploding ammunition dump. Battery C, only 50 to 70 meters from the conflagration, had dozens of unexploded shells land in and around its position and received considerable damage. First Lieutenant William L. Eberhardt, executive officer of Battery C, said, "All we could think of was trying to get those rockets and mortars silenced. Until we could get them stopped, we didn't have time to worry about the duds or the ammo blowing right there." The cannoneers continued to man the guns despite the danger, delivering counter-rocket and countermortar fire that neutralized several enemy positions.

One howitzer was out of action for several minutes while a dud mortar round was cleared from the emplacement and another gun took a direct hit from a white phosphorous shell that ignited the gun's ready ammunition. One man was killed and another wounded. The battery command post received five direct hits. Miraculously, no one was hurt. Battery C fired 3,000 rounds in trying to counter the North Vietnamese fire.

Incoming rounds smashed into the airstrip, ripping apart the steel plates, destroying two HMM-262 CH-46 helicopters, and damaging five others. In addition, incoming rounds damaged all of the weather monitoring equipment, most of the airstrip's night lighting system, many field telephone lines, bunkers, engineer equipment, generators, the post exchange, a mess hall, and other facilities. Only 549 meters of the 1,189-meter runway remained open after the bombardment. The fighting and shelling of 21 January resulted in 14 Marines dead and 43 wounded. III MAF immediately



Defense Department (Marine Corps) A190594

Large clouds of dust and smoke obscure part of the Khe Sanh Combat Base after two NVA artillery shells exploded. On 23 February, another Marine ammunition supply point took a direct hit, which resulted in several secondary explosions.

declared a "tactical emergency" and rushed to replenish the ammunition. Six Fairchild C-123 Provider light cargo aircraft of the 315th Air Commando Wing brought in 26 tons of ammunition after dark on 21 January. A 1st Marine Aircraft Wing (MAW) Sikorsky CH-53 Sea Stallion helicopter brought in much needed whole blood on the same night.

Khe Sanh Village

Corporal Michael Archer described the Khe Sanh village headquarters complex as

roughly triangular shaped with one side along Route 9 and one side parallel to a Buddhist shrine and school just to the west. The base of the triangle, about 200 meters in length, ran southwest from a rice storehouse on Route 9 to the end of the Special Forces compound.

The district headquarters was a large stone and stucco building in the French colonial style, with high ceilings and a large verandah.

A 3.7-meter-high sandbag tower stood in front of the head-quarters building. A .50-caliber machine gun was mounted on the tower. The administrative building and barracks for the Provincial Forces building stood next to the tower. The Marine Combined Action Platoon barracks, mess hall, mortar pit, and showers were located behind the headquarters building. A small helicopter landing zone had been cleared nearby.

The Special Forces compound was located adjacent to the Marine compound. "This compound, self-contained and more heavily barbed-wire than the Marine's, was surrounded



Defense Department (Marine Corps)

A Marine 105mm howitzer lashes out at enemy troops surrounding Khe Sanh.

by a shallow trench filled with *punji* stakes (sharpened bamboo spikes)," Archer noted. A narrow passageway next to the communications bunker was the only entrance through the barbed wire. The communications bunker was located behind the district headquarters building about 20 meters from the barbed wire fence that formed the west side of the compound. Archer described the bunker: "Only half of the bunker was below ground, and it was topped by a corrugated metal roof. The interior was divided into two rooms separated by about ten feet of empty space. The room to the left was for the Special Forces radio operators, the one on the right for the Marines."

At 0530 on 21 January, almost simultaneously with the indirect fire attack on the main base, the North Vietnamese *bo dois* (people's soldiers) of the 7th Battalion, 66th Regiment,



Defense Department (Marine Corps) A190802

Marines stack empty 105mm casings at Khe Sanh, indicative of the artillery support provided for the base. In the background, partially obscured by clouds, is Hill 950.

304th Division, under the command of Nguyen Van Thieng, launched an attack on the Huong Hoa District headquarters in Khe Sanh village. The village was defended by 175 soldiers and Marines, including two platoons of the South Vietnamese 915th Regional Force Company, a four-man U.S. Army advisory group, headed by U.S. Army Captain Bruce B. G. Clarke, and two platoons from CAP Oscar, commanded by Marine First Lieutenant Thomas B. Stamper. CAP Oscar-1 (CAP O-1), consisting of 10 Marines and 1 Navy corpsman, headed by Sergeant John J. Balanco, and about an equal number of Bru tribesmen, was in the headquarters hamlet.* The second platoon, CAP O-2, led by Sergeant Roy Harper, at about the same strength, was in a nearby hamlet about 200 yards to the west.

Lieutenant Stamper recalled,

The base started taking real heavy incoming and right away we ordered everyone into the trenches; grab your rifles, flak jackets and everything. Fifteen minutes later, I started to go out of the bunker, walked out the door, and saw a red pen flare. That's when all hell broke loose around the entire compound—360 degrees around the thing.

^{*}Sgt Balanco would later be awarded a Silver Star for his actions on 21 January.



Defense Department (Marine Corps)

A crash crew works to extinguish a Boeing Vertol CH-46 Sea Knight on fire at Khe Sanh.



Defense Department (Marine Corps) A190245)

The Khe Sanh shuffle in action on 25 January 1968 as Marines run for cover. Forty-five mortar rounds and eight rockets hit Khe Sanh that day. Note that a camouflage parachute covers a bunker and that one of the Marines is completely airborne. *Time* magazine reported, "The dash for cover is part of every man's routine."

Under cover of a heavy fog, the NVA assault elements crept to within 15 meters of the compound's punji stake-filled moat before launching their attack. "I had seven guys wounded in the first thirty to forty seconds," Hospital Corpsman Second Class John R. Roberts with CAP O-2 exclaimed. The main enemy fire came from the front and right flank of the compound, dominated by the Buddhist shrine. "We took a lot of fire from [the direction of] the shrine," Lieutenant Stamper said. "We knocked that out with artillery, on the third round."

Captain Clarke and Lieutenant Stamper called in artillery and air support, stopping the initial assault. The 1st Battalion, 13th Marines, fired more than 1,000 rounds of variable-time proximity fuses to form a ring of steel around

the embattled village. "The officers called in air strikes and artillery, because the NVA were in the wire," Sergeant Balanco recalled. "It was scary as hell when those jets are dropping their bombs that close to you." Hospital Corpsman Second Class Roberts said, "The jets came in dropping napalm so close we could feel the intense heat as though we were in an oven." However, the defenders were eventually forced to give up most of the village and establish a final defensive perimeter around the headquarters compound.

CAP O-2 was able to hold its position against the enemy assault. As the fog lifted about midday on 21 January, the enemy attack slackened. The NVA continued to place pressure on the defenders with mortar fire and RPGs, but they limited their infantry action to small arms fire and probes.



Defense Department (Marine Corps) A190683

Incoming artillery shell explosion at Khe Sanh.

Helicopters attempted to resupply the embattled headquarters compound but could not land. Sergeant Balanco managed to retrieve some ammunition that was kicked out of the aircraft and distributed it to his men.

The 1st Battalion, 26th Marines, sent a platoon from Company D to reinforce the village. "The platoon fought its way down the road until it reached the top of a hill overlooking the compound," First Lieutenant John M. Kaheny said. "They spotted a mass of enemy soldiers deploying against them and turned back to the base." A second relief expedition was organized. The South Vietnamese 256th Regional Force Company was flown into a landing zone near the old French fort, 2,000 meters east of Khe Sanh by the U.S. Army's 282d Assault Helicopter Company (Black Cats). As the Black Cats set down in the zone, the 11th Company of the 66th Regiment opened fire from camouflaged trenches. It was a slaughter. The North Vietnamese killed more than 25 of the American pilots and crew and 70 or more of the Regional Force troops. Among the dead was the expedition leader, U.S. Army Lieutenant Colonel Joseph P. Seymoe, the deputy advisor for Quang Tri Province.

During the night of 21–22 January, the situation remained tense but relatively quiet, except for some enemy sniper fire. The surviving Marines—most of whom were wounded—and

Bru of CAP O-2 took advantage of the lull and made their way to the headquarters compound. In the late morning of 22 January, a helicopter took Lieutenant Thomas Stampler to brief Colonel Lownds about the feasibility of continuing the defense of the village. The regimental commander decided to evacuate the village after "long consideration and proper evaluation of the facts."

General Westmoreland sent a message to Admiral U. S. Grant Sharp Jr., commander in chief of the Pacific Fleet, and to General Wheeler. An extract of the message stated:

The anticipated enemy attack on Khe Sanh was initiated last evening. Khe Sanh military installation had been under constant rocket and mortar fire since early morning, and Hill 861 had been under ground attack. Ammunition and POL [petroleum, oil, lubricants] dumps have been hit, with fire and explosions reported by Air Force FAC [forward air control]. Seventh Air Force is maintaining an airborne command post and FAC's [sic] in the area.

Fire Support Coordination

The 26th Marines Fire Support Coordination Center (FSCC) was located adjacent to the operations section in the regimental Combat Operations Center (COC). The FSCC was

tasked with the responsibility for coordinating, planning, and supervising all supporting arms at Khe Sanh. It was headed by Lieutenant Colonel John A. Hennelly, 1st Battalion, 13th Marines' commander, and comprised of representatives from intelligence, infantry, artillery, air, and three different military branches—Navy, Marines, and Army. Lieutenant Colonel Hennelly was given the nickname of "Band of Steel Hennelly" because of the overwhelming fire support that he brought to bear on the North Vietnamese.

The FSCC had three principal subordinate sections: Fire Direction Control, which served as the brain of the artillery battalion; the Direct Air Support Center (DASC) for control of aircraft; and Target Intelligence that identified possible enemy locations. Captain Kent O. W. Steen, the 26th Marines' assistant fire support coordinator, said that the Marine "culture of fire support planning and coordination integrated with the infantry they support" played a large role in the defense of the base.

Targeting

The targeting effort at Khe Sanh was run by Captain Mirza M. Baig, the 26th Marines Target Intelligence officer. He was on special assignment from the 3d Marine Division, where he served as the clandestine intelligence coordinator. Baig believed that a thorough knowledge of enemy doctrine and tactics was essential in developing a fire support strategy. His assistant claimed Baig had a mind like a computer and stored bits of information on note cards, one card for each 1,000-meter map grid. Lieutenant Colonel Shawn P. Callahan in *Close Air Support and the Battle for Khe Sanh* wrote that Baig's job "was to mix art and science to find the enemy."

Airspace Coordination

The ground and airspace around Khe Sanh was divided into several different regions, as noted in the diagram of the airspace divisions. The two zones closest to the combat base, A and B, include the immediate battle space. These zones were under the control of the 26th Marines FSCC. Located in the regimental command bunker, the FSCC exercised unrestricted control of all maneuver units, as well as all air strikes and indirect fire missions in support of ground units. The FSCC controlled the air strikes through the DASC, which was located in the Air Force bunker about 75 meters

from the COC. Normally, the DASC would be colocated with the FSCC, but the COC was too crowded. Lieutenant Colonel Johnny O. Gregerson, Marine Air Support Squadron 3 (MASS-3), complained that "problems occurred on coordination of the air effort in the overall fire-support plan because of a lack of instantaneous communications and joint understanding of the problems involved. Its location caused problems."

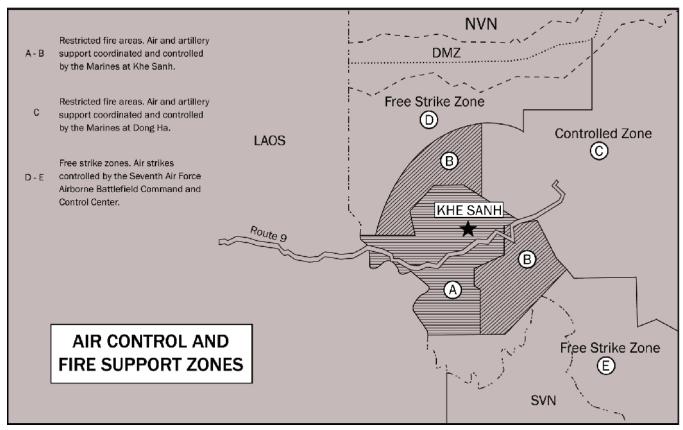
The airspace represented by the letter "C" of the diagram on p. 36 was under the control of the 3d Marine Division because it was decided that the NVA in the area posed no threat to Khe Sanh. The 3d Marine Division exercised fire support and air control through its own FSCC and DASC-Bravo from the division COC bunker in Dong Ha. The final divisions of airspace, D and E, were designated "free strike zones" and controlled by the Air Force through its Airborne Battlefield Command and Control Center set in a C-130 configured with a command and communications suite that orbited over Laos.

Single Manager Controversy

The escalating situation at Khe Sanh brought to the surface the old dispute about the role of Marine air in the overall air campaign.* Air Force General William W. Momyer, USMACV deputy for air and commanding general of the Seventh Air Force, was charged with the responsibility of overseeing all USMACV air operations in Vietnam, and he was not happy that III MAF was essentially operating its own air force in the I Corps Tactical Zone. He considered this "separate" system to be in contradiction to the principal that, as the air commander, he should have the ability to mass his forces at the decisive time and place on the battlefield, just like the ground commander. He recommended that the 1st MAW turn over control and scheduling of its fixedwing assets to the Air Force. The Marine Corps was strongly opposed, considering its fixed-wing aircraft an integral part of its air-ground team.

General Momyer was able to convince General Westmoreland to support his proposal. "If the battle of Khe Sanh develops," Momyer said, "it [single manager] may be the event to get air responsibilities straightened out." General

^{*}A detailed discussion of the single manager controversy is presented in chapter 24 in U.S. Marines in Vietnam: The Defining Year, 1968.



Adapted by History Division

Westmoreland submitted a letter of intent to adopt the new system to the next higher command, Admiral Sharp, just a week before Operation Niagara was to begin. But Sharp, influenced by senior Marine generals, immediately put a halt to Momyer's proposal. However, despite the Marine objections, the plan was resurrected two months later and implemented on 31 March. Colonel Lownds complained that "the time of request for an on-call mission just about doubled . . . if you wanted a pre-planned strike you could have it the next night following the night you put it in—in other words, 48 hours afterwards. Air should be more responsive. . . . At Khe Sanh the enemy didn't stand still and wait for you to hit him."

Lieutenant Colonel Callahan wrote,

In summary, the single management controversy and its effect on the battle of Khe Sanh is often over-stated. Although the single management of aviation assets within Vietnam was the subject of heated debate which resulted in a fundamental change of air command and control during the battle . . . the adoption

of [it] had limited effect on the Marines at Khe Sanh. This was largely true due to Marine efforts to preserve the air-ground team by countering the imposition of the system and mitigating its effects.

Retribution

General Westmoreland decided to unleash a massive air assault on the North Vietnamese, code named Operation Niagara.

Niagara II

Operation Niagara II began at 0930 on 22 January, with 595 tactical strike sorties (including Air Force, Marine Corps, and Navy) and 49 B-52 sorties on a round-the-clock basis against located targets. From that date through 31 March 1968, when Operation Niagara was officially terminated, more than 24,000 tactical strike sorties and 2,500 B-52 sorties had dropped more than 95,000 tons of ordnance. Prados and Stubbe noted that the cascade of bombs "amounted to almost 1,300 tons of bombs around Khe Sanh, the equivalent



Defense Department photo

An Air Force Boeing B-52 Stratofortress drops its bombs during an Arc Light mission over Vietnam.

of a 1.3-kiloton tactical nuclear weapon, every day of the siege. Allied aircraft were delivering approximately five tons of bombs for every one of the 20,000 NVA soldiers initially estimated in the Khe Sanh area, or more than fifteen tons per man measured against roughly 6,450 Marines and ARVN troops in the garrison."

Arc Light Strikes

The B-52 missions were a key element in Niagara II's air offensive. During the period from 22 January to 31 March, the B-52s dropped nearly 60,000 tons of high explosives on North Vietnamese targets. On the weekend before the Tet Offensive began, U.S. Army and Air Force Douglas EC-47 Skytrain's airborne direction finding pinpointed the location

of the NVA "Front" headquarters just inside Laos that was directing operations in the Khe Sanh area. On 29 January, the day before the Tet Offensive began, 45 B-52 bombers dumped 1,350 tons of bombs on the site of the North Vietnamese headquarters, and the radio transmissions that had been originating from the site disappeared for almost two weeks, indicating that the bombers had destroyed the enemy headquarters.

The big bombers could each carry 27 tons of ordnance in mixed bomb loads of 250-, 500-, and 750-pound loads. Initially, the safety zone for an Arc Light strike was three kilometers. The North Vietnamese were aware of this restriction and moved some troops and ammunition storage areas within the safety zone. At the end of February, the Air Force

started employing a van-mounted MSQ-77 Combat Skyspot radar to direct the strikes. At the same time, the 3,000-meter bombing restriction was rescinded. The tactical commander could request a strike as close as 1,000 meters from the perimeter. The first "close in" strike was conducted on 26 February at a distance of 1.2 kilometers from the perimeter. A captured North Vietnamese soldier reported that his company suffered 10 men killed, including his commander, political officer, and assistant political officer. Many of the company's trenches were collapsed and several machine guns and mortars destroyed.

The 26th Marines FSCC at Khe Sanh provided 90 percent of the targeting data for the strikes, but General Westmoreland personally approved each mission. The FSCC sent their mission requests to the 3d Marine Division air officer about 15 hours prior to the scheduled drop time. Up to three hours prior to the strike, the regiment could request an alternate target; but after that time, no changes were permitted. USMACV scheduled eight strikes every 24 hours. Later, the response time was pared down. A three-plane cell was scheduled every three hours. Every 90 minutes, the Skyspot radar would pick up the bombers and direct them to a particular target. The schedule was juggled to keep the enemy off balance. The cells would vary their intervals over their targets from 60 to 90 minutes, or even two hours. In the last week of February, the Air Force changed the number and intervals to six B-52s every three hours instead of three aircraft every 90 minutes.

