

TA-4 circled overhead trying to keep his flock from running amuck. During the missions to 881S, the men of India and Mike, 3/26, added to the hullabaloo with a little twist of their own. When the CH-46s settled over the hill, the Marines on the ground tossed out a few dozen smoke grenades for added cover and then every man in the perimeter fired a full magazine at anything on the surrounding slopes which appeared hostile. With some 350 men hosing down the countryside at the same time, the din was terrific.

Neither the deluge of lead from 881S nor the suppressive fire of the jets and gunships kept the NVA completely quiet. The 120mm mortar crews in the Horseshoe were especially active during the resupply runs to 881S and always lobbed some rounds onto the hill in hopes of knocking down a helicopter. These tubes had been previously registered on the LZs and the smoke screens had little effect on their fire; as a result, the Marines frequently shifted landing zones.(*). The smoke did block the view of the North Vietnamese machine gunners and they were forced to fire blindly through the haze--if they dared fire at all. The choppers still took hits but nowhere near as many as before the Gaggle was initiated. The CH-46 pilots, poised precariously

(*) There is an interesting possibility as to why the mortars in the Horseshoe were never silenced. Fourteen years earlier, at Dien Bien Phu, the North Vietnamese used an ingenious method to protect their heavier siege mortars from air attacks and they may well have repeated it at Khe Sanh. The mortar crews selected a site on the slope of a hill, figured the elevation and deflection necessary to hit one specific target, and then dug a small tunnel at that precise angle into the side of the hill. The mortar was emplaced at the bottom of the tunnel with connecting caves which housed the gunners. When fired, the mortar rounds traveled up the shaft, sometimes as far as 50 feet before reaching the surface. The foliage was cleared away from the mouth of the tunnel so that the rounds did not hit the overhanging branches and detonate prematurely. Mortars emplaced in this manner were, of course, limited to only one target and, as far as the gunners in the Horseshoe were concerned, that target was 881S. When the siege was later broken and Marine units began to maneuver in the terrain surrounding the hill mass, they were never taken under fire by the 120mm mortars even though they did receive fire from smaller caliber weapons. Hill 881S, however, continued to be hit periodically by the 120mms.

above the LZs during the few agonizing seconds it took to unload their cargo, often heard the sickening smack which meant that a bullet had torn into the fuselage of their thin-skinned helos. The members of the two-man Helicopter Support Teams (HST), 3d Shore Party Battalion who were attached to the rifle companies were also prime targets. These men had to stand up while they guided the choppers into the LZs and, every few days, they had to attach bundles of cargo nets, which accumulated from previous missions, for the return trip to Dong Ha. This was dangerous for the aircrews as well as the HST men because, during the hook-up, the pilots had to hold their aircraft in a vulnerable position a few feet above the ground with the nose cocked up and the belly exposed to fire from the front. While they attached the bundles, the ground support personnel could hear the machine gun rounds zing a few inches over their heads and slap into the soft underside of the suspended helicopter. Not all the bullets and shell fragments passed overhead; on 881S, the defenders were operating with their fourth HST when the siege ended.

In spite of the seriousness of the situation, the Gaggle was not without its lighter episodes. In one instance, an HST man attached to I/3/26 hooked up an outgoing load and gave the pilot the "thumbs up" when he discovered that he had become entangled in the pile of nets. The CH-46 surged into the air with the startled Marine dangling helplessly from the bottom of the net by one foot. But for the quick reaction of his comrade on the ground who informed the pilot by radio that the chopper had taken on more than the prescribed load, the young cargo handler would have had a rather interesting trip to Dong Ha. The CH-46 crews also provided a human touch during these missions. When the Sea Knights swept over the hills, it was not uncommon to see a machine gunner on board quit his weapon for a second, nonchalantly pitch a case of soda pop out the hatch, and then quickly return to blaze away at the enemy positions. At 1st MAW Headquarters, Lieutenant Colonel Carey, who had been an infantryman in Korea before he went to flight school and who sympathized with the men on the outposts, felt that a small gesture acknowledging their continued outstanding performance was in order. Special efforts were made to obtain quantities of dry ice for packing and one day, without notice, hundreds of Dixie-cups of ice cream were delivered to the men on the hills as part of the regular resupply. This effort was dubbed Operation COOL IT. The only hitch developed on 881S where the Marines, unaware of the contents, allowed the cargo to remain in the LZ until after dark when it was safe to venture out of the trenchline.