To rapidly develop target boxes for the incoming B-52 strikes, the Khe Sanh area was overlaid with a grid system in which each "box" represented a one by two kilometer target area. It was the same size as could be effectively hit by a cell of three B-52s. The coordinates of the box to be hit were forwarded to the Skyspot radar site, which in turn directed the incoming B-52 sorties.

The Arc Light strike put fear into the hearts of the North Vietnamese soldiers. In March 1968, a diary from an NVA NCO near Khe Sanh was captured. In it, he wrote, "Here the war is fiercer than in all other places. . . . It is even fiercer than Dien Bien Phu. All of us stay in underground trenches. We are in the sixtieth day and B-52s continue to pour bombs . . . this is an area where it rains bombs and cartridges. Vegetation and animals, even those who live in deep caves

or underground, have been destroyed." A Marine private first class described the effects of a bombing:

A B-52 strike is truly awesome. There would be no hint of a strike arriving until the bombs exploded. The bombs fell in a staggered pattern. First one bomb, then another to the right and front of the first explosion, then another to the left and front of the second explosion, and so forth. The bombs created a long pattern of craters, churned up earth, and blasted trees. After the bombs exploded, I would be able to hear the planes. They produced a weird, low moaning that lasted until they were out of range. I never saw the planes, since they bombed from a great height.

Mini Arc Light

In their bombing campaign around Khe Sanh, the Marines experimented with several techniques. Two of the most unique were the "Mini" and "Micro" Arc Lights, which were used for area bombing and required close coordination with ground supporting fires. The concept behind the Mini Arc Light was to act upon fast-breaking intelligence when the B-52 strikes were not available. When the regiment received indications that North Vietnamese units were moving into a specific area, the Khe Sanh FSCC would plot a 500 by 1,000-meter run in the center of the suspected enemy sector. The regiment then asked for Marine fixed-wing aircraft on station to conduct a radar-controlled AN/TPQ-10 mission and at the same time alerted artillery batteries at Camp Carroll and the Rockpile (175mm guns) for fire missions. With the bombing runs, usually flown by two Grumman A-6 Intruders, carrying 28 500-pound bombs and artillery batteries firing mixed caliber ranging from 4.2-inch mortars to 175mm guns, the FSCC and Air Support Radar Team (ASRT) computed the data so that the initial shells and bombs hit the target at the same time. The Micro Arc Light was a smaller version of the Mini Arc Light using smaller targets and lighter ordnance.

Close Air Support

Despite the dramatic aspects of the Arc Light campaign, the 26th Marines relied heavily on the close air support missions flown by the tactical fighter-bomber aircraft, especially those controlled by ASRT-Bravo from MASS-3. Captain Moyers



Defense Department (Marine Corps) A421997

Two Grumman A-6 Intruders (only the wing tip can be seen of the second aircraft) from Marine Fighter Attack Squadron (All-Weather) 533 return to Chu Lai after a mission. Note that the bomb racks of the first aircraft are empty.

S. Shore II, in *The Battle for Khe Sanh*, noted, "The accuracy of ASRT-3 was phenomenal." The ASRT and its sensitive equipment arrived at Khe Sanh on the evening of 16 January and by 20 January commenced operations. Three days later, it set a new squadron record by controlling the delivery of 210.7 tons of bombs. The team was located in heavily sandbagged underground bunkers behind the Gray Sector of the perimeter. On 24 January, ASRT-Bravo received minor damage to an antenna as a result of an enemy shell fire. Operations were not interrupted.

An Air Force liaison officer believed that the Marine radar operators could safely bring a bombing mission in as close as 50 meters. A Marine from the Khe Sanh FSCC stated in an emergency that "he would have no qualms about calling in an ASRT-B ...TPQ [10] within thirty-five meters of his position. During Niagara II, ASRT-B controlled nearly 5,000 missions." According to the airborne controllers who observed strikes by ASRT-Bravo, it was highly accurate in directing strikes. Captain Richard E. Donaghy, 26th Marines' air officer, said, "I cannot imagine what would have

happened at Khe Sanh had we not had ASRT-B. They were always 'up,' always on target and always innovative."

In addition to its accuracy, the TPQ-10 system was extremely flexible. A strike could be programmed and executed within 10 or 12 minutes utilizing any available aircraft. Most of the missions were at night when it was inefficient and dangerous to conduct dive-bombing strikes. As a matter of routine, two Marine and three Air Force flights were scheduled every hour unless an emergency developed. On 18 February, ASRT-Bravo set a new squadron record for a single 24-hour period by controlling aircraft that delivered 486 tons of ordnance on 105 separate targets.

The basic ingredient of Marine air at Khe Sanh remained the visual close air support missions.* Air Force Captain R. G. Lathrop, a Douglas A-4 Skyhawk pilot, flew several close air support missions at Khe Sanh:

The first thing that caught my eye was how small the

^{*}Marine close air support usually refers to missions where the pilots under the direction of an airborne or ground controller visually obtain and attack the target.

Khe Sanh base was. It looked like a piece of tape, red and torn laid across a small ridge surrounded by taller mountains. I could see . . . the mottled layout of the base which was covered with bunkers, debris of types I could not recognize from my altitude. There were wrecked aircraft on the mat and there were rounds impacting inside the perimeter. From the perimeter outward, there were concentric rings of trenches, blown apart and separated from each other by almost interlocking bomb craters. The trenches went for as far as I could see to the north and west. A bombed out road ran past Khe Sanh to the west, and there was a bombed out French style building along the road just past Khe Sanh on the way to the Laotian border. There were air strikes being conducted by more than one air controller and the impact of bombs could be seen west toward Laos from where I was orbiting.

Along with radar-controlled bombing, close air support missions were launched against pinpoint targets in proximity to friendly troops. This type of air strike was the most responsive to the needs of the ground commanders and the most accurate. There were usually fighter/bombers overhead at Khe Sanh around the clock. During the day, the air around the base was filled with the high-pitched shriek of jet engines: Marine, Navy, and Air Force McDonnell Douglas F-4 Phantom IIs; Marine and Navy A-6 Intruders, A-4 Skyhawks, and Vought F-8 Crusaders; Air Force Republic F-105 Thunderchiefs, North American F-100 Super Sabres, and propeller-driven South Vietnamese Douglas A-1 Skyraiders.

Upon arrival in the sector, the fixed-wing aircraft would report into the Khe Sanh DASC, who in turn would assign the pilots to a Marine or Air Force airborne controller. These controllers came from the Air Force's 20th Tactical Air Support Squadron or from Marine Headquarters and Maintenance Squadron 36 and VMO-6. At least five pilots flying either Cessna O-1E "Birddogs" or Bell UH-1 Iroquois (or Hueys) remained overhead during the day in radio communication with both the ground and air. Once in visual and radio contact with the attack aircraft, the controller would make a "marking run," where they fired either a smoke rocket or dropped a colored smoke grenade upon the target. Given the correct headings by the airborne controller and possibly

AN TPQ-10 Radar



The Air Support Radar Team-Bravo (ASRT-B) used the AN TPQ-10 radar to guide aircraft to their target. The radar emitted a pencil-shaped beam that detected and locked on to the aircraft. Using target coordinates provided by the Fire Support Coordination Center (FSCC), the controller programmed the enemy position, ballistic characteristics of the bombs, current wind, and other pertinent data into a computer, which was connected to the radar. The computer also received inputs from the radar and, in turn, provided

correction in airspeed, altitude, and heading, which the operator passed on to the pilot. The controller closely monitored the set and, at a predetermined release point, called a "Mark" to the pilot who "pickled" (or dropped) his bombs.





Defense Department (Marine Corps)

A fully loaded Douglas A-4A Skyhawk from VMA-211 is located at the Chu Lai airstrip. The small, maneuverable Skyhawk could carry a variety of ordnance and a payload of nearly 8,000 pounds.

after a few "dummy" passes, the jets would then strike the enemy positions. In the meantime, the controller would be in contact with the ground and make any necessary adjustments in their instructions to the attack pilots. Once the attack aircraft released the ordnance, the air controller made an assessment of the strike and radioed the results to the fixed-wing pilots.

Aerial Lifeline

The North Vietnamese recognized the importance and vulnerability of the Route 9 supply route. They commenced ambushing convoys, and by the end of August 1967, nothing ventured beyond Ca Lu. Khe Sanh had to be supplied by air. The first problem faced by an inbound aircrew was to find the base. Just off the east end of the runway, the ground dropped off sharply into a gorge more than 1,000 feet deep.

The wind channeled warm, moist air from the coast into the gorge, producing the right conditions for thick, heavy banks of fog, which spilled onto the plateau to obscure the combat base and the surrounding area. Before the siege began, the structures at Khe Sanh showed up vividly on aircraft radar, allowing pilots to "see" through the fog. However, once the North Vietnamese started shelling the base, the Marines went underground and leveled the above-ground structures, resulting in a poor radar return.

A detachment from Marine Air Traffic Control Unit 62, Marine Aircraft Group 36 (MAG-36), operated ground control approach (GCA) radar from the airstrip to guide aircraft, but enemy fire knocked it out on 19 February. An ASRT TPQ radar, which normally controlled bombing, was pressed into service. Lieutenant Colonel Richard E. Carey, 1st MAW staff, said the radar "proved to be invaluable in



National Naval Aviation Museum, NNAM.1996.253.2810

A Douglas A-1 Skyraider aircraft, nicknamed "Spad," after the French World War I fighter.

multiple roles. We utilized it in conjunction with aerial delivery . . . for supplementary positioning of A-6 [aircraft] . . . strikes which we conducted when the Arc Lights were not available, and we used it for Special Close Air Support on the hill positions."

The aircrews also faced a formidable array of North Vietnamese antiaircraft weapons. The enemy cleverly concealed heavy machine guns and some 37mm antiaircraft guns along the approaches to the runway and invariably engaged aircraft on landing and takeoffs. Even when the supply planes approached the field in dense fog under radar control, the NVA gunners fired away "in the dark," so to speak, presumably firing at the sound of the engines. Fifty-three airlift aircraft were hit by ground fire, 18 extensively damaged, and 3 Fairchild C-123 Providers were destroyed. Several aircraft were hit on GCA final and completely in the "soup." For

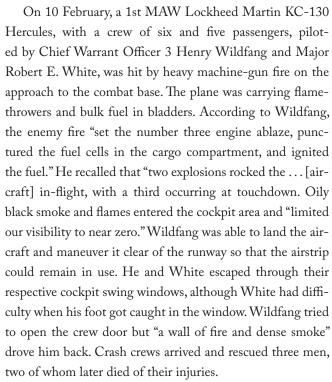
an aircraft loaded with several tons of fuel or ammunition, a single hit could be disastrous.

A standard landing approach toward a runway consisted of a constant, controlled descent at a shallow angle, but the surrounding hills and risk of enemy fire forced the crews to keep their large, comparatively unwieldy craft—C-130s, C-123s, and De Havilland C-7 Caribous—at a much higher level for longer to stay out of range of small-arms weapons and present a smaller target to the larger-caliber weapons. Then, as the aircraft approached the end of the runway, the pilot would drop the nose and put the aircraft into a steep dive, levelling out only at the very last moment. From here, the pilot could either land or make a very low-level pass along the runway at an altitude of about five feet, dropping the supplies out of the open rear cargo doors along the way. The pilot would then pull up sharply at the far end of the runway and execute a steep climb out of the valley, helped by the fact that the plane was now much lighter, having deposited its load.

^{*}In other words, in trouble or in a bad situation.

Skyraider

Then-Captain Richard Camp recalls, "I watched a Skyraider on one of the first days of the siege. The pilot lined up on the target and started his bombing run. I could hear the NVA 12.7mm anti-aircraft guns chattering away. The plane continued to dive and instead of pulling out after releasing its bombs, it plowed into the ground and exploded in a huge fireball. Needless to say I was flabbergasted. Either the pilot was hit by ground fire or got target fixated. In any event, he did not survive the crash."



When an aircraft safely touched down, the North Vietnamese immediately fired on the runway with everything they had, often damaging the plane or causing casualties among the exposed personnel gathered to service or board it. Every moment on the ground was fraught with danger. Pilots soon developed the technique of "speed offloading" for cargo, in which the plane continued to taxi after landing and



Defense Department (Air Force)



Defense Department (Marine Corps)

Top: Fairchild C-123 Provider transport at the National Museum of the United States Air Force.

Bottom: An Air Force Fairchild C-123K Provider transport brings in supplies for the Marines at Khe Sanh. This version of the Provider was equipped with auxiliary jet engines and could land, unload, and take off in as little as three minutes.

the cargo simply rolled out the back. This reduced offloading time from the 10 minutes required with a forklift to less than 30 seconds. The Fairchild C-123K Providers, equipped with auxiliary jet engines, could land, offload, take on passengers, turn around, and lift off again in as little as three minutes. One unknown pilot in the Air Force's 834th Air Division described it as "the longest three minutes on earth."



Photo courtesy of David Douglas Duncan

Marines on the ground stand back and watch as the Lockheed Martin KC-130, piloted by CWO-3 Henry Wildfang and Maj Robert E. White, burns on the Khe Sanh runway after enemy fire set ablaze the cargo of flamethrowers and bulk fuel.

The workhorses of the fixed-wing air delivery effort were the Lockheed C-130 (or KC-130) Hercules, the C-123K Provider, and the C-7 Caribou, with cargo capacities of 15 tons, 5 tons, and 3 tons, respectively. Marine Aerial Refueler Transport Squadron 152 (VMGR-152) provided the KC-130s while the Air Force flew all three types of transports. While the C-130 had the obvious advantage of greater carrying capacity, the smaller aircraft could land on shorter spaces of open runway, spend less time on the ground, and present a smaller target on the ground as well as in the air.

The day following the Marine KC-130 loss, a North Vietnamese 122mm rocket exploded 15 feet from an Air Force C-130 that was offloading troops, killing one and wounding four. Fragments damaged the tail section and the aircraft could not fly until repaired. On 12 February, enemy gunners hit it again. The aircraft was finally repaired that night and the next morning took off, sporting 242 new holes in the airframe. At this point, General Momyer, Seventh Air Force, ordered the field closed to Air Force C-130 flights. Ten days later, III MAF followed suit.

The C-130 prohibition meant that the resupply needs of the garrison could not be met by the C-123 and C-7 aircraft. Logisticians estimated that Khe Sanh consumed, on average, 125.6 tons of supplies per day. The destruction of ASP-1 on 21 January drove the daily requirement to 235 tons. To maintain this amount, other methods of resupply were used.



Photo courtesy of David Douglas Duncan

A rescue team chief stands in exhaustion, looking at the foam-covered wreckage of the aircraft. Eight of the 11 persons on board the aircraft died in the crash and resulting fire.

Container Drop System

The container delivery system, or parachute drop method, delivered the most cargo at Khe Sanh. A drop zone 500 by 300 meters was established outside the combat base perimeter, near the 1st Battalion, 9th Marines, and in front of the Red Sector defense perimeter. Lieutenant Colonel John F. Mitchell, from 1st Battalion, 9th Marines, recalled that the drop zone was a "no-man's land from the valley floor west of Khe Sanh and north/northwest of . . . [the combat base]." Company C, supported by Company A, 1st Battalion, 9th Marines, was assigned the dangerous recovery mission. The men were subjected to sniper fire and an occasional ambush. Typically, five or six planes made drops during the morning, releasing their loads at intervals of about 25 minutes each to allow the cargo to be picked up. The airdrops resumed in the afternoon until halted before darkness. Colonel Mitchell believed his men recovered 95 percent of the supplies.

North Vietnamese antiaircraft fire was a constant threat throughout the run-in and during the drop itself. Marines on



Defense Department photo

The air remained Khe Sanh's lifeline to the outside. Here, a Lockheed C-130 Hercules parachutes supplies to the defenders. Approximately 8,120 tons of supplies arrived by parachute or extraction methods during the period of the siege, compared with about half as much landed and unloaded.

the perimeter could hear the enemy machine guns fire at the aircraft, many of which were hit by the fire, but none were shot down. Low clouds and low visibility in an area of high terrain made the drop mission even more hazardous.

The parachute drop technique called for close air-ground coordination. The Marine Air Traffic Control Unit at Khe Sanh guided the C-130 pilots to the drop zone by lining them up with the long axis of the runway. When the aircraft passed a certain point over the eastern threshold of the field, the controller called, "Ready, ready, mark." At "mark," the pilot pushed a stopwatch, activated his Doppler navigation system, turned to the predetermined run in heading, and maintained an altitude of between 500 and 600 feet. The Doppler device indicated any deviation from the desired track to the drop zone. The release point was calculated by using the stopwatch—20 to 26 seconds from "mark," depending on the winds. At the computed release point, the pilot pulled the C-130 into an eight-degree up altitude and applied full power. The 16 pallets, containing 15 tons of supplies, moved backward on floor rollers and slid from the rear of the plane. A large cargo parachute carried the one-ton bundle to the ground.



Defense Department photo

An Air Force C-130 cargo hold just after parachuting supplies to the combat base.