The ice cream was a little sloppy but edible and greatly appreciated.

The introduction of the Super Gaggle was a turning point in the resupply effort. Prior to its conception, the Marines on the outposts dreaded the thought of leaving their positions to retrieve cargo--even when it included mail--because of the heavy shelling. With a dozen Skyhawks pasting the surrounding hills during each mission, this threat was alleviated to a large degree and casualties tapered off. The Company I, 3/26, commander later stated: "If it weren't for the Gaggle, most of us probably wouldn't be here today." The helicopter pilots, knowing that their jet jockey compatriots were close at hand, were also able to do their job more effectively. In the past, the transport crew chiefs occasionally had to jettison their external load prematurely when the pilot took evasive action to avoid ground fire. When this occurred, the cargo nets usually slammed into the perimeter and splattered containers all over the hill-top. (*) (131) With the Super Gaggle, the pilots had less enemy fire to contend with and did not bomb the hills with the cargo pallets as much; as a result more supplies arrived intact. In addition, the system greatly facilitated the picking up of wounded personnel. (**)

The Marine helicopters continued their flights to and from Khe Sanh throughout the siege. In spite of the obstacles, the chopper pilots crammed enough sorties into those days with flyable weather to haul 465 tons of supplies to the base during February. When the weather later cleared, this amount was increased to approximately 40 tons a day. While supporting Operation SCOTLAND, MAG-36 and MAG-16 flew 9,109 sorties, transported 14,562 passengers, and delivered 4,661 tons of cargo. (132)

(*) Of all the jettisoned loads, those containing water were the most spectacular. On one occasion, a CH-46 carrying plastic containers of water was forced to release the net about 200 feet above the ground. The containers broke open in midair and the contents cascaded on the hill below. The Company E, 2/26, commander, Captain Breeding, later recalled that it produced one of the prettiest waterfalls he'd ever seen.

(**) It is no exaggeration to say that MAG-36 helicopters played a decisive role in the battle. The maintenance of the hill outposts was imperative if Khe Sanh was to be held, and these units depended on the helicopters for survival.

Colonel Lownds was more than satisfied with the airborne pipeline which kept his cupboard full and he had quite a cupboard. The daily requirement for the 26th Marines to maintain normal operations had jumped from 60 tons in mid-January to roughly 185 tons when all five battalions were in place. While the defenders didn't live high off the hog on this amount, at no time were they desperately lacking the essentials for combat. There were periods on the hills when the Marines either stretched their rations and water or went without, but they never ran short of ammunition. Understandably, ammunition had the highest priority--even higher than food and water. A man might not be able to eat a hand grenade but neither could he defend himself very effectively with a can of fruit cocktail. This did not mean that the men of the 26th Marines went hungry. On the average, the troops at the base received two C-Ration meals a day and this fare was occasionally supplemented with juice, pastry, hot soup, or fresh fruit. The men on the hills subsisted almost entirely on C-Rations and the time between meals varied, depending on the weather. Within the compound, water was rationed only when the pump was out of commission and that was a rare occurrence. Lieutenant Colonel Heath's position on Hill 558 was flanked by two streams so 2/26 was well supplied but the Marines on the other four outposts depended on helilifts for water; it was used sparingly for drinking and cooking. (*) (133) Besides the essentials, the 26th Marines also required tons of other supplies such as fortification material, fuel, tires, barbed wire, and spare parts--to name a few. PX items were on the bottom of the bottom of the priority totem pole because, as Colonel Lownds remarked: "If you have to, you can live without those." On the other hand, mail had a priority second only to ammunition and rations. The men at Khe Sanh received over 43 tons of mail during the worst month of the siege. (134)

One portion of the airlift which affected morale as much as the arrival of mail was the swift departure of casualties. A man's efficiency was greatly improved by the knowledge that,

(*) During one period of extremely bad weather, the platoon from A/1/26 which held positions on Hill 950 went without resupply for nine days and the water shortage became a major problem. Lieutenant Colonel Wilkinson authorized the platoon commander, Second Lieutenant Maxie R. Williams, to send a squad out to a small stream which was about two hours march from the perimeter. In addition to finding water, the Marines surprised a group of North Vietnamese and killed nine of the enemy. One Marine was also killed.