Under visual flight rules, the average computed error for the drops was only 95 meters. Even when these missions were executed completely under instrument flight rules (IFR), the average distance that the bundles landed from the intended impact point was only 133 meters—well inside the drop zone. On a few occasions, however, the parachute bundles missed the zone and drifted far enough away from the base to preclude a safe recovery. In those rare instances, friendly artillery and air strikes were brought to bear on the wayward containers to keep them from falling into enemy hands. One load fell within the combat base, and five men were killed by the heavily laden pallets. During the siege, Air Force C-130 crews conducted a total of 496 parachute drops, totaling more than 8,000 tons of supplies at Khe Sanh.

Ground Proximity Extraction System

With the ground proximity extraction system (GPES), load-masters positioned palletized cargo on rollers inside the aircraft with a hook attached to the pallet in such a manner that it would hang down like the tailhook of a carrier plane. To drop the cargo, the pilot made a low pass over the drop zone trailing the hook and engaged an arresting cable, much like a plane making a carrier landing. When the hook engaged the cable, the pallets were jerked out of the rear hatch and came to a dead stop on the runway. GPES only had limited use, not because of any fault of the system but rather because of faulty installation of the arresting gear. The Marine installers were repeatedly forced to seek cover from enemy mortar fire, and as a result, they failed to anchor the arresting apparatus



Defense Department photo

Supplies for the embattled Marines at the base. Marines on the ground at Khe Sanh watch as the supplies come floating down. Several collapsed parachutes can be seen in the background.

properly. In the first attempt, the Air Force C-130 ripped the arresting cable out of the ground. After the cable was repaired, other efforts were more successful. In one instance, a pallet of 30 dozen eggs was extracted "without a single eggshell being cracked." Another source allowed that only two of the eggs were broken. In all, 15 GPES deliveries were made during the siege.

Low Altitude Parachute Extraction System

For a low altitude parachute extraction system (LAPES) delivery, the loadmasters prepared the cargo in much the same manner as the GPES, except that, instead of attaching a hook to the pallet, they attached a parachute. The pilot flew over the runway at an altitude of five feet and fired a small explosive charge that cut a retraining cable and allowed the parachute to deploy out of the rear cargo hatch. The parachute pulled the palletized cargo out of the aircraft to drop the few feet to the ground. LAPES was extremely accurate,

with some crews able to place their cargo within a 25-meter square. There was one problem with the system—the platforms would slide for some distance until the extraction parachute brought them to a halt. On 21 February, a C-130 inadvertently struck the ground, tearing off the airplane's rear ramp and causing the load to extract early and break apart. The careening cargo killed one Marine and injured another. In mid-March, an extraction parachute separated from the load, allowing the platform to go wild, smashing into a bunker and killing the Marine inside. LAPES also caused some damage to the runway, the result of repeated pounding by nine-ton loads moving at more than 100 knots, slamming down from five feet and skidding along the strip. Altogether, there were 52 LAPES missions.

Near the end of February, the Air Force resumed C-130 landings. A few days later, on 1 March, North Vietnamese fire hit and destroyed a C-123 attempting to take off, causing General Momyer to end the experiment and forbid



Defense Department photo

An Air Force C-130 after being hit by North Vietnamese shell fire. The three men shown are fleeing the damaged aircraft. One is wounded.

C-130 landings once again. Enemy gunners continued to take a toll, however. On 5 March, they hit a C-123 caught on the ground while changing a flat tire, wrecking the transport completely. Only a day later, 49 men died when another C-123 fell to antiaircraft fire while approaching Khe Sanh to land. In addition to the three destroyed C-123 aircraft, 26 Air Force transports (18 C-130s and 8 C-123s) received battle damage during the siege.

Despite the many problems and risks encountered, both the Air Force and Marine transport aircraft kept the base supplied when they were the only means available to do so. The Air Force aircraft delivered more than 12,000 tons of supplies to the garrison, with two-thirds of the amount by parachute, delivered by either LAPES or GPES. From the period 5 January through 10 April 1968, Marine fixed-wing transports, mostly Lockheed Martin KC-130 Hercules from VMGR-152, hauled 1,904 tons into Khe Sanh and carried 832 passengers.

Super Gaggle

While fixed-wing aircraft largely provided for the needs of the units located within the Khe Sanh base itself, the Marines on the isolated hill posts depended on Marine helicopters for everything from ammunition to water and casualty evacuation. The 1st MAW mounted a monumental helicopter effort using aircraft from both helicopter groups, MAG-16 and MAG-36. This massive helicopter lift also resulted in new techniques involving close coordination between Marine fixed-wing and rotary aircraft as well as with supporting artillery fire.

Helicopter flights to the hills were at least as dangerous as the C-130 runs to the combat base. The helicopters were exposed to small-arms fire from hundreds of North Vietnamese positions in proximity to the Marines' lines as well as to mortar fire while in the landing zone or hovering above it. The enemy quickly learned that the Marines ignited smoke grenades to mark their landing zones when helicopters were

inbound. As a result, mortar fire almost always greeted the resupply aircraft and harassed the Marines detailed to recover the supplies from the landing zone. "The weather was a primary consideration during this period," HMM-262 command chronology noted. "Early in the evening the fog would roll in and the visibility and ceiling would remain zero until late the following morning." The fog and low-lying clouds sometimes dipped down to enshroud the peaks of the higher hills, even when the combat base remained clear.

The Marines on the outposts attempted to alleviate the problems for the aviators. On Hill 881 South, Captain Dabney always tried to obtain needed fire support from external sources, rather than from his own mortars and howitzers. In this manner, he conserved his own ammunition. He tried to confuse the enemy by setting off numerous different-colored smoke grenades and then told the pilots which color smoke marked the correct landing zone.

The Marine helicopters brought supplies to the hill positions directly from Dong Ha, rather than from the combat base itself. This reduced the number of times cargo handlers had to package and stage the supplies, as well as the amount of time the aircraft had to remain airborne in the hazardous environment around Khe Sanh. This system was not without problems, however. One battalion commander complained that priority requests required up to 5 days for delivery, while routine resupply took 10 days. Further, carefully assembled loads, packaged to fulfill specific requests, sometimes arrived at the wrong position.

By mid-February, with the enemy shooting down three helicopters attempting to reach the hill outposts on a single day, Marine commanders realized that they had to take steps to remedy the situation. Lieutenant General Richard Carey noted that "it became apparent that we had to do something fast . . . Bill [Lieutenant Colonel William J. White] and I suggested that we could come up with an answer. I was the considered authority on the fixed-wing participation and Bill provided the helicopter expertise. When all the details were sorted out I suggested the name super gaggle as that is a favorite fighter pilot term meaning, 'perceived confusion of the first order'."

The plan was to establish a small air task consisting of 8 to 16 resupply CH-46 helicopters, about a dozen A-4 Skyhawks and four Huey gunships to fly cover, a Marine KC-130 to refuel the aircraft, and a TA-4F Skyhawk with a TAC(A) in the backseat to orchestrate the entire affair. The Khe Sanh DASC and FSCC ensured the coordination of air and ground fires. In the first Super Gaggle mission flown on 24 February, under cover of suppressive fixed-wing and artillery support, each of eight CH-46s successfully dropped off a 3,000-pound external load in less than five minutes when they could have been taken under fire. One helicopter took a hit but landed safely at the Khe Sanh airstrip.

In a typical Super Gaggle mission, a TA-4 would fly to Khe Sanh on weather reconnaissance. When the TA-4 reported favorable conditions, the A-4s launched from Chu Lai, en route to Khe Sanh, and the CH-46 helicopters took off from Quang Tri, en route to Dong Ha where prestaged supplies waited. After picking up the supplies and carrying them externally underneath in specially designed cargo slings, the helicopters began the short trip to Khe Sanh, flying on instruments and then letting down through a hole in the cloud cover. Major John A. Chancey, pilot with HMM-364, noted in his diary, "worst weather in the drop zone yet encountered . . . was [instrument flight rules] IFR all the way and had to come through a hole south west of the hill, go below the ridge line and scoot up in to the zone just over the ground and in the clouds the last 200–300 yards."

Just before the helicopters arrived, four A-4s struck enemy positions with napalm and two others saturated antiaircraft positions with CS gas carried in spray tanks. About 30 seconds prior to the helicopters' final approach to the designated hills, two A-4s laid a smoke screen on both sides of the planned flight path. As the helicopters flew in behind the smoke, four more A-4s carrying bombs, rockets, and 20mm cannons suppressed known and suspected North Vietnamese gun positions. It often appeared that planes were everywhere. Corporal Thomas J. Miller, a crew chief for HMM-364 remembered, "[We] had just pickled [dropping the external load] and I looked out the side door to see an A-4 about 50 feet outside our rotor tips. The fixed wing has his gear down, flaps down, and speed brakes deployed. I yelled at the pilot, 'do not turn right'." Another crewman recalled, "We broke out on the bottom of the clouds just as an F-4 roared

^{*}Maj Chancey was awarded a Distinguished Flying Cross for his actions during these resupply missions.



Defense Department A192747

A CH-46 Sea Knight helicopter delivers a sling load of supplies to a Marine fire support base in Vietnam.

beneath our Huey....I swear I could see the F-4 driver writing on his knee board!"

The Hueys followed closely to pick up any downed crews and a KC-130 Hercules orbited high overhead to refuel any A-4s in need. At times, the entire gaggle operated in the hills where some peaks reached 3,000 feet with less than 1,500 feet ceilings, and occasionally the helicopters took off and landed at Dong Ha with less than 400-foot clearances. "What a gaggle!" Major Chancey exclaimed, "But no mid-air—don't tell me how we missed . . . I had a badly swinging load—sheer terror . . . what a way to make a living!!"

Captain Dabney recalled:

On the days when a Super Gaggle was due, we'd register all of our mortars (we had eight-two 8mm and six 60mm) on known or suspected AA [antiaircraft]

sites and stand by. At about 10 minutes prior to Super Gaggle, we'd get the word and fire all mortars with white phosphorus (WP) rounds. Four A-4s would then appear—two on either side of the hill—and attack mortar marked sites with Zuni rockets. Two more would then drop delay cluster bomb units and high-drag 250-pound bombs in valleys north and south of the hill. Two or more would then drop napalm along both sides of the hill—about 75 to 100 meters out to discourage NVAs who would lie on their backs and fire up into bellies of birds with their AK-47s. It got hot when napalm hit, and we prayed a lot, but they never missed. We'd also have each Marine in the trench line (about 200) heave a grenade as far as he could down the hill in front of him to clear or discourage the same



Defense Department (Marine Corps)

Smoke screen being deployed by an A-4 aircraft during a Super Gaggle mission on Hill 881 South.

NVA. Finally, our mortars would fire four to five more rounds of WP at AA sites they were registered on (to blind them in case Zunis hadn't gotten them), and then all Marines on the hill would take cover. As we did so, two more A-4s would lay smoke on either side of the hill. Super Gaggle prep was an exciting show, and we'd sometimes have trouble keeping troops, especially replacements new to the hill, under cover. It was dramatic entertainment, but given the inevitability of incoming mortars, it was mortally dangerous to forsake cover to watch.

Captain Dabney explained that CH-46 helicopters carrying supplies in slings dangling below the aircraft were the key to the resupply effort:

As soon as smoke was laid, flight crews from HMM-364 would appear with external loads brought from Dong Ha, 10 birds in two strings of 5 just above the smoke. They'd fly parallel to the hill, usually to the

south because wind was usually from the north. They appeared to us to do a "right flank, march," come in to the five zones on the hill, release their loads of supplies (such as ammunition, food, and water) and beat feet. A second echelon of five would do likewise, but it was dicier, because by then smoke from the north would be blowing over the hill and visibility would be severely restricted. Because all zones were on a line only 200 meters long, the birds were damn close together. How they avoided colliding, I don't know, but they did. One bird in the second echelon would be designated to land in a zone we'd have ready, drop off mail and replacement Marines, and pick up any casualties. The NVA would always fire mortars, but their forward observers were blinded by smoke, so their fire was generally ineffective except when an occasional round would land in some trooper's hole. Nothing we could do about that, except pray. AA fire was constant and sometimes heavy, but, like mortars, gunners were firing blind through



Defense Department A422352

A CH-46 Sea Knight helicopter provides a net of supplies to Marine ground units atop a rugged combat support base in the northernmost sector of South Vietnam.

smoke. They'd occasionally get lucky and wing a bird, but they never brought one down on the hill during Super Gaggle.

Using the Super Gaggle technique, groups of helicopters could resupply the hills four times per day with little danger of losses. Indeed, only two CH-46s fell to enemy fire during the Super Gaggle missions, and in both cases, the Hueys picked up the crews immediately. During the month of March, the helicopters delivered about 80,000 pounds of cargo per day to the hill outposts. Marine helicopters flew more than 9,000 sorties, including the Super Gaggle flights, and carried 3,300 tons of supplies and more than 10,600 passengers to the Khe Sanh defenders.

Tightening the Ring: Hill 861 Alpha

With Echo Company, Khe Sanh will be held.

~ Captain Earle G. Breeding

Captain Earle G. Breeding's Company E, 2d Battalion, 26th Marines, was assigned to occupy Hill 861 Alpha, located approximately four kilometers northwest of the combat base and 500 meters northeast of Hill 861 South. The hilltop was important because it blocked direct observation between Company K, 3d Battalion, on Hill 861 and the 2d Battalion's position on Hill 558. This stretch of ridgeline prevented the two units from supporting each other by fire and created a corridor through which the North Vietnamese could maneuver to flank either Marine outpost. Company E was attached to the 3d Battalion for the duration of the siege.

The hill was only a mile southwest of Hill 558, but the company had to get there the hard way—shank's mare (i.e., to walk) through thick undergrowth. "I remember saying to myself that I couldn't believe that any type of grass could grow this high," Lance Corporal Larry E. Jackson recalled. "It was about six to seven feet high. Each blade would cut you as you walked across it. . . . I would have to take my M-16 rifle and put it in front of me and lean forward with all my weight to open a trail." Company E set out shortly after first light on 22 January and were quickly bogged down. The men were weighed down with weapons, equipment, and a 10-pound protective flak jacket that trapped body heat. The temperature was in the high 70s, although the tropical humidity made it seem much hotter. Water soon became a problem as the hot, sweaty, parched Marines emptied their canteens. Several men became heat casualties, which further slowed the column down. Night was falling as the exhausted Marines reached the summit of the hill.

The next morning, the men started to dig foxholes and string the barbed wire that had been brought in by helicopter. The defenses were gradually expanded until a trench system completely encircled the hill. Claymore mines were added and artillery targets were preregistered. Captain Breeding instituted an alert system that put one-half the company on alert throughout the night.

On the evening of 3–4 February, sensors northwest of Hill 881 South detected the movement of 1,500–2,000 people. Captain Mirza Baig, 26th Marines Target Intelligence officer, initially believed the movement to be a North Vietnamese resupply effort and passed the information to fire support units for their attack. On the following night, however, the massed movement continued and further study



Photo courtesy of David Douglas Duncan

Capt Earle G. Breeding, commander of Company E, 2d Battalion, 26th Marines, with cigar in his right hand and radio in his left, reports the successful counterattack of his company against the enemy on Hill 861A.

caused Baig to change his opinion. He now thought the sensors had detected a North Vietnamese regiment in an attack formation. The 1st Battalion, 13th Marines, joined by four batteries of 175mm guns at Camp Carrol, pounded the suspected NVA formation. Sensors in the area transmitted the explosion of impacting shells, as well as the voices of hundreds of panic-stricken men running to escape the deadly barrage.

Company E watched the scene from Hill 861 Alpha. Unbeknownst to them, one or possibly two North Vietnamese battalions from the 325th Division split off from the larger unit being punished by the artillery barrage and readied an assault on Hill 861 Alpha. At 0305 on 4 February, Company E was struck by a tremendous 82mm mortar barrage. This was followed up by volleys of RPG fire, which knocked out several Marine crew-served weapons and shielded the

advance of the NVA sappers and assault troops. The perimeter wire was quickly breached. "They came up the northern slope," Captain Breeding explained. "The only approach they had. They had all the cover in the world between the dark of night—it was absolutely pitch black—and all that high elephant grass."

Second Lieutenant Donald E. Shanley's 1st Platoon bore the brunt of the attack. Private First Class Michael DeLaney said, "They hit the 1st Platoon because it was stretched across a finger that was lower than the rest of the hilltop, easier to get to." The crew-served weapons bunkers were knocked out with the first rounds. "The NVA knew where they all were before they started the attack," DeLaney added. Captain Breeding thought the enemy had "zeroed their mortars in on us the night before, but I hadn't realized what they had done."



Defense Department A801357

U.S. Army artillery from 3d Section, Battery C, 2d Battalion, 94th Regiment, at Camp J. J. Carroll, firing 175mm guns as support missions for Marines at Khe Sanh.

The North Vietnamese penetrated the 1st Platoon's position, forcing the Marines back to the company command post. "They didn't break through Shanley as much as they absorbed through him," and Breeding explained that "there were 1st Platoon Marines down there manning their positions through the fight." Just the same, Shanley's platoon lost more than one-half its men in the first moments of the fight.

The company command post was located halfway back along the hill from the 1st Platoon area and a little to the east of the military crest, near a big tree. The tree also sheltered the company aid station that had been set up in a huge bomb crater. Breeding called for fire support. Friendly artillery rolled back and forth over the slope upon which the NVA were attacking. Captain Baig later speculated that the heavy and accurate artillery fire (almost 2,000 rounds from the 1st Battalion, 13th Marines, alone) on and behind the

assaulting NVA had prevented their reserves from joining the attack. Companies I and K also supported Company E with 81mm and 60mm mortar fire, which helped to disperse the massing enemy. Under the control of ASRT-Bravo, flight after flight of fixed-wing aircraft pummeled the attacking North Vietnamese.

The fighting was close and personal, sometimes hand-to-hand. "It was just like a World War II movie," Breeding said. "Knife-fighting, bayonet fighting, hitting people on the nose with your fist and all the rest of that." Shortly after 0500, Lieutenant Shanley led his men in a bold counterattack that restored the lines after hand-to-hand fighting. The North Vietnamese who survived the counterattack fled the hilltop, then regrouped and attacked again, but the second effort was stopped cold. By 0630, Company E had beaten back the attack.



Photo courtesy of David Douglas Duncan

Two Marines of Company E repair the unit's barbed wire after its successful defense of Hill 861A. The body of one of the attackers is in the foreground.

Private First Class DeLaney said, "There were bodies everywhere.... I had never seen young dead people... their skin was gray and rubbery; they didn't look human anymore." An early morning fog blanketed the hilltop and there were a number of seriously wounded men that needed to be evacuated. Lance Corporal William Maves stood in the middle of the tiny landing zone with a red star cluster in his hand. As a medevac helicopter eased down through the fog, Maves fired the signal flare that the pilot used to vector in on the landing zone. The casualties were loaded and he took off. Another helicopter followed and evacuated the remaining men.

The fight for Hill 861 Alpha cost Company E 7 dead and 35 wounded Marines. A sweep of the area at dawn revealed more than 100 enemy dead on the slopes of the hill and within the perimeter.

Lang Vei Special Forces Camp

Lang Vei was a heavily fortified position on Route 9 about two kilometers from the Laotian border. Its primary mission was border surveillance and area pacification. The camp was defended by fewer than 500, including 24 soldiers of Detachment A-101, Company C, 5th Special Forces Group; 14 Vietnamese Special Forces; four CIDG companies of Bru Montagnards, including an attached mobile strike (MIKE) force company; and six interpreters. The camp was well armed with one 4.2-inch mortar, seven 81mm mortars, and 16 60mm mortars; two 10mm and four 57mm recoilless rifles; two .50-caliber and 39 .30-caliber machine guns; plus 100 4.2-inch light antiarmor weapons (LAAWs). On 6–11 January, a forward observer from 1st Battalion, 13th Marines, registered defensive artillery fires for the camp

In late January, a Special Forces reconnaissance patrol reported that it had discovered the telltale tracks of armored vehicles and locations where the NVA had marked off fording sites just across the Laotian border from Lang Vei. The patrol's findings were forwarded but disregarded with the comment, "You're wrong, the tracks are from bulldozers." Army Colonel Jonathan F. Ladd, 5th Special Forces Group, tried to get antitank mines—"We could hear the tanks moving around"—but USMACV refused to believe there was a tank threat and no mines were supplied. On 23 January, the Laotian outpost at Huoi San, which was held by the

Royal Laotian Army's 33d Infantry Battalion (BV-33 or Elephant Battalion) was overrun by the 1st Battalion, 24th Regiment, 304th Division, supported by seven PT-76 tanks from the 198th Tank Battalion.* An Air Force FAC who was trying to provide support radioed, "Just before dawn, Elephant (BV-33) reported that they were being overrun. I could hear the machine guns and mortars in the background as he talked rather sadly over the radio."

The panicked Laotian survivors and their wives and children retreated to Lang Vei. The Laotian commander reported that the North Vietnamese attackers had been supported by tanks, but his report was met with skepticism by higher headquarters primarily because there was no visual sighting of tanks—"Tracks had been sighted they could have been made by vehicles other than tanks." At the same time, sensors detected considerable personnel and vehicle movement toward Lang Vei, while patrols and outposts continued to report heavy enemy activity in the area. On 30 January, Private Luong Dinh Du of the 8th Battalion, 66th Regiment, 304th Division, surrendered and reported that the base was going to be attacked.

On the day that Du surrendered, a Special Forces patrol found an underwater road in the Sepone River. The road was built so that it was covered with just enough water to conceal it from air observation. Army Specialist Fourth Class John A. Young, accompanying a Laotian patrol, was ambushed near Khe Sanh village and captured. On 31 January, a MIKE force patrol near Khe Sanh surprised an NVA battalion and, together with air strikes, killed an estimated 154 enemy soldiers. Sergeant Turner, who served at Lang Vei from September 1966 to June 1967 said, "We were just hanging out there. There was no support, especially in rainy weather. You couldn't even get a helicopter in. I was surprised that the North Vietnamese didn't try to take us out long before they did. We always had an escape and evasion plan to get out of there if we were attacked."

North Vietnamese Plan of Attack

North Vietnamese forces for the attack on Lang Vei consisted of the *24th Regiment* (minus one battalion) reinforced by the *3d Battalion*, *325th Division*; the *198th Tank Battalion*,

consisting of 16 PT-76 tanks; 4th and 40th Sapper Companies; one 14.5mm antiaircraft company; and one flamethrower platoon.

The plan of attack was for the 3d Battalion with five tanks to attack from the south and eliminate the command head-quarters and the positions of the 104 and 101 CIDG Companies. The 5th Battalion, 24th Regiment, with two sapper squads and six tanks was to attack from the west and eliminate the 102 and 103 CIDG Companies and to assist with the elimination of the command headquarters. The 7th Company, 24th Regiment, and two tanks were to attack the outer outpost, while the 4th Battalion, 24th Regiment, using the 2d and 3d Companies, was to attack from the northeast into the positions of the 101st CIDG Company.

"I've got a tank sitting on top of my bunker!"

At 0030 on 7 February, North Vietnamese infantrymen, led by 12 PT-76 amphibious tanks, crashed through the perimeter's barbed wire and rolled into the camp. The defenders fought back fiercely, destroying a number of the tanks with 106mm recoilless rifle fire, but it was not enough to stop the assault. The enemy overwhelmed Detachment 101-A and the Bru CIDG companies.

Eight Special Forces survivors, six of them wounded, managed to barricade themselves in the command post bunker, an underground concrete reinforced structure. They held out despite the efforts of the North Vietnamese. An Air Force forward controller described the situation: "Our advisors were trapped in the command post bunker in the middle of the camp, and the NVA were swarming all over it, throwing satchel charges and smoke bombs down the [air] vents." The trapped Special Forces called in fire support and airstrikes. The 1st Battalion, 13th Marines, responded with 19 missions, expending 567 rounds, including 68 selected ammunition (firecracker) projectiles, while overhead Marine and Air Force attack aircraft tried to drop their ordnance on enemy concentrations in and around the camp. The Special Forces requested that the 26th Marines execute the previously arranged contingency plan. Colonel Lownds refused, reporting that the combat base itself was even then being heavily shelled and that he expected an enemy assault against the airstrip at any time. Further, the difficulty of moving through the rough terrain at night with enemy tanks along

^{*}The 15-ton PT-76 tank is a Russian amphibious light tank mounting a 76mm D-56T rifled tank gun and a turret-mounted 7.62mm machine gun.

Route 9 made reinforcement, in the words of one Marine staff officer, "suicidal."

First Lieutenant Fred McGrath, from Bravo Battery, 1st Battalion, 13th Marines, noted, "The last transmission was to the effect, 'Oh hell, they have tanks. They're right on top of us'." There was a rushing sound and the Lang Vei radio went silent. The defenders were largely dependent upon their own efforts. Individually and sometimes in groups, the Special Forces and Bru CIDG troops broke out of the camp and made their way to Lang Vei village where the Laotian BV-33 Battalion still remained. Special Forces personnel with the battalion in the old camp attempted to encourage and plead with the Laotians to assist their comrades in the new camp, but the results were only a few feeble and begrudging counterattacks. After much discussion and some recriminations, General Westmoreland ordered the Marines to conduct a helicopter evacuation of the camp.

Shortly after 1700 on 7 February, under strong air cover from fixed-wing aircraft and helicopter gunships, Marine CH-46s helilifted the relief force from FOB-3 into old Lang Vei. "The 46s went in and received ground fire," Captain Edward Kufledt, from VMO-6, explained, "which we tried to suppress. There was a lot of fire, everybody got hit." A CH-46 copilot, First Lieutenant Charles Crookall said, "It was like a flying circus. I had an A-4 roll in below me and drop napalm—scared the crap out of me—and left a big wall of fire." Kufledt watched the CH-46s go in: "They landed quite a distance from each and were immediately inundated by hundreds and hundreds of Laotians and Vietnamese."

The aircraft were so overloaded that they could not get off the ground. "There were people hanging on the ramp, the wheels, even the VHF antenna," Army Special Forces Staff Sergeant Dennis L. Thompson recalled, continuing that "they were grabbing anything they could get a hold of." Kufledt was astonished, "I heard one of the pilots exclaim, 'this is not working, we're taking off.' I saw people falling off the tramp, off the wheels as the aircraft pulled out of the zone. They took some light hits from the right side. . . . I could see the tracers, so we went in to suppress with our machine guns." Crookall's aircraft was struck. "We took a hit in a hydraulic line, a pinhole leak in the forward rotor area

PT-76 Tanks at Lang Vei

The battle for Lang Vei was the first time North Vietnamese tanks were used in South Vietnam. The tanks came down the Ho Chi Minh Trail to a point on the Xe Pone River, 11



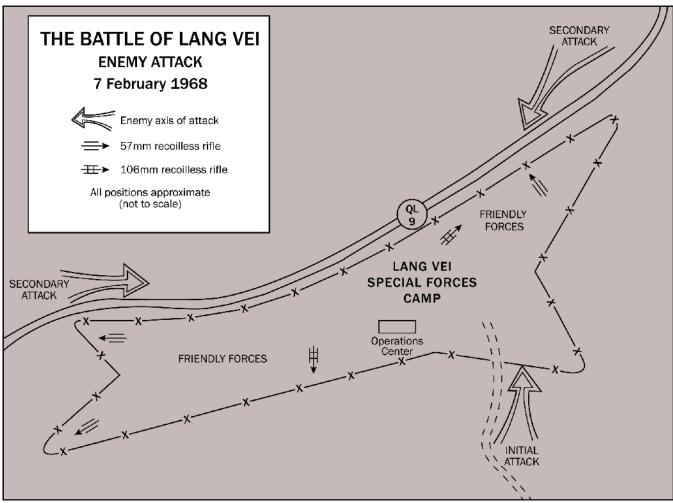
Defense Department (Air Force)
Two PT-76 tanks disabled
on the road leading into
Lang Vei.

kilometers south of the Special Forces camp. The tanks entered the river and swam for a kilometer or two before mounting the west bank and driving overland for another six kilometers. At the Laotian border, they entered the river again and swam the last four kilometers to the Vietnamese village of Lang Troai, a kilometer from Lang Vei, where they staged for the early morning assault.

over the cockpit," he said. "It was not enough to bleed the system but we lost some power and the gates fell off. We got down low, in case we had to set it down." Crookall's helicopter made it back to Khe Sanh. "Our crew chief inspected the troop compartment after we landed and found an incendiary grenade with the pin pulled lodged between the troops seat and the bulkhead, which he carefully deactivated with a piece of wire," Crookall added.

Captain Kufledt's gunship was about half a mile from Khe Sanh when he received a radio call from the Air Force FAC saying there was an American still in the landing zone. Kufledt polled his crew to see if they were up for a rescue attempt. "Let's do it," they replied. "I circled around to the south and asked Covey [FAC's call sign] to use the fixed wing on station to . . . suppress NVA fire," Kufledt said. The bombers pulled off the target. "As we rolled out on final approach," First Lieutenant George E. Rosental, Kufledt's copilot explained, "I saw a file of NVA—10 or 20—in a gully . . . at least a quarter mile away, far enough I thought that we could get in and out before they were a threat." Kufledt started the

^{*}Sgt Thompson was awarded a Silver Star for actions during the defense of Lang Vei.



Department of Defense

approach and explained, "I pulled back on the stick and started to flare. Suddenly the whole world lit up!"

Lieutenant Rosental recalled, "I looked through the chin bubble and saw an NVA directly below me on one knee. He opened fire and stitched us with his AK-47! I was hit with three rounds, one in each leg and one in the arm, which cut an artery. The bullets in the legs felt like someone had hit me with a sledge hammer." Rosental slumped in his seat, semiconscious. The aircraft took hits. "The instrument panel lit up like a Christmas tree," Kufledt said. "Almost all the caution lights were solid yellow. The engine red fire light came on and the engine coughed. I struggled to gain control and abort the landing. I caught a glimpse of my copilot. He was slumped in the seat and I thought he was dead."

Captain Kufledt managed to keep the helicopter airborne. "The helicopter vibrated badly, but stayed in the air,"

he said. The crew chief, Corporal Robert Crutcher, tried to administer first aid. "Rosental was bleeding heavily and in pain but the armored seats kept me from getting to him," Crutcher said. Kufledt was able to fly the badly damaged helicopter to Company C, 3d Medical Battalion, or "Charlie Med," where Rosental was treated, stabilized, and evacuated. The shot-up helicopter—with more than 80 bullet holes—was also evacuated but had to be jettisoned into the jungle when something went wrong during the lift. Captain Kufledt was awarded the Silver Star and Corporal Crutcher received a single mission Air Medal.

The loss of Lang Vei cost 10 Special Forces soldiers killed or missing, along with 5 Vietnamese Special Forces and 5 interpreters. Initially, only 50–70 Montagnards were accounted for, although eventually 9 Vietnamese Special Forces, 117 CIDG strikers, 127 MIKE force troops, and

Reinforcement Controversy

In November, Captain John Raymond's Company A, 1st Battalion, 26th Marines, was directed to find an overland route to Lang Vei, should it be necessary to reinforce the camp. The company avoided well-used trails to reduce the risk of ambush. The straight-line distance was only nine kilometers, but it took the company 19 hours to reach the camp. Major James Stanton, 26th Marines staff officer said, "It is true that we had an agreement to go to the aid of Lang Vei in the event it was threatened with being overrun, but the situation at the combat base deteriorated so quickly and so completely that it should have been obvious to anyone that we could no longer guarantee their security." Major Gary E. Todd reported that Bru refugees "had seen what amounted to an NVA regiment lying in ambush between Khe Sanh Combat Base and Lang Vei that night during the attack." Lieutenant General Cushman said, "There was nothing one could do really, to salvage the situation."

1 interpreter managed to reach safety. Many of the survivors were wounded, including all but one of the Americans. North Vietnamese losses included seven tanks destroyed and an estimated 250 killed in action. Detachment A-101 was awarded the Presidential Unit Citation (Navy) for its heroic defense.

Humanitarian Crisis

Early in the morning of 8 February, Company L, manning positions on the Red Sector adjacent to FOB-3, were surprised to find several thousand Laotian civilians, local Bru tribesmen, and CIDG soldiers lining the road outside the gate begging for admittance and help. The refugees said they were survivors of the battle and had walked all night to reach the base. An aerial observer spotted the long column of refugees: "They were mainly women and children carrying belongings. That sure tore at me. Those poor people just didn't know where to go. They were caught right in the middle—so sad." Many of them were wounded, without food, and exhausted from the trek. They were refused entry to the base and were forced to spend several days on the road without proper medical treatment, food, and water.

The refugee problem was exacerbated by the refusal of the South Vietnamese to evacuate the Montagnards. Many felt that the decision was a reflection of Vietnamese attitudes toward the tribesmen. After a great deal of back and forth, some of the Montagnards were flown out, but most simply walked away, down Route 9 to the east. It soon became obvious that many of them had not reached safety but had been pressed into service by NVA troops. The refugees were observed moving back and forth on the road with NVA soldiers intermingled with them.

Hill 64, Alpha Outpost

Second Lieutenant Terence R. Roach's reinforced 1st Platoon, Company A, 9th Marines, occupied a small, oval-shaped (40 meters by 20 meters) combat outpost on Hill 64, approximately 500 meters west of the battalion perimeter. The hilltop outpost, designated Alpha Outpost, had steep sides, except for the northwest slope. It was a well-prepared position with multiple layers of barbed wire around the perimeter and a network of trenches that linked the platoon's sandbagged bunkers together. The platoon's mission was to serve as an extra measure of security for the battalion through its ability to detect and report enemy activity well ahead of the lines.

Lieutenant Colonel John Mitchell said, "We knew the hill was going to be attacked . . . it was only a matter of time. We could hear the buildup of the NVA via the new acoustic sensors that were strewn around Hill 64, and out in front of our perimeter. . . . I passed the word to Lieutenant Roach to put the Marines on full alert." At 0415 on 8 February, in a heavy fog and near-total darkness, a reinforced battalion from the 101D Regiment, 325C Division, struck the outpost after laying down a heavy and accurate mortar barrage that covered the hilltop for three to four minutes. The North

Disarming the Refugees

A short time after the refugees arrived, a Special Forces officer ordered the Company L Marines, without the knowledge of the company commander, to disarm the strikers. The Marines collected four M60 machine guns, several M79 grenade launchers, and dozens of .30-caliber carbines, which they quickly appropriated for Lima Company's use. The Special Forces officer was outraged to learn of the theft and confronted the Marine company commander, demanding return of the weapons to his custody and accusing the Marines of being thieves. A heated exchange followed, after which the Special Forces officer stalked off without the weapons. Company L gained the use of the weapons, except for the carbines, which were collected and surveyed.

Vietnamese also shelled the combat base and 1st Battalion's position to disrupt Marine artillery support and to prevent friendly reinforcements from reaching the outpost. During the attack, more than 350 mortar and artillery shells fell on the battalion's position.