A CH-46 helicopter of Marine Aircraft Group-36 evacuates wounded from Hill 861A (Photo courtesy David D. Duncan)



U. S. Navy doctors and corpsmen, wearing helmets and flak jackets, treat wounded at Charlie Med aid station. (Photo courtesy David D. Duncan)

if he were hit, he could expect immediate medical attention and when necessary, a speedy evacuation.(*). Those with minor wounds were usually treated at the various battalion aid stations and returned to duty; the more seriously injured were taken to Company C, 3d Medical Battalion. Charley Med, as this detachment was called, was located just south of and adjacent to the aircraft loading ramp. There, U. S. Navy doctors and corpsmen treated the walking wounded, performed surgery, and prepared the litter cases for medevac. From Charley Med, it was a short, but often nerve-racking trip to a waiting aircraft and a hospital at Phu Bai. During the siege, the courageous men of Charley Med, often working under heavy enemy fire, treated and evacuated 852 wounded personnel.(135)

Thus the Marine and U. S. Air Force transport pilots, helicopter crews, loadmasters, and ground personnel kept open the giant umbilical cord which meant life for the combat base. Without their efforts, the story of Khe Sanh would undoubtedly have been an abbreviated edition with a not-too-happy ending. On the other hand, accounts of the heroism, ingenuity, and skill demonstrated by these men would fill a book. But there were other things besides manna falling from the heavens at Khe Sanh and the vital role of the transports was frequently eclipsed by the efforts of air crews who carried a much deadlier cargo.

(*) Bad weather occasionally precluded the immediate evacuation of casualties from the hill outposts.

PART VI

SUPPORTING ARMS AND INTELLIGENCE

The amount of air and artillery support that the 26th Marines received during the defense of Khe Sanh was enormous. Few regiments ever had such an overwhelming amount of firepower at their disposal. The reason was that General Westmoreland gave SCOTLAND priority over all other operations in Vietnam. The well-publicized struggle had long since become more than just another battle; it was a symbol of Allied determination to hold the line in Vietnam. The stubborn resistance of the 26th Marines had generated an emotional impact that was felt not only in the United States but around the globe. Thanks to a small army of war correspondents and reporters, millions of people followed the battle day by day and, in essence, the military prowess of the United States was exposed to the world.

The agency at the combat base which was responsible for coordinating the vast array of supporting arms was the 26th Marines FSCC which was headed by the 1/13 commander, Lieutenant Colonel Hennelly. The FSCC, with its artillery and air representatives, was an integral part of the regimental staff and it planned and supervised the execution of all fire missions within the SCOTLAND area of operations. Subordinate to the FSCC, was the 1/13 Fire Direction Center (FDC), headed by Captain Lawrence B. Salmon, and the Khe Sanh Direct Air Support Center (DASC), under Major Charles D. Goddard. The FDC served as the brain of the artillery battalion where initial fire requests were received and transformed into numerical data for the gun crews. To speed up the process, Captain Salmon relied heavily on the Field Artillery Digital Automatic Computer or FADAC. The DASC had displaced to the KSCB on 19 January with the sole mission of handling the deluge of incoming aircraft. Requests for air support from the FSCC were channeled through the DASC to the Tactical Air Direction Center of the 1st MAW. Whenever the wing could not completely fill a quota, liaison teams within the DASC called on the other services for assistance. Once the schedule was met and the strike aircraft arrived on station, the Marine DASC, aided by an Airborne Command and Control Center (ABCCC) from Seventh Air Force, coordinated all air operations within the Khe Sanh TAOR. (*) (137)

(*) Marine control of air support within the Khe Sanh TAOR

This mammoth air umbrella, called Operation NIAGARA, lasted from 22 January until 31 March and was truly an Allied effort. At one time or another, the Khe Sanh DASC utilized the assets of all services: 1st MAF, Seventh Air Force, Strategic Air Command, U. S. Navy Task Force 77, Vietnamese Air Force, and various U. S. Army aviation companies. The majority of the sorties, however, were flown by U. S. Marine, Navy, and Air Force crews. Their mission was to "destroy enemy forces in the SCOTLAND ...TAOR, interdict enemy supply lines and base areas,...and provide maximum tactical...air support to friendly forces." Generally, the type of strike fell into one of three categories: close air support, B-52 Arc Light strikes, or radar-controlled bombing. (*) (138)

Close air support missions were utilized against pinpoint targets in proximity of friendly troops. Along with radar-controlled bombing, this type of air strike was the most responsive to the needs of the ground commanders and the most accurate; the attack pilots, however, required reasonably good weather to be able to hit their targets. There were usually fighter/bombers overhead at Khe Sanh around the clock; if not, they could be quickly scrambled from hot pads or diverted from other missions. When the pilots arrived on station, they checked in with the DASC and were handed off to a Marine or Air Force Tactical Air Controller (Airborne) who personally directed the strike. There

resulted from negotiations between CG, III MAF and the Seventh Air Force. General Cushman was delegated authority for Colonel Lownds to control, through his FSCC, all supporting fire, including air strikes within a circle which encompassed the range of the regiment's 155mm howitzers. During the period 22 January-13 February, operational difficulties caused ComUSMACV to give Commander, Seventh Air Force full responsibility for the overall NIAGARA air effort through the ABCCC.

(*) Close air support in Vietnam includes all air attacks that are coordinated with the supported force. Radar-controlled bombing and B-52 strikes, in this context, can be called close air support but, for the purposes of this study, the three above mentioned categories will be considered separately. Although the delivery method is technically not a criteria, close air support in this text will refer to those missions where fixed-wing pilots, under the direction of an airborne or ground controller, visually acquire and attack a target in proximity to friendly forces.

were seven TAC(A)s assigned to the 26th Marines; the Air Force personnel were members of the 20th Tactical Air Support Squadron and the Marines were from Headquarters and Maintenance Squadron 36 and Marine Observation Squadron 6. At least five of these pilots, flying Ol-E Birddogs or UH-1E gunships, remained over the battlefield during the day and maintained direct communications with both the attack aircraft and the troops on the ground. In this manner, the TAC(A)s could rapidly employ the jets wherever they were needed the most and the close supervision reduced the chance of accidentally bombing friendly forces.

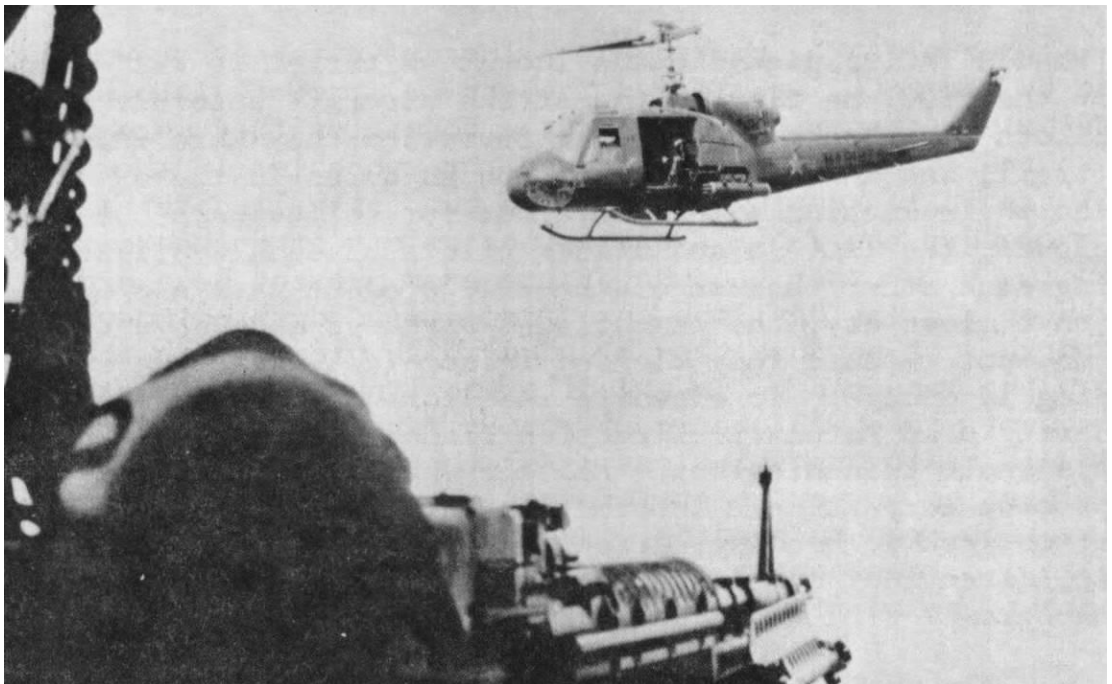
During the day, the air around Khe Sanh was filled with the high-pitched shriek of jet engines: Marine, Navy, and Air Force F-4 Phantoms; Marine and Navy A-6 Intruders, A-4 Skyhawks, and F-8 Crusaders; Air Force F-105 Thunderchiefs and F-100 Super Sabers. In addition to the jets, the South Vietnamese prop-driven A-1 Skyraider, a rugged attack aircraft of Korean War vintage, was in evidence. At times, the sky overhead resembled a giant beehive. When a flight arrived on station, the Khe Sanh DASC normally directed it into a holding pattern until a TAC(A) or a Forward Air Controller on the ground was free to handle the strike. These patterns sometimes extended up to 35,000 feet with scores of planes gradually augering their way downward as each preceding flight unloaded its ordnance and scooted for home.