The North Vietnamese assault troops launched a twopronged attack against the northwestern and southwestern sectors of the perimeter. They blew the barbed wire with Bangalore torpedoes, satchel charges, and even threw canvas on the obstacles to roll over them. They swarmed into the inner perimeter almost immediately. Lieutenant Roach tried to stem the breakthrough almost single-handedly, killing several of the enemy with his rifle and attempting to rally the troops on the perimeter. He died in a hail of automatic weapons fire while trying to rescue a badly wounded Marine. Lieutenant Colonel Mitchell said, "For the most part, it was a fight without any senior platoon leaders (the platoon sergeant and two of three squad leaders were killed) . . . leadership of the platoon was taken over by a corporal, while Marine privates and lance corporals independently engaged in numerous acts of courage to keep the top of the hill in control of the Marines."

The battalion's 81mm mortar platoon and 1st Battalion, 13th Marines, laid down heavy defensive fires to prevent

NVA reinforcements from entering the fight. An Air Force FAC directed several strikes in support: "They [Canasta 403] did a fantastic job of placing their bombs and strafing passes right up the hill toward the outpost." Additional airstrikes were conducted, resulting in 50 enemy killed by air.

About 30 Marine survivors gathered in the southern portion of the trench network and used sandbags to wall off their part of the trench from the enemy. Some of their weapons were damaged or destroyed, ammunition was scarce, and many of the men were wounded. They fought desperate hand-to-hand encounters, sometimes swinging entrenching tools or five-gallon water cans.

One Marine had an extremely close call during the fight but lived to tell about it. On the northern side of the perimeter, Private First Class Michael A. Berry of the 1st Squad was engaged in a furious hand grenade duel with the NVA soldiers, when a ChiCom grenade hit him on top of his helmet and landed at his feet.* Private First Class Barry quickly picked it up and drew back his arm to throw, but the grenade went off in his hand. Had it been an American M26 grenade, the private would undoubtedly have been blown to bits, but the ChiCom grenades frequently produced an uneven frag pattern. In this case, the bulk of the blast went down and away from the Marine's body. The back of Berry's right arm, his back, and right leg peppered with metal fragments, but he did not lose any fingers and continued to function for the rest of the battle.

In another section of the trench line, Lance Corporal Robert L. Wiley had an equally hair-raising experience. Wiley, a shell-shocked victim, lay flat on his back in one of the bunkers, which had been overrun by the enemy. His eardrums had burst, and he was temporarily paralyzed. His glazed eyes were fixed in a corpse-like stare, but the Marine was alive and fully aware of what was going on around him. Thinking that Wiley was dead, the North Vietnamese were only interested in rummaging through his personal effects for souvenirs. One NVA soldier found the Marine's wallet and took out several pictures, including a snapshot of his family gathered around a Christmas tree. After pocketing their booty, the NVA moved on. The relief column rescued Lance Corporal Wiley.

^{*}The term ChiCom refers to grenades made in Communist China.

Shortly after daylight, the commanding officer of Company A, Captain Henry J. M. Radcliffe, led the 2d Platoon in fighting their way to the base of the hill. Radcliffe directed an air strike on the North Vietnamese, then led his Marines in a frontal assault that cleared the enemy off the hill, directly into the 1st Battalion's fire. Companies B and D joined with the 106mm recoilless rifles and a tank in cutting down the retreating enemy troops. By 1100, the battle was over and the charred and blasted outpost was again in Marine hands.

The 1st Platoon's Marines had paid a high price; casualties numbered 24 dead and 27 wounded. More than 150 North Vietnamese littered the hill and many more may have died from wounds. Additionally, the Marines captured much enemy equipment, including 13 machine guns, an indication that the North Vietnamese fled the battlefield in disorder. Although the hill had been recaptured, Colonel Lownds ordered the outpost abandoned.

The Siege

As the North Vietnamese shelling intensified, the Marine defenders were forced to dig an elaborate system of trenches, bunkers, and shelters to defend themselves.

Digging In

Home is where you dig it.

~Unknown Marine, Khe Sanh

Until the North Vietnamese artillery, rocket, and mortar attack on 21 February, most of the base facilities—billeting areas, bunkers, ammunition storage areas, mess facilities were built above ground. Very few installations had been dug in. After the shelling, things changed dramatically the Marines went underground. Khe Sanh was given a high priority for engineering supplies, particularly sandbags, razor barbed wire, barbed wire, and antipersonnel mines. Colonel Lownds ordered that the troops would have overhead cover to protect against at least an 82mm mortar round. It was determined that one strip of runway matting and two or three layers of sandbags would meet the requirement. The difficulty, of course, was to procure enough runway matting. Lance Corporal Ernie Husted remembered, "The Seabees had this funny idea that [runway] matting should be used on the airstrip, so we would trade with them and when that





Photos courtesy of author

Top: Above ground bunker in the 3d Battalion, 26th Marines, area before the start of the siege.

Bottom: Bunker in the 3d Battalion, 26th Marines, area after the siege started.

didn't work, we'd wait till there was shelling and then we would go and steal the matting and use it for our bunkers."

The average bunker usually started as a 2.4-by-2.4-meter dugout with one 15 by 15 centimeter timber inserted in each corner, a strip of runway matting, sandbags, loose dirt, and more sandbags. Some enterprising Marines piled on more loose dirt, then took discarded 105mm casings and drove them into the top of the bunker like nails. Sergeant Glenn Prentice asked, "How do you build something to withstand a rocket round or an artillery round or a mortar round? . . .

Shell Crater

The battalion executive officer, Major Joseph M. Loughran Jr., told the author to look at a shell crater on the main road that ran through the center of the camp. It was an all-weather road the Seabees had constructed from crushed rock. "I remember staring at this huge crater, possibly six feet deep and seven or eight feet wide, thinking how are we going to build anything that will stop one of these. I reported my sighting to Loughran and kiddingly remarked, 'I think we better surrender.' We both laughed. A week later the COC bunker took a direct hit. Fortunately it did not penetrate the roof. No one laughed."

It was like building a fort when you were a kid. We used wooden ammunition boxes for building blocks and fill them with dirt. We had a whole series of supports and sandbags and hollow areas to basically protect against the artillery and rocket and mortar rounds."

First Lieutenant William K. Gay, Company A, 3d Engineer Battalion, was the detachment commander charged with the development of the defenses. When he first arrived in mid-November, the perimeter consisted of a single barrier of triple concertina barbed wire. It was in bad repair and overgrown by elephant grass in some places. Gay's engineers cut the brush away and cleared a trace 150-200 meters wide. More layers of concertina were added, as well as a 10-meter wide swath of tanglefoot wire. Hundreds of claymore mines were emplaced around the perimeter and, finally, crew-served weapons were sighted in to create overlapping bands of steel. Lieutenant Colonel Wilkinson's battalion prepared a devil's brew of gasoline and explosives. They put the mixture in 55-gallon drums and placed them along avenues of approach into the battalion's lines. When detonated, it would spray flaming gasoline on anyone in its path.

During the day, hundreds of Marines dug trenches, bunkers, and individual shelters. Private First Class Bill Hancock described digging in on Hill 558, "Everything on our hill was dug in, our sleeping quarters, out fighting holes, everything was underground and camouflaged. We dug constantly, even tunnels between fighting holes . . . there was nothing above ground on our hill." Master Sergeant James A. Haskins described the 17th Interrogation Translation Team's method of filling sandbags:

Gunnery Sergeant Max Friedlander constructed a table of artillery ammo boxes with six legs and a sand chute. We would pile red, Khe Sanh dirt onto the table and hand a sandbag at the end of the chute; then using a shovel we would push the dirt down the chute into the bag. The whole thing resembled something seen in a mining camp of the late 1800s, but we were soon filling hundreds of sandbags a day.

Within days, a network of trenches extended completely around the combat base. Their zigzag pattern was designed to limit casualties if a round exploded in the trench. Lieutenant Stubbe recalled, "[We] would make what they called 'roll-outs,' which were little cavities in the bottom edge side of the trench that [we] could roll into and still be safe in case a round did land in the trench." The red clay soil made digging easy, but "when it became saturated, it became pea soup, and anything below ground collapsed," Stubbe noted. The men learned to live and work underground. One Marine placed a sign next to his trench: "Home is where you dig it." Despite their efforts, it was virtually impossible to construct a shelter that was thick enough or deep enough to survive a direct hit by a North Vietnamese heavy caliber shell.

Trenches at the base varied, but generally they were four to six feet deep, one to two feet wide at the bottom, and two to three feet wide at the top. The spoil from the trench was heaped to either side and lined with sandbags. The sun quickly bleached the color out of the bags, making it easy to spot the trench line and the bunkers that were piled with sandbags. Every 9–15 meters the trench would have overhead protection, usually runway matting with three or four layers of sandbags.

1st Battalion, 26th Marines

The 1st Battalion had three companies—B, C, and D—manning the Blue and Grey sectors, nearly three-quarters of the perimeter. It tied in on the left flank with Company



Defense Department (U.S. Air Force)

Portion of the perimeter at Khe Sanh after the siege commenced. Note the ammunition and supply berms at the top of the photo.



Defense Department (U.S. Air Force)

Interior of the combat base south of the runway. Note the smashed buildings.



Defense Department (U.S. Air Force)

Eastern end of the combat base perimeter showing the 37th ARVN Ranger position on the left foreground.



Defense Department (U.S. Air Force)

Interior of the combat base south of the runway, close to the regimental command post.



Defense Department (U.S. Air Force)

Center of the combat base showing a portion of the runway and exterior trench line in the foreground



Defense Department (U.S. Air Force)

Western end of the combat base showing the turnaround area. Note the destroyed aircraft on the left.

L, 3d Battalion, and on the right with FOB-3. Company D, even though it held a position on the perimeter, it was designated the reserve in case the North Vietnamese penetrated the lines. The battalion command post was located in the remnants of an old French bunker. "It had been filled with trash and debris," Lieutenant Colonel Wilkinson said, "but we cleaned it out and strengthened it with logs." The battalion hardened its aid station. "I really had nothing under cover when we first got here," Wilkinson explained, but "with the help of the engineer platoon we secured huge logs and used them to cover the top."

The battalion's lines were strengthened "by a tremendous amount of barbed wire, double apron, particularly on the eastern side of the base which was probably the primary avenue of approach because it happened to come up from the village," Wilkinson explained. "We had double apron, Canadian tangle foot, single apron, double concertina and we got the Seabees to dig trenches with their backhoe . . . and clear fields of fire." The battalion also reinforced the defenses with improvised mines called fougasse. "There was a garbage dump on the south side of the perimeter that I felt was probably the most opportune avenue of approach the enemy could have. So we placed a few out there," Wilkinson added.

Lieutenant Colonel Wilkinson complained about a lack of fortification material. He explained, "I felt frustrated because we really never had the material with which to build a real bunker. We had fighting holes and a trench line, with maybe one layer of sand bags on top, but one layer of sand-bags won't stop a very big round." He improvised by ordering his men to dismantle the battalion's mess hall. "It was not a large structure," Wilkinson said, "but it did have a lot of lumber in it. We cannibalized it as well [as] some of the other wooden huts to ... put a little overhead on the positions so it would protect the men from at least a 60mm mortar."

Lieutenant Colonel Wilkinson said that "one of the most tragic things that happened is when Company B had a patrol go out in daylight hours."

The Jacques Patrol

On the morning of 25 February, Second Lieutenant Donald Jacques led the 3d Platoon, Company B, 1st Battalion, 26th Marines, through the perimeter wire of the combat base and headed south on a short-range patrol as part of the



Defense Department A190852

Marine forward observers trying to spot North Vietnamese Army mortar positions from the front lines at Khe Sanh.

regiment's effort to gather information on enemy activity close to the base. The patrol consisted of two heavily reinforced squads with two machine gun teams, an 81mm mortar forward observer, a rocket team, a Kit Carson scout, and a scout from the battalion intelligence section, for a total of 47 Marines.* Lieutenant Colonel Wilkinson explained that "the patrol was to follow a diamond-shaped rough [three check points]—from Point A to Point B to Point C and then back in." Captain Kenneth Pipes, from Company B, briefed Second Lieutenant Jacques before the patrol. "There were three checkpoints," he explained, "and beyond the third checkpoint they were to re-enter our lines in the vicinity of the 1st Platoon, which was standing by as a reaction force in case the 3d Platoon ran into some problems. The patrol was to depart 0800 and return 1000."

Corporal Gilbert Wall, an 81mm mortar forward observer, explained, "We went out the south gate by the trash dump and moved down along the NVA trenches." Hospital Corpsman Third Class Frank V. Calzia, the platoon corpsman, recalled, "The trench half-encircled the trash dump and went

down the face of a small hill, across a river, and up the face of another small hill, and then around it and out of sight." The trench was two to three feet deep and a foot wide. Corporal Wall said, "We followed the trench until it came to an end, then headed south away from the base. It was open—no cover at all—but the NVA never fired or shot at us. We moved hundreds of meters away from the base."

About a kilometer south of the base, the patrol spotted three North Vietnamese near the road leading to Khe Sanh village. Jacques radioed Captain Pipes for permission to capture them. Pipes gave permission, not realizing that the patrol was not where it was supposed to be. He warned the officer to be extremely careful "and don't get sucked into an ambush." Corporal Wall said Jacques shouted, "Let's go get them! His pistol was in the air and his hand fell forward to signal, 'charge'." Private First Class Calvin E. Bright said that "the Kit Carson scout that was with us begged and pleaded not to go; he said, 'Don't go any further!' "Within a matter of minutes," Pipes recalled, "they reported heavy enemy fire and that they were penned down."

Just south of the road, the patrol ran into an ambush. A company-size enemy unit occupying a bunker complex

^{*}A Kit Carson scout refers to former Viet Cong guerrillas used as intelligence scouts for American infantry units.



Defense Department A190685

An overview of the 1st Battalion, 26th Marines' bunker defenses along the western perimeter of the base. The Marines had come under criticism for not "digging in."

allowed the platoon to advance to within point-blank range before opening fire. "I couldn't believe how many NVA were there," Corporal Wall said. "I was terrified. I could see clearly the deep trouble we were in." Private First Class Bright's fireteam was on the left of the formation. "Our point man was hit almost immediately. . . . At first we succeeded in having fire superiority . . . then all of a sudden they had reinforcements that came up, and they gained superiority over us," Bright explained.

The platoon attempted to maneuver, but under intense enemy fire casualties mounted rapidly. "I noticed that the 3d Squad had been wiped out," Hospital Corpsman Third Class Calzia said. "There was no one left." Lieutenant Jacques ordered a withdrawal. "The lieutenant came by," Calzia remembered, "We gotta get out of here," he said. "Get out the best way you can. We're getting wiped out," Captain Pipes said.

Lieutenant Colonel Wilkinson was faced with a dilemma. "Do I send a squad or are we going to send a company?" Company D, 1st Battalion, 26th Marines, was ready to go. Wilkinson said,

It was the most difficult decision a commander has to make and the decision I made was: we would not send out the force or go to the aid of those Marines. Now that violates all the Marine principles that I was taught from the first day at Parris Island [South Carolina] in 1948. When a Marine gets in trouble, you go out and help him and bring him back. My decision was based on the fact that casualties had been inflicted rapidly. The Marines went into a killing zone and were either killed or seriously wounded. Then, the history of the Vietnamese War was filled with instances in which you get a squad in trouble, you send out a platoon; the platoon gets into trouble you send out a company; you



Defense Department A190833

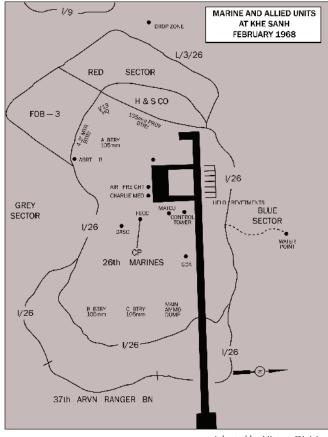
LCpl T. Steinhardt, Company B, 1st Battalion, 26th Regiment, with an M-14 shooting at an enemy forward observer at Khe Sanh.

send out another company. Before long night falls and you've got half a battalion out in a very tenuous position. My mission was to defend Khe Sanh Combat Base. I was thin. That's why I did not send aid to the Bravo Company patrol.

Captain Pipes sent another platoon to assist. Second Lieutenant Peter W. Weiss led the 1st Platoon through the gaps in the perimeter wire and headed for the scene of the ambush. About 300 meters from the beleaguered 3d Platoon, Weiss and his men received enemy machine gun fire from 20 meters to their front, forcing them to the ground. Captain Pipes said, "As the 1st Platoon moved into position to offer supporting fire, they in turn were pinned down. I called for close air support, 81mm and 60mm mortars, 90mm tank guns, firing .50 calibers but fog and the proximity of friendly and enemy forces hampered their efforts." To add to the

confusion, the North Vietnamese entered Company B's radio net, possibly using a radio captured from one of the 3d Platoon's destroyed squads, compounding communication problems in the critical situation. Hospital Corpsman Third Class Calzia "looked over and the lieutenant stood up for some ungodly reason, and that's when he got it. I crawled over to him. He'd caught it right across both femoral arteries, and he was dead within minutes."

Corporal Wall tried to rescue his platoon commander. Wall described the gruesome scene: "I moved Lieutenant Jacques behind a small mound of dirt and tried to stop the bleeding. I soon noticed a change in the color of his face. It was turning white. His head fell back, his eyes rolled back, and he died." Several survivors filtered back to the 1st Platoon. Lieutenant Weiss ordered his men to gather the wounded and withdrawal. The 3d Platoon was in shambles, with most of the men were either wounded, dead, or missing.



Adapted by History Division

First Lieutenant Thomas O'Toole from VMO-6 was flying overhead when he spotted the patrol. He reported:

There were 15 Marines in the trench trying to make it back. I thought they were taking fire, because the rear man was shooting to the rear. We went back to the area of the bunker complex, and in the middle of a field surrounded on all sides by trenches, there appeared to be fifteen to twenty Marine bodies. We turned around, and I did identify them because of the flak jackets and helmets. Three men lay together as if they had been a machine gun crew. One man was bandaged on the chest, while another lay beside him as if he was a corpsman.

The 3d Battalion COC monitored the air nets and heard Lieutenant O'Toole ask if anyone at the base had Marines outside the wire and then said,

They're being slaughtered! We came around again. This time, a figure among the bodies stood up and fired

at us and with that the entire trench line opened up, and we received three hits on the aircraft. We figured that the point had walked into this open area, and was annihilated, and the rest were trying to make their way back to the perimeter.

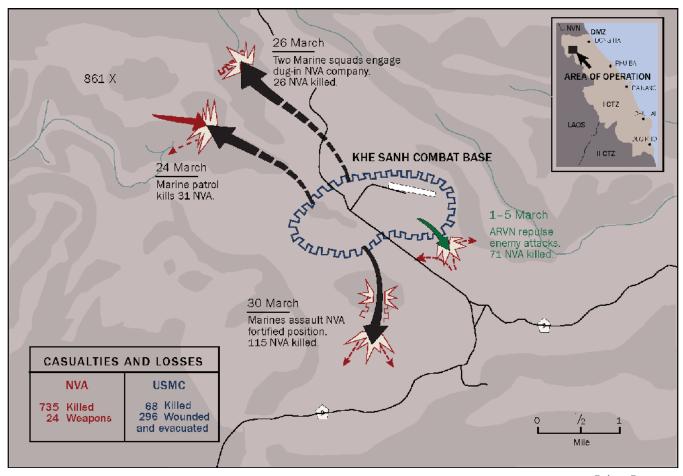
For what had started out as a platoon patrol, the casualties were staggering: 6 killed in action, 17 wounded, and 25 missing. One of the men declared missing, Private First Class Ronald L. Ridgeway, was captured and finally released in 1973. No enemy casualties could be confirmed. On 27 February, Colonel Lownds issued further restrictions on patrolling, limiting it to that which was "necessary to insure [sic] the security of . . . defensive obstacles and local security elements."

On 30 March, Company B attempted to recover the bodies of the missing men. In a four-hour firefight, the company fought its way 500–600 meters from the perimeter but ran into a buzz saw of enemy fire from the entrenched 8th Battalion, 66th Regiment, 304th Division. Captain Pipes recalled, "We immediately came under extremely heavy RPG, 82mm and 60mm mortar fire, as well as heavy automatic weapons and small arms." Unable to proceed, Captain Pipes ordered a withdrawal. Nine of his men were killed in action and another 40 wounded, including Captain Pipes, but 115 of the enemy lay dead on the battlefield. None of the Jacques patrol was recovered until a week later by Company D.

3d Battalion, 26th Marines

Company L, 3d Battalion, 26th Marines, manned approximately 3,000 meters of the Red Sector of the perimeter. The other three companies in the battalion were deployed to the hill positions—881 South and 861. Company L tied in with 1st Battalion, 26th Marines, on the right and the Special Forces FOB-3 on the left. The battalion command post was located in a grove of trees 75–100 meters behind the company's lines.

Initially the battalion established a base camp, complete with tents and a mess hall. The perimeter consisted of hastily dug foxholes, but after the January shelling, the area changed dramatically. Within a matter of days, deep trenches and underground bunkers miraculously appeared. It was possible



Defense Department

to walk Company L's lines without leaving the trenches. Thick barriers of concertina and barbed wire were erected. Engineers laid dozens of M14 antipersonnel mines, known as "toe poppers," in front of the wire.

37th ARVN Ranger Battalion

The 1st Battalion, 26th Marines' perimeter extended some 200 meters behind the 37th ARVN Ranger Battalion. "The Rangers were set up in front of my 2d Platoon, on the east flank of the perimeter, covering one of the main routes of advance into the base," Captain Pipes said. Wilkinson explained that "we were in the inner line of defense and they [37th Ranger Battalion] were the outer line. They had a pretty good position out there. We were able to get them sandbags and the backhoe had dug them a pretty good position." The

only gap in the Ranger lines was where the runway extended through it, and this was covered by two Ontos. At night, the gap was sealed off with strands of German tape—a new type of razor-sharp barbed wire that was extremely difficult to breach.

Captain Pipes thought the Rangers were "a good outfit—a good, scrappy bunch. We quickly built up a mutual trust with the ARVNs." Lieutenant Colonel Wilkinson said, after meeting with the battalion commander, Captain Hoang Pho, "He appeared to be about 23 years old, a real nice guy, but not a very strong commander. I kept a very close eye on them, although they did have a very dedicated and very heroic U.S. Army captain as their advisor, Captain Walter [A.] Gunn Jr." The officer had been with the Rangers for two months. "The ARVN Rangers are supposed to be the most elite troops





Photos courtesy of author

Top: A portion of Company L, 3d Battalion, 26th Marines' perimeter.

Bottom: Company L, 3d Battalion, 26th Marines' trench line.

there are besides the airborne," Wilkinson said, "and what little I've been around them, I'd say they're the best."

During the night of 28-29 February, sappers prepared the ground to the front of the Ranger perimeter by cutting holes in the perimeter wire and removing mines and trip flares. Their activity was not discovered until morning. The following night at 2130, a battalion of the 66th Regiment, 304th Division, struck the ARVN position. Unknown to the enemy, electronic sensors had silently heralded their impending attack, and by the time the first waves of assault troops rushed the wire, two B-52 strikes, diverted from other targets, were on the way. The 1st Battalion, 13th Marines, accompanied by the Army's 175mm guns and radar-directed attack aircraft, pounded the North Vietnamese infantry with telling results. The B-52s saturated the area to the rear of the assault waves with tons of high-explosive bombs, devastating what the sensors indicated was a second battalion moving forward to attack.

The Rangers reported that the North Vietnamese left 7 dead in the perimeter wire, but a search the following morning revealed 71 more with many Bangalore torpedoes and satchel charges. The dead were still huddled in trenches, many in the kneeling position, in three successive platoon lines, as if they had been caught in the assault position. The devastating effect of the firecracker round was apparent. The Rangers had one man wounded.

For the remainder of the Khe Sanh battle, the enemy concentrated most of their efforts against the Rangers, attacking its position seven times in March, including another battalion-size assault on 18 March. Although North Vietnamese sappers breached the wire during one of these attacks, the Rangers repulsed every attempt, with assistance of supporting fires from 1st Battalion, 13th Marines, and attack aircraft. In addition, the North Vietnamese employed psychological warfare against the ARVN using loudspeaker broadcasts enticing them to defect.

The Water Point Miracle

The water point was located on a small hill obscured by high grass about 150 meters outside the northern sector of the base perimeter. Seabees constructed a dirt dam in the Rao Quan River 25 meters wide, creating a 6-foot deep reservoir. Engineers from the 1st Platoon, Company A, 3d Engineer

Battalion A, maintained a 350-gallon-per-minute pump that lifted the water 27 meters from the river over an 244-meter span and into a large black rubber storage container. The pump had to be hauled down to the stream every few days to fill the containers. Engineer Bill Gay said that

we drew a lot of mortar fire doing that and the NVA could have ambushed us and destroyed the pump but, to our amazement, they never interfered. The pipe from the pump up to the bladders was often punctured and we had to figure out how to create a whole new pipeline from damaged pieces. The bladders and purification equipment were also damaged by shrapnel and we were soon patching the patches.

The extensive rains of September and October 1967 ruptured the dam, but it was quickly repaired by a detail led by U.S. Navy Equipment Operator First Class Rulon V. Rees. The detail lined the face of the dam with old scrapped Marston matting from the airstrip and blasted a crater in the riverbed about nine meters in front to act as a reservoir in case the river level fell. On 24 February, the base was down to just 1,893 liters in its water supply.

Life on the Hills

For the men defending the hill positions, the monotony of everyday living was interspersed with moments of fear.

Hill 881 South

Hill 881 South was small, only 50 meters wide and 100 meters long, manned by less than 300 men. "The hill had two knobs connected by a saddle. India Company took the bigger knob," Lieutenant John Esslinger said. "Mike Company took the smaller knob and that's where we stayed for the rest of the siege." Initially, the trenches on the hill were merely shallow furrows. "Maybe eighteen inches deep," Esslinger recalled, "because the soil was really hard clay, almost like rock. Digging was really difficult. You'd bend your E-tool [entrenching tool] trying to dig the stuff up." Most of the men lived in aboveground bunkers, but when the hill started receiving incoming fire, "the dirt got a lot softer," Esslinger humorously remembered. Esslinger also recounted some problems with the depth of the trenches: "It wasn't long before some portions of the trenches were too deep. In some places eight feet

deep so I had the men dig firing steps so they could step up and see over the trench line." The aboveground bunkers were abandoned and the sandbags used as overhead protection for shelters the men dug into the sides of the trench. Esslinger said that "within a week we were living in the trenches."

Captain Dabney recalled, "We had no bunker-building capability and it meant there was nothing we could do to stop the big rounds. The smallest thing they [NVA] threw at us was a 120mm mortar round. You just don't stop that with overhead cover made of barbed wire stakes and sandbags." The 120mm mortar round caused more damage and casualties than all the other enemy weapons combined. Lieutenant Esslinger recalled, "The round had a super quick fuse that detonated upon contact with the ground, leaving an impact crater not much deeper than a coffee saucer. The explosion sent the shrapnel flying horizontally . . . any exposed Marine within 30 meters was a casualty, more often than not a KIA [killed in action]." Lieutenant Esslinger recalled that "you could hear the thump of the mortar round leaving the tube."

The firing position that gave Company I the most trouble was located to the southwest of the hill in a U-shaped draw known as "the Horseshoe." There were at least two NVA 120mm mortars in the area which, in spite of an avalanche of bombs and artillery shells, continued to plague the defenders. Because of the shape of the hill, the summit was the only defendable terrain, which provided the enemy with a compact target. Captain Dabney figured that it took one layer of runway matting, eight layers of sandbags, and one of either rocks or 105mm shell casings to stop a 120mm mortar shell with a quick fuse from penetrating. Nothing could be done if the round had a delayed action fuse. During the siege, Company I lost 40 men killed in action and more than 150 wounded.

Captain Dabney requested bunker-building material, but heavy timbers were simply too heavy to transport by helicopter. Dabney explained that "what little bunker-building material we got, every last bit of it was dedicated to the ammo bunkers because if they got hit, the explosion would blow us all off the hill." Dabney estimated that at one point, the bunkers were stuffed with 3,000 rounds of 105mm ammunition, 5,000 rounds of 81mm and 60mm mortar ammunition, 500 rounds of 106mm ammunition, and 300 rounds for the 3.5-inch rocket launchers, as well as explosives, grenades,

and tens of thousands of rounds of small-arms ammunition. "Given the size of the hill, it was absolutely critical that we fortify the bunkers," he explained.

The hill was barely large enough for three small landing zones; one in the saddle and two on a gradual nose east of Company I's position. The NVA had mortars zeroed in on each one of them. "As soon as they saw a helicopter approach one of the zones, the enemy would start pumping out rounds," Esslinger explained. "So we would have helicopters feint into one zone and then land in another. They had to be out of the zone within thirty to forty seconds. Casualty evacuation was dangerous." Essingler added: "We had a trench line out to the landing zone. We'd have the casualty in the trench with a couple of guys. As soon as the helicopter got close to the ground, the stretcher-bearers would run out and throw the casualty into the helicopter, jump back in the trench and the bird would get out of there. It all had to be done before the mortar rounds exploded."

Captain Dabney recalled a disastrous resupply/emergency medevac. He explained,

We off-loaded the ammunition and immediately began loading wounded aboard. The bird had been in the zone two or three minutes when a 120mm mortar round impacted within a few feet of it. Our senior Doc [corpsman] and two of our previously wounded Marines were killed in action. About a dozen others including the helicopter crew were wounded. We'd no sooner gotten that mess unscrambled when the second bird, a CH-46 came in—same damn thing—down in the zone and full of holes. We had lost 2 birds shot down and 1 crash-landed at Khe Sanh after getting hit leaving the hill. All told we sustained 7 KIAs and maybe 25 WIAs [wounded in action].

The hill's lifeline depended on a small team of men from the Helicopter Support Team (HST) and the Tactical Air Control Party (TACP). Together they formed the backbone for directing and controlling aviation assets, both fixed and rotor wing. Captain Dabney praised their bravery: "Daily when the weather allowed and often several times a day, those [HST] Marines stood in the open in those zones under the helicopters and performed tasks without which we grunts and the helo crewmen could not have survived," he

said. "The anti-aircraft rounds were always whipping by and the mortar rounds were often 'on the way' and they knew it, yet they did their duty' til the bird was gone then ran like hell and dove into the nearest hole."

The hill was under constant observation by snipers who shot at anyone venturing above ground. Company M's commander, Captain John J. Gilece, fell victim to a sniper in the middle of the day as he moved from one side of the hill to the other. Instead of going through the trench line, he jumped up and ran across the top of the hill and a sniper shot him in the leg. Lieutenant Esslinger took command of the company and held it during the entire siege.

Company I had been cursed with the presence of a particularly accurate sniper who was located in the brush to the south of their perimeter. The sniper wounded 10 men in the course of a week, all of whom had to be evacuated. The Marines on the perimeter watched patiently for the culprit to expose himself. Their vigilance paid off when they spotted the glint off the sniper's telescopic sight. They marked his position and lugged a nearly 450-pound 106mm recoilless rifle from the northern side of the hill through the trenches. Once in position, the gunner sighted in and fired an antipersonnel round containing 6,000 13-grain flechettes (a pointed steel dart stabilized with fins). The sniper was eliminated.

Hill 861

Hill 861 was located approximately three kilometers northwest of Khe Sanh. The entire topographical crest of the hill was pocked with craters and buried in loose soil. During the 1967 Hill Battles, it was estimated that bombs had blown more than 20 feet off the summit. One Marine said that some of the craters were deep enough to hold a small building. Author Gregg Jones, in *Last Stand at Khe Sanh: The U.S. Marines' Finest Hour in Vietnam*, wrote, "The American stronghold on Hill 861 measured approximately four hundred meters north to south and about 150 meters east to west. The hill sloped upward toward the north and crested a little over fifty yards above the trench line as it snaked around the northern perimeter . . . the helicopter landing zone was down the hill to the south."

A Marine said, "We were really fortifying the place . . . more digging, more wire and more claymores." A chest-high trench ran completely around the hill with protective sandbags

on the outside. Bradbury dug a sleeping hole in the side of the trench that he could stretch out in. "It was about five or six feet long," he explained. "I dug mine about two or three feet in and then I went to the left. I figured if a mortar happened to land in the trench the shrapnel would not reach me."

Following the NVA attack on 21 January, the Marines on the hill maintained a heightened state of alertness as they repaired the damage to the perimeter. Private First Class Elwin Bacon said, "Kilo Company was on 100 percent alert [at night]. That's a very long time to be without sleep." The situation on the hill was made even worse by the dozens of North Vietnamese bodies that littered a ravine. "The smell from in front of my position was enough to make a hog vomit," Bacon explained. There was no way to bury the remains because NVA snipers were actively shooting at anyone moving along the perimeter. Corporal Dennis M. Mannion recalled, "Using heavy ship's binoculars I was able to see clearly that the bodies turned to skeletons within three weeks....There was no flesh on them, just skeletons wearing North Vietnamese uniforms, packs and helmets."

During the remainder of the siege, Hill 861 was not attacked again by North Vietnamese infantry, but it was raked by mortar and sniper fire. "We would get mortared twice or three times a week," Lance Corporal Bradbury said. "It would be sporadic."

Hill 950

The 1st Battalion, 25th Marines, provided one platoon to the defense of the radio relay station on Hill 950. Private First Class Robert A. Harrison said the day-to-day routine on the hill consisted of "digging deeper trenches, laying concertina wire and playing cards." This all changed when a resupply helicopter came in. "The NVA would open up with heavycaliber machine gun and mortar fire. We would usually be able to call in some close air support to suppress the enemy fire," Harrison explained. Lieutenant Colonel Wilkinson stated, "We did a little risk taking up there. The enemy had people with a .50 caliber machine gun on Hill 1015, which they used to shoot at us with impunity." On 23 January, the HMM-262 command chronology stated, "Attempting to resupply Hill 950, Major [Anton E.] Therriault crashed near the landing zone and the aircraft was destroyed. No casualties occurred."

Resupply was a continuing problem because of the weather. "Even a heavy wind could keep the helicopters from landing in the small landing zone," Wilkinson explained. The hill sometimes went for a week or more before supplies could be flown in. At one point, the hill was dangerously close to running out of water. There were only two gallons for the 75-man garrison. Wilkinson gave the platoon commander permission to take a patrol out to get water: "I had some concerns about the patrol and having casualties that we would be unable to evacuate. They not only were able to bring back some water but they surprised a rather lethargic NVA unit and kicked the hell out of them. It raised the Marines spirit immeasurably."

Hill 558

The three companies of 2d Battalion, 26th Marines, completely encompassed Hill 558 and blocked enemy movement through the Rao Quan Valley. The battalion quickly dug in. Lance Corporal William Hancock, a rifleman in Company H, said, "Everything on our hill was dug in, our sleeping quarters, fighting holes . . . everything was underground and camouflaged . . . we set up barbed wire, minefields, booby traps. . . all kinds of defensive things." Lieutenant Colonel Francis J. Heath Jr. sent out reinforced platoon-size patrols to determine the enemy's location and disposition. On 24 and 25 January, patrols from Company F made contact with an NVA company. The patrols pulled back to hit the enemy with artillery, mortar, and air strikes. The patrols suffered one KIA and 20 WIA (12 medevac and 8 minor), while killing 39 of the enemy.

The 26th Marines curtailed all security patrols in February, allowing the battalion to place its efforts on improving its defensive position. Triple concertina and a combination double apron and German standing fence was installed around the battalion's position. Punji pits and tangled barbed wire were placed within the triangular cells of the barbed wire obstacles. Barbed wire explosive devices, consisting of a roll of straight wire with C4 in the center, were employed along the perimeter. Fougasses, gasoline, and fuel in barrels were buried in the sides of the hill. C4 placed at the bottom of the barrels was triggered electronically, igniting the mixture and sending a sheet of flame out of the barrel like a flamethrower. Claymore mines were extensively utilized, and finally, a total

of 11 antipersonnel and antitank minefields containing more than 1,500 M14 antipersonnel mines and 141 M15 antitank mines were installed.

During January, February, and March, 2d Battalion, 26th Marines, received sporadic 82mm and 60mm mortar fire, as well as rockets, but casualties were light. There was no enemy ground contact. However, small enemy reconnaissance teams—three to six men—worked against the battalion's western perimeter.

NVA Trenches and Bunkers

The North Vietnamese also dug in. They used the bad weather to conceal a system of siege trenches, interlaced with supply bunkers they were digging in the Khe Sanh area. The trenches extended from the Laotian border to the perimeter of the combat base, with the heaviest concentration in the south and southeast. The trench system was of great concern because the same tactics were used by the Viet Minh at Dien Bien Phu to get close to the French defenses. The press played up the similarities between the two. Lieutenant Colonel Wilkinson had studied Bernard Fall's book Hell in a Very Small Place, which described the battle of Dien Bien Phu, and made it required reading for all his officers. As they read Fall's book, they could look outside and see the very same tactics developing on the North Vietnamese side of noman's-land. One Marine kiddingly remarked, "Jesus Christ, skip the middle part; what happens at the end of the book?" The 3d Battalion COC had a sign that was blank on one side and on the other side it read, "Tonight's the Night." Every night, it was turned so the words could be read.

The trenches were immediately targeted for artillery and air strikes. The pilots described the trenches they were finding. "I saw more high-speed trenches right up to the southern perimeter of the base," Captain Charles Rushforth, an Air Force forward air controller said. "I saw guys in the trenches—two hundred plus. Who's friendly? I buzzed them, and the guy in the field waved: the others in the trenches, just 500 meters away, sat. I zipped over them and started to pull the turn. Then the whole world opened up. The ground troops yelled on their radios, 'Hey, Covey, get out of there! They're really hosing you down!"

Flight after flight of fixed-wing aircraft attempted to bomb the NVA out of the trenches with rockets, 2,000-pound

bombs, and "napalm baths," a scheme in which they dropped a number of unfused napalm tanks on the target that were then ignited by rocket or cannon fire from the following planes. Yet, despite the heavy bombardment, the North Vietnamese continued to extend the trench system. Working at night or under cover of fog, the NVA often moved their lines forward as much as 200-300 meters in a single night. One Marine recorded that "we watched with some fascination and no small apprehension, day by day, as the trenches crept closer and closer to our perimeter." Some of the enemy trench lines stretched 2,000 meters from assembly area to within 35 meters of the perimeter. Lieutenant Colonel Wilkinson said, "Marines of 1/26 [1st Battalion, 26th Marines] used periods of good visibility to register M-79 rounds on the close-in NVA trenches. At night, during periods of invisibility, M-79s would fire a version of H&I [harassment and interdiction] fires into the trenches."

On 25 February, a Marine aerial observer spotted a section that ran north from Hill 471, one kilometer north of Khe Sanh village to within 25 meters of the base perimeter. A 50-meter section ran parallel to the perimeter, which seemed to indicate that the North Vietnamese planned to use it as a line of departure (LOD) for an assault. Surprisingly, this new trench had been dug in one night despite the heavy artillery and air assault. Another trench paralleled the 1st Battalion's sector of the perimeter. At night, Douglas AC-47 Spooky gunships, nicknamed "Puff the Magic Dragon," worked over the NVA trenches with their three 7.62mm General Electric miniguns. The machine guns fired 2,000 rounds a minute. "The miniguns looked like flaming water hoses," Lieutenant Colonel Wilkinson said, "as they hosed down the trenches for us."

In the following days, aerial photographs disclosed more and more of the trench system. The photographs showed that the North Vietnamese trenches followed the contours of the ground and used existing vegetation to make airborne detection difficult. Spoil was concealed with reeds and elephant grass, rather than used for parapets as the Marines did at the base. The trenches were narrow, only 46–61 centimeters wide and normally about 1.22 meters deep. Communications trenches connected crew-served weapons. Antiaircraft guns were heavily camouflaged in small gun pits that only gave them a small sector of fire but made them more difficult to



David Douglas Duncan Collection

Navy doctors and corpsmen from Company Charlie Med, wearing helmets and flak jackets, conduct an emergency operation on a wounded helicopter pilot at Khe Sanh dispensary. Most wounded were evacuated out of Khe Sanh as soon as possible.

locate. U.S. pilots quickly learned that the trench lines were heavily protected by 12.7mm antiaircraft machine gun.

Medical Support

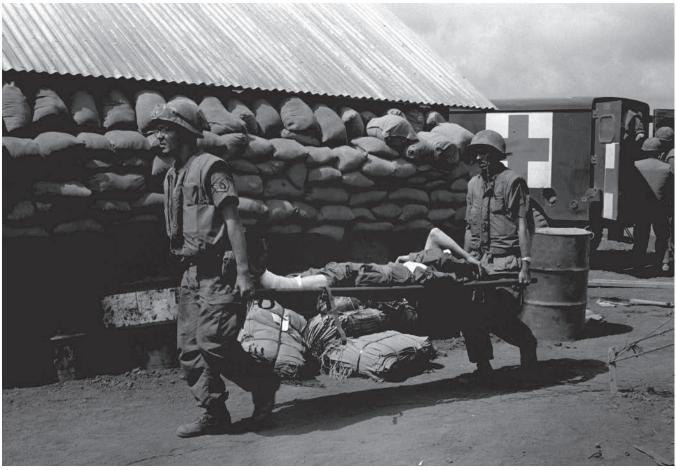
With an ever-growing number of casualties, the medical battalion assumed an increasingly important role.

Charlie Med

Company C, 3d Medical Battalion ("Charlie Med"), was a collecting and clearing company attached to the 26th Marines. It was located adjacent to the midpoint of the runway about 30 meters from the loading ramp/helicopter landing zone and close to the regimental headquarters. Its

mission was to prepare the casualties for evacuation so that they could safely make the flight in a stabilized condition. Before the siege, the doctors and corpsmen worked in four 4.6 by 9 meter tents: one for sick call, one for supplies, and two as living quarters for the corpsman. After the bombardment on 21 January, they were "hardened" by ringing them with a double row of waist-high sandbags, which gave the medical personnel some protection from flying shrapnel as they worked on the wounded men.

A "bomb proof" aid station was finally constructed by Navy Seabees. It consisted of heavy timbers covered with runway matting and sandbags. One Marine remembered that it had seven layers of sandbags, 105mm shell casings,



Defense Department

Air Force stretcher-bearers carrying a casualty to the runway for evacuation by air. Photo was taken before the siege as noted by the undamaged building and vehicle.

and runway matting, forming a huge mound nearly impervious to mortar and rocket fire. Hospitalman Michael Hill said, "Charlie Med was a huge bunker, a massive structure that could take a hit. You'd hear rounds going off and sometimes you'd see dirt falling . . . but you couldn't stop working. If we had casualties, we had to take care of them, and we had to make sure they didn't get hurt worse from the shelling." "Charlie Med" was staffed by 4 doctors and 26 Corpsmen and was under the leadership of Navy doctor James Finnegan.

Casualties were brought to the triage area by Marines who had been assigned as litter-bearers. The stretcher was placed on a pair of waist-high sawhorses where corpsmen quickly removed the casualty's uniform and began checking for wounds. A doctor would examine the casualty and make a determination as to the treatment they would receive. After the casualty was stabilized, they would be prepared for evacuation. One observer noted, "I went down into the med bunker and was overwhelmed with the amount of Marine wounded. They were everywhere with the doctors and corpsmen working feverishly to staunch the flow of blood and save as many lives as they could. The floor was sticky with their blood. The smell was unforgettable."

When word was received that medevac helicopter was inbound, stretcher-bearers carried the casualties to a fivefoot high sandbag blast wall adjacent to the helicopter pad and wait. "When it came in," Hill explained, "you'd load them aboard and just hope we wouldn't get blown away by incoming artillery. They had been shooting at that place for some time ... and they had it exact." Lance Corporal Charles Thornton recalled, "It was truly a helpless feeling as two Marines picked up the stretcher and began running toward the helicopter. ... I could see the impact of rounds 'walking' down the runway." Thornton was loaded on the helicopter.

It seemed like an eternity before we left the ground. . . . There were so many wounded on board that it had to get a running start to get off the ground. I can remember vividly looking out the helicopter door as we circled Khe Sanh and seeing the trench lines and bomb-scarred terrain become smaller as the helicopter flew higher. I thanked God for allowing me to be wounded in order to escape that hellhole.

Navy doctor Lieutenant Edward M. Feldman noted that from 15 January to 23 April 1968, Company C treated 2,541 patients, of which 2,000 were serious enough to require hospitalization. Less than 5 percent were for gunshot wounds. The great majority of the wounds were from shrapnel, mostly to the abdomen and extremities.

Operation Pegasus

"On 25 January," Army Major General John J. Tolson III, commanding general of 1st Cavalry Division (Airmobile), stated, "I was directed to prepare a contingency plan for the relief or reinforcement, or both, of the Khe Sanh base. This was the first in a chain of events that was later to emerge as Operation Pegasus." The concept of operations for Pegasus was for the 1st Marine Regiment with two battalions to launch a ground attack west toward Khe Sanh while the 3d Brigade, 1st Air Cavalry Division, would lead the air assault. D-day was set for 1 April 1968. On 2 and 3 April, all elements would continue to attack west toward Khe Sanh; and, on the following day, the 2d Brigade of the 1st Air Cavalry Division would land three battalions southeast of Khe Sanh and attack northwest. The 26th Marine Regiment, which was holding Khe Sanh, would attack south to secure Hill 471. On 5 April, the 1st Brigade, 1st Air Cavalry Division, would air assault just south of Khe Sanh and attack north. The following day the ARVN Airborne Task Force would air assault southwest

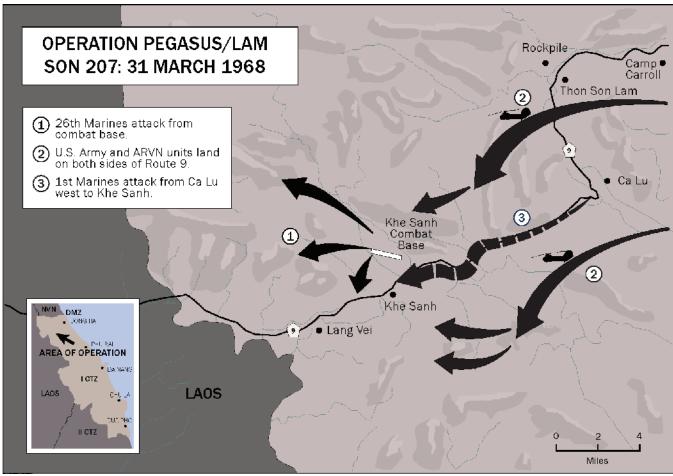
of Khe Sanh and attack toward the Lang Vei Special Forces camp. Linkup was planned at the end of seven days.

The construction of a new airstrip in the vicinity of Ca Lu, 16 kilometers east of Khe Sanh, was a key factor for the entire operation. The 3d Marine Division scheduled a deception operation designed to divert the enemy's attention from Khe Sanh to Dong Ha. Capitalizing on its air mobility, the Army division would advance along the axis of Route 9. Engineers would follow, repairing culverts and bridges to make the road passable to vehicles. The South Vietnamese promised an ARVN airborne task force of three battalions to participate in the operation.

Preparations began immediately. The 11th Engineer Battalion and Naval Mobile Construction Battalion 5 joined the 1st Air Cavalry Division engineers in building the base at Ca Lu, to be called "LZ Stud." The project included bunkers, supply storage facilities, and an airstrip capable of handling C-123 cargo aircraft. The 1st Air Cavalry Division began preparing the battlefield on 26 March when Army Lieutenant Colonel Richard W. Diller's 1st Squadron, 9th Cavalry, began helicopter-borne reconnaissance patrols in everwidening arcs from LZ Stud. During the initial surveillance efforts, it became evident that the enemy had established positions designed to delay or stop any attempt to reinforce or relieve Khe Sanh. Diller's squadron located and targeted NVA positions and prepared landing zones by directing air strikes using delay-fused or "daisy cutter" bombs to blast gaping holes in the dense vegetation.

Operation Pegasus started not with a bold and powerful thrust but with a decidedly more ponderous motion. At H-hour—0700 on 1 April—foul weather grounded the helicopters of the 1st Air Cavalry Division, but the men of the 1st Marines, on foot, crossed the LOD on time, initiating the offensive. The regiment attacked along Route 9, removing mines and obstacles from the road and repairing bridges, culverts, and bypasses. The 2d Battalion, 1st Marines, was assigned to secure the high ground north and west of Route 9 and LZ Stud and provide security for the engineers.

By 1300, the weather cleared, allowing the 1st Air Cavalry's 3d Brigade to conduct the planned air assaults into landing zones along Route 9 west of the 1st Marines. Despite the delay, the brigade secured its landing zones and flew in its artillery before nightfall. Throughout the area of operations,



Department of Defense

allied forces made only light contact with the North Vietnamese. In the following days, the operation continued in the pattern set on D-day, including the seemingly obligatory bad weather in the mornings, which forced delays in airmobile operations. The North Vietnamese remained elusive.

The Khe Sanh garrison joined the offensive on 4 April when the 1st Battalion, 9th Marines, sortied against Hill 471, which was 2,500 meters due south of the airstrip. The hill was a key terrain feature because it overlooked the road junction and that segment of Route 9 that snaked to the southwest. The battalion, minus Company B, moved to the LOD at 0230, finally leaving the positions it had defended for 73 days. Hospital Corpsman Third Class William Gressner recalled, "I felt naked when we left the holes and trenches behind and moved to the battalion's first objective." At

0600, the battalion attacked along the fog-shrouded Che Rien Ridge toward Hill 471, which lay two kilometers to the southeast. Following a lengthy artillery and air preparation, Company A assaulted the hill at 1500. The defenders, a reinforced platoon of the 8th Battalion, 66th NVA Regiment, put up a spirited fight, but Company A soon overwhelmed them, securing the hill at 1600. The attack cost the battalion 10 dead and 56 wounded. The enemy left 16 dead on the objective.

The North Vietnamese were not content to give up Hill 471 that easily. Shortly after the Marines overran the hill, enemy rocket fire began and by midnight, 192 rounds had fallen. At 0430 the next morning, the 7th Battalion of the 66th NVA Regiment assaulted Captain Ralph H. Flagler's Company C on the eastern half of the hill. Company A,



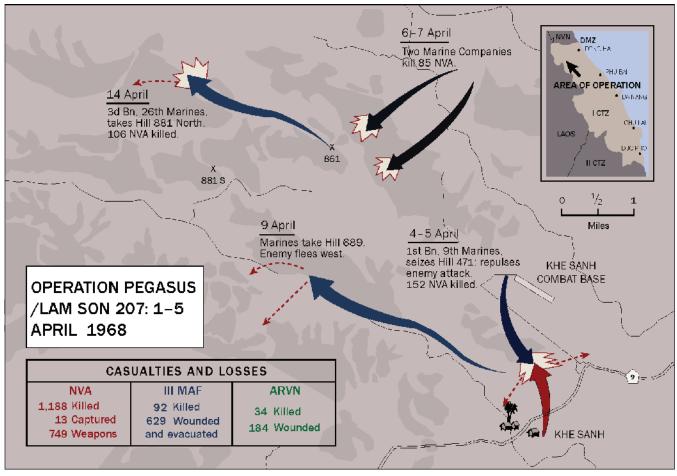
Defense Department A801090

1st Battalion, 9th Marines, west of Khe Sanh.

located on the western side, was masked by the crest of the hill and could not fire in support. North Vietnamese infantry swarmed up the slope firing rifles, submachine guns, and RPGs, while heavy machine guns pounded Company C's positions. The enemy advanced to within 20 meters of the Marine fighting holes, but Flaglers's men stood fast, with the help of almost 1,000 rounds of artillery fire from the 1st Battalion, 13th Marines. By 0630, the enemy attack was spent and the North Vietnamese withdrew. At a cost of 1 Marine killed and 28 wounded, the 1st Battalion, 9th Marines, killed more than 140 North Vietnamese and captured 5 prisoners.

Other units of the garrison went on the offensive as well. On 6 April, Captain Lee R. Overstreet's Company G, 2d Battalion, 26th Marines, attacked the ridge that extended from Hill 861 toward the base. Just as the company reached the

crest of the ridge, North Vietnamese opened fire from camouflaged, mutually supporting bunkers cutting down several Marines at point-blank range. Unable to advance into the heavy and accurate enemy fire, Company G suffered additional casualties as Marines tried to recover the fallen men nearest to the enemy positions. Captain Overstreet called for artillery and air support, but the number of aircraft available was limited and the artillery frequently entered a "check fire" status to allow for the safe passage of planes supporting other units. Because of these fire-support coordination problems, the Marines could not overcome the stiff resistance atop the ridge. With six Marines missing in action (later found dead) but presumed dead within the enemy perimeter, Captain Overstreet ordered Company G to withdraw to Hill 558 at nightfall "as a result of regimental policy to recall units to



Defense Department

the defensive positions for the night." In addition to the 6 MIAs, Company G had 4 Marines killed and 47 wounded and claimed 48 NVA died in the fight.

Elsewhere in the area, many major events took place on 6 April. The 1st Battalion, 26th Marines, attacked out of the combat base to the south, sending Company D against the NVA bunker complex where 25 missing members of Company B had last been seen. Company D recovered the remains of 21 Americans. As the 1st Air Cavalry Division's 3d Brigade worked to clear Route 9 in the area west of the 1st Marines, they encountered a strong NVA blocking position and fought a daylong battle that ended when the enemy fled, leaving 83 dead. At noon, the men of the 1st Battalion, 9th Marines, became the first defenders of Khe Sanh relieved in Operation Pegasus when the Army's 2d Battalion, 12th Cavalry, landed at Hill 471 and assumed responsibility for its defense. The 1st Battalion, 9th Marines, immediately attacked westward

toward Hill 689. As a climax to the many events of the day, the ARVN 84th Company, 8th Airborne Battalion, landed by helicopter at Khe Sanh Combat Base and linked up with the 37th Ranger Battalion.

The momentum of the offensive continued unabated on 7 April. The 2d Battalion, 26th Marines, returned to the scene of the previous day's ambush, this time with two companies, and cleared the ridge of the enemy, killing more than 30. The 1st Battalion, 9th Marines, continued the westward advance it had begun the previous afternoon, capturing Hill 552 with no enemy resistance. Near Khe Sanh village, the 2d Brigade of the 1st Air Cavalry Division captured the old French fort after a three-day battle against an NVA battalion. Along Route 9, the 1st Marines conducted a few airmobile operations of its own, as the 2d Battalion, 1st Marines, and the 2d Battalion, 3d Marines, searched the vicinity of the highway for signs of enemy activity that might threaten the

11th Engineer Battalion's road repair project. The 3d Brigade of the cavalry division pressed on along Route 9, still west of the 1st Marines.

Enemy resistance began crumbling even further as the allied force maintained pressure. Units reported finding many abandoned weapons and large numbers of North Vietnamese bodies and mass graves as enemy units withdrew toward Laos. Major General Tolson reported, "It became increasingly evident, through lack of contact and the large quantities of new equipment being found abandoned on the battlefield, that the enemy had fled the area rather than face certain defeat." Some organized resistance remained, however, as the Communist forces continued to conduct limited objective ground attacks and probes in the areas.

The much-awaited linkup of U.S. forces at the Khe Sanh Combat Base proper occurred at 0800 on 8 April, when the Army's 2d Battalion, 7th Cavalry, entered the base along the coffee plantation road. First Lieutenant Joseph Abodeely, Company D, 2d Battalion, 7th Cavalry, said, "We all knew this was a big deal. . . . My platoon was the first platoon to walk into Khe Sanh, and I blew a cavalry charge on a bugle [captured from the NVA]." As the 3d Brigade began moving in, the 26th Marines prepared to depart the base. But the offensive did not slow down, even for this event. West of the base, the 1st Battalion, 9th Marines, advanced on Hill 689, which had for 11 weeks dominated its position at the quarry. The enemy, although unseen, made their presence felt through steady and accurate mortar fire that killed 9 Marines and wounded 27 during the battalion's advance.

On 11 April, the engineers declared Route 9 open to vehicular traffic. The engineers had replaced nine bridges, constructed 17 bypasses, and repaired 14 kilometers of road. It was the first time the road was passable from Ca Lu to Khe Sanh since September 1967. The same day, the 1st Air Cavalry's 1st Brigade left for operations in the A Shau Valley. The 37th Ranger Battalion left soon afterward.

Colonel Bruce F. Meyers was aboard the USS *Iwo Jima* (LPH 2) when he received a call from Major General Tompkins over the scrambler radio. "The general asked did I 'want a regiment'," Meyers said. "I replied, 'Hell yes, General!' We arranged for me to turn over command of my landing force [Special Landing Force Alpha] in the morning, and by 1100, I was dodging the 12.7mm anti-aircraft in the early-morning

Khe Sanh fog aboard the first chopper I could get." The change of command was held the next morning, 12 April. "Dave [Lownds] took off by chopper for what later proved to be a trip to the White House to receive the Navy Cross and the 26th Marines' Presidential Unit Citation."

On 14 April, Colonel Meyers, the new commanding officer of the 26th Marines, ordered the 3d Battalion, 26th Marines, to attack Hill 881 North. With the order to take the hill, Lieutenant Colonel John C. Studt, who had assumed command of the battalion the previous month, laid on a full menu of fire support. In addition to the howitzers and guns emplaced at the main base and Ca Lu, the battalion also had the support of the three 105mm howitzers on Hill 881 South and its own 106mm recoilless rifles.

Shortly after midnight, all four companies of the battalion, accompanied by two scout dog teams, moved along routes previously secured by patrols into assault positions in the saddle between Hills 881 South and North. One platoon of Company I with Headquarters and Service Company was left on Hill 881 South. Captain William Dabney, who had been selected for major, was placed in command of the Provisional Weapons Company and rear security.

Throughout the night, Marine artillery and mortar shells crashed into Hill 881 North, destroying the enemy's bunkers and trenches, as the 3d Battalion waited for daybreak and the order to mount the final attack. Finally, shortly after dawn at about 0530, the artillery began final preparation fires as the battalion attacked with three companies abreast and the command group and one company in reserve close behind. Surging forward through an eerie and barren landscape of charred limbless trees and huge bomb craters, the battalion rolled up the enemy's defenses on the southern slope of the hill. As the Marine lead elements approached a tree line in their "uphill assault . . . the 106's [on Hill 881 South] literally blew the tree line away," Colonel Meyers recalled. Finally, with the crest of Hill 881 North before it, the battalion called for a massive 2,000-round artillery barrage. When it was over, Company K attacked along the right flank. Captain Paul L. Snead's men rushed through the smoking debris, rooting out the defenders from the ruins of bunkers and trenches.

At 1428, Company K raised a U.S. flag, which a squad leader had brought along, marking Hill 881 North as friendly

Presidential Unit Citation

The President of the United States takes great pride in presenting the PRESIDENTIAL UNIT CITATION to TWENTY-SIXTH MARINES (REINFORCED),

THIRD MARINE DIVISION (REINFORCED)

For service set forth in the following:

CITATION:

For extraordinary heroism in action against North Vietnamese Army forces during the battle for Khe Sanh in the Republic of Vietnam from 20 January to 1 April 1968. Throughout this period, the 26th Marines (Reinforced) was assigned the mission of holding the vital Khe Sanh Combat Base and positions on Hills 881, 861-A, 558 and 950, which dominated strategic enemy approach routes into Northern I Corps. The 26th Marines was opposed by numerically superior forces two North Vietnamese Army divisions, strongly reinforced with artillery, tank, anti-aircraft artillery and rocket units. The enemy, deployed to take advantage of short lines of communications, rugged mountainous terrain, jungle, and adverse weather conditions, was determined to destroy the Khe Sanh Combat Base in conjunction with large scale offensive operations in the two northern provinces of the Republic of Vietnam. The 26th Marines, occupying a small but critical area, was daily subjected to hundreds of rounds of intensive artillery, mortar and rocket fire. In addition, fierce ground attacks were conducted by the enemy in an effort to penetrate the friendly positions. Despite overwhelming odds, the 26th Marines remained resolute and determined, maintaining the integrity of its positions and inflicting heavy losses on the enemy. When monsoon weather greatly reduced air support and compounded the problems of aerial resupply, the men of the 26th Marines stood defiantly firm, sustained by their own professional esprit and high sense of duty. Through their indomitable will, staunch endurance, and resolute courage, the 26th Marines and supporting units held the Khe Sanh Combat Base. The actions of the 26th Marines contributed substantially to the failure of the Viet Cong and North Vietnamese Army winter/spring offensive. The enemy forces were denied the military and psychological victory they so desperately sought. By their gallant fighting spirit and their countless individual acts of heroism, the men of the 26th Marines (Reinforced) established a record of illustrious courage and determination in keeping with the highest traditions of the Marine Corps and the United States Naval Service.



Defense Department

President Lyndon B. Johnson attaches the Presidential Unit Citation Streamer to the colors of the 26th Marine Regiment in ceremonies, 23 May 1968, at the White House. Holding the unit's colors is Sergeant Major Agrippa W. Smith, sergeant major of the 1st Battalion, 9th Marines, who remained as top enlisted man the longest period of time at Khe Sanh, while Colonel David E. Lownds, commanding officer of the 26th Marine Regiment during the defense of Khe Sanh, looks on. The unit was cited for its outstanding performance during the seven week siege by North Vietnamese Forces.



Defense Department

A Marine from 3d Battalion, 4th Marines, takes a long look at Khe Sanh airstrip before departing the base.

territory. The 3d Battalion lost 6 dead and 21 wounded. The Marines took two prisoners from the 8th Battalion, 29th Regiment, 325th Division, and killed more than 100 of the North Vietnamese troops. With the enemy driven from the hill, the battalion began withdrawing to Hill 881 South, their mission accomplished. The attack was the last battle of Operation Pegasus.

At 0800 on 15 April, the 3d Marine Division once again assumed responsibility for the Khe Sanh Combat Base and

Operation Pegasus gave way to Operation Scotland II. The 1st Air Cavalry Division transferred its command post to Camp Evans but left its 2d Brigade under the control of the 3d Division.* The 1st Marines, to this point still operating along Route 9 just west of Ca Lu, moved to Khe Sanh to assume responsibility for defense of the combat base. Even

^{*}Camp Evans was named for LCpl Paul O. Evans, a member of Company L, 3d Battalion, who was killed during actions in Quang Tri Province in 1967.

as the Marines boarded their helicopters, Company K came under mortar fire.

As the helicopters landed at the Quang Tri airstrip, the 3d Marine Division band, playing the Marine Corps Hymn, was there to greet the troops. According to the band master, "it was the most inspiring performance of his career: chopper after chopper disgorging filth covered Marines in tattered and torn utilities, some with bandages, many carrying NVA souvenirs, but the expressions on their faces as soon as they perceived the strains of the Hymn was what moved him."

In Operation Pegasus, allied forces accomplished their mission of reopening Route 9 between Ca Lu and Khe Sanh at a cost of 92 Americans dead and 667 wounded and 51 ARVN killed. The North Vietnamese lost more than 1,100 killed and 13 captured. III MAF units found enemy supply caches estimated as "exceeding the basic load for an NVA division," including 3,000 tons of rice, more than 200 crewserved weapons, 12,000 rounds of large caliber ammunition, 5 wheeled vehicles, and a tank.

Epilogue

The base continued to receive light, sporadic incoming rocket fire for the next two months. In mid-June, a plan was drawn up for the closure of the base.

Operation Charlie

On 19 June, Task Force Hotel, the successor to the 26th Marines began executing Operation Charlie, the 3d Marine Division's plan for the evacuation and destruction of Khe Sanh Combat Base. The plan called for the Marines to withdraw all salvageable supplies and equipment and to destroy all fortifications and anything of possible use that they could not move. Colonel Marion C. Dalby noted,

Clearing Khe Sanh was tedious but thorough. Elements of 1st Marines moved methodically across the combat base filling trenches, destroying fortified positions, evacuating anything that might be of use to the enemy and removing the wreckage of many months [of] heavy fighting. As they moved they leveled the entire area with bulldozers, so that on 6 July as the 1st Marines command group departed the area, it was level and smooth ... only the old runway and taxiways remained.

Convoys rolled from Khe Sanh to Ca Lu daily, heavily laden with stockpiled supplies, salvaged fortification materials, and previously stranded damaged equipment. Detachments from the 3d and 11th Engineer Battalions and the 3d Shore Party Battalion arrived with bulldozers and mechanics to help with the work. Even burned-out vehicle hulks and damaged equipment were cut apart into smaller pieces, moved to secure areas, and buried to prevent their use in enemy propaganda. The same Seabee unit that had toiled to repair and upgrade the airstrip months before returned to rip up the steel matting runway.

Working parties destroyed more than 800 bunkers and 4.8 kilometers of concertina wire, throwing the wire into the trenches and filling them with soil. They slit open the countless sandbags and emptied them, wrecked standing structures, and burned what remained to the ground. As a final step to discourage the North Vietnamese from attempting to dig through the ruins for useful material, the Marines sprinkled the area with CS powder, an irritant chemical agent. At 2000 on 5 July, the Khe Sanh Combat Base, now just a smoldering scar on the land, officially closed.

Twenty years after the battle, when asked to name the decision of which he was the most proud, General Westmoreland replied, "The decision to hold Khe Sanh."

Sources

This commemorative was based on the official U.S. Marine Corps publication originally written by Jack Shulimson, LtCol Leonard A. Blasiol, Charles R. Smith, and Capt David A. Dawson, U.S. Marines in Vietnam: The Defining Year, 1968 (Washington, DC: History and Museums Division, Headquarters Marine Corps, 1997). Additional information came from Gregg Jones, Last Stand at Khe Sanh: The U.S. Marines' Finest Hour in Vietnam (Boston: Da Capo Press, 2014); Col R. D. Camp with Eric Hammel, Lima-6: A Marine Company Commander in Vietnam (New York: Atheneum, 1989); LtCol Shawn P. Callahan, Close Air Support and the Battle for Khe

Sanh (Quantico, VA: History Division, Headquarters Marine Corps, 2009); Capt Moyers S. Shore II, The Battle for Khe Sanh (Washington, DC: G-3 Division, Historical Branch, Headquarters Marine Corps, 1969); Sedgwick D. Tourison and Ray W. Stubbe, B5-T8 in 48 QXD: The Secret Official History of the North Vietnamese Army of the Siege of Khe Sanh, Vietnam, Spring, 1968 (Wauwatosa, WI: Ray W. Stubbe, 2006); John Prados, The Blood Road: The Ho Chi Minh Trail and the Vietnam War (New York: Wiley, 1999); and Ronald J. Drez and Douglas Brinkley, Voices of Courage: The Battle for Khe Sanh, Vietnam (New York: Bulfinch Press, 2005).

Acronyms and Abbreviations

ARVN	Army of the Republic of Vietnam
ASRT	Air Support Radar Team
CAP	
CIDG	Civilian Irregular Defense Group
COC	
DASC	Direct Air Support Center
DMZ	demilitarized zone
FAC	forward air control
FMFPac	Fleet Marine Force, Pacific
FSCC	Fire Support Coordination Center
GCA	ground control approach
GPES	ground proximity extraction system
H&I	harassment and interdiction
HMM	Marine Medium Tiltrotor Squadron
HST	Helicopter Support Team
ICTZ	I Corps Tactical Zone
IFR	instrument flight rules
JTAD	Joint Technical Advisory Detachment
KIA	killed in action
LAAW	light antiarmor weapons
LAPES	low altitude parachute extraction system
LOD	line of departure
LSA	logistics support area
LZ	landing zone

MAF	
MAW	
MIKE	mobile strike force
NCO	
NVA	
RVN	
SIGINT	signal intelligence units
SOG	Special Operations Group or Studies and Observations Group
TACP	
USMACV	U.S. Military Assistance Command, Vietnam
VPA	
WIA	wounded in action

Acknowledgments

I would like to recognize the Marine Corps History Division for its assistance with this monograph, particularly Chuck Melson and Paul Westermeyer for their advice and constructive comments; Dr. Fred Allison for providing the oral history interviews from History Division's extensive collection; interns Patrick Saint, Igor Neves, and Robert P. Hanger for their work with the illustrations and maps; and the Marine Corps Heritage Foundation for the research grant it provided

to support the project. Special recognition, of course, goes to the veterans of the battle for their sacrifice and valor at Khe Sanh. Semper Fi, particularly the Marines and corpsmen of Lima Company, 3d Battalion, 26th Marines. Special recognition, of course, goes to the veterans of the battle for their valor and sacrifice at Khe Sanh, particularly the Marines and Corpsman of Lima Company, 3d Battalion, 26th Marines.

Richard D. Camp Jr. Colonel, U.S. Marine Corps (Retired)

Richard D. Camp Jr.

Colonel, U.S. Marine Corps (Retired)



Photo courtesy of the author

Dick Camp entered the Marine Corps through the Officer Candidates School after attending the State University of New York and graduating with a degree in elementary education. Commissioned as a second lieutenant in 1962, he served in a variety of command and staff assignments during a 26-year career, including 13 months as a rifle company commander with Lima Company, 3d Battalion, 26th Marines, and aide de camp to Major General Raymond G. Davis. Camp retired in 1988 with the rank of colonel and became a business manager for two school districts in Ohio. Retired again in 2005, he became the acting director of Marine Corps History Division. In 2006, Camp became the vice president for museum operations at the Marine Corps Heritage Foundation. He retired in 2012 to write full time.

He is the author of 15 books, including Assault from the Sky: U.S. Marine Corps Helicopter Operations in Vietnam (2013); two novels on Vietnam titled Echo Among Warriors: A Novel of Marines in the Viet-

nam War (2011) and The Killing Ground: A Novel of Marines in the Vietnam War (2013); cowriting Lima-6: A Marine Company Commander in Vietnam (1989); and more than 100 articles in various military history magazines. In addition, Camp has been a guest lecturer at numerous seminars and professional meetings.



MARINES IN THE VIETNAM WAR COMMEMORATIVE SERIES