When a TAC(A) picked out a lucrative target or was assigned one by the FSCC, he cleared the strike aircraft into his area. The pilots then broke up whatever formation they were in, slipped into trail, and snaked their way through holes in the overcast-- all the while keeping a sharp eye out for helicopters. Below the clouds, the TAC(A)s and attack pilots often had difficulty finding each other because of the ever present haze and dust. Even on a clear day, the camouflaged Birddogs and Hueys were hard to spot because they blended in so nicely with the surrounding landscape. To expedite the link-up, the jet pilots frequently used Automatic Direction Finders to get a fix on the TAC(A)s radio transmissions. All the while, the airborne spotter was passing on pertinent information such as target description, elevation, run-in heading, direction of pull-off, number of passes, direction and distance of nearest friendly troops, and whether ground fire was expected.

When the controller and his flight made visual contact, the real work began. The TAC(A) made a marking run during which he either fired a smoke rocket or pitched out a colored smoke grenade on the position he wanted hit. Once the attack pilots



Marine and Air Force TAC(A)s controlled strike aircraft from light observation aircraft called Birddogs. (USMC Photo A402048)



UH-1E Gunships of Marine Observation Squadron-6 were also used to direct close air support missions. (USMC Photo A421451)

had the smoke, the TAC(A), and the nearest friendlies in sight, they rolled in on the assigned heading and made dummy passes until the controller was satisfied that the jets were lined up on the right target. He then cleared them in for hot passes. While the jets streaked in, the controller monitored his VHF tactical net to the ground troops and gave short corrections to the attack pilots over his UHF radio. An example of an average commentary follows:

TAC(A): Number One, from my smoke go six o'clock at 100 meters....PILOT: Roger, Ones in hot...TAC(A): I have you in sight, you're cleared to fire....TAC(A): PILOT: Ones off target...Switches Safe....TAC(A): Number Two, from One's hits come three o'clock at 50 meters...PILOT: Roger, Two's in hot....etc., etc.

The aircraft continued their race track pattern until all ordnance was expended at which time the leader announced that his flight was pulling off "high and dry."(*)

The TAC(A) would then swoop low over the smoke-shrouded target and attempt to record the results of the strike. This Battle Damage Assessment (BDA) was relayed to the departing pilots for their intelligence debriefing back at homeplate. An example of one such transmission would be:

Your BDA follows: 5 KBA (killed by air); two bunkers, 1 automatic weapon, and 50 meters of trenchline destroyed; one secondary explosion. You have been flying in support of the 26th Marines; your controller has been SOUTHERN OSCAR. Good shooting and good afternoon, gentlemen.

While the strike pilots checked out with the Khe Sanh DASC and headed for home, the TAC(A) looked for another target and waited for another flight.(139)

One of the most unusual incidents involving the use of strike aircraft occurred near Hill 881S and the key figure in the episode was a Marine from American Samoa--Lance Corporal Molimao Niutoa. The corporal was a bull of a man, who because of his origin and wedge-shape physique was nicknamed "Pineapple Chunk." (A second American Samoan in the company of considerably

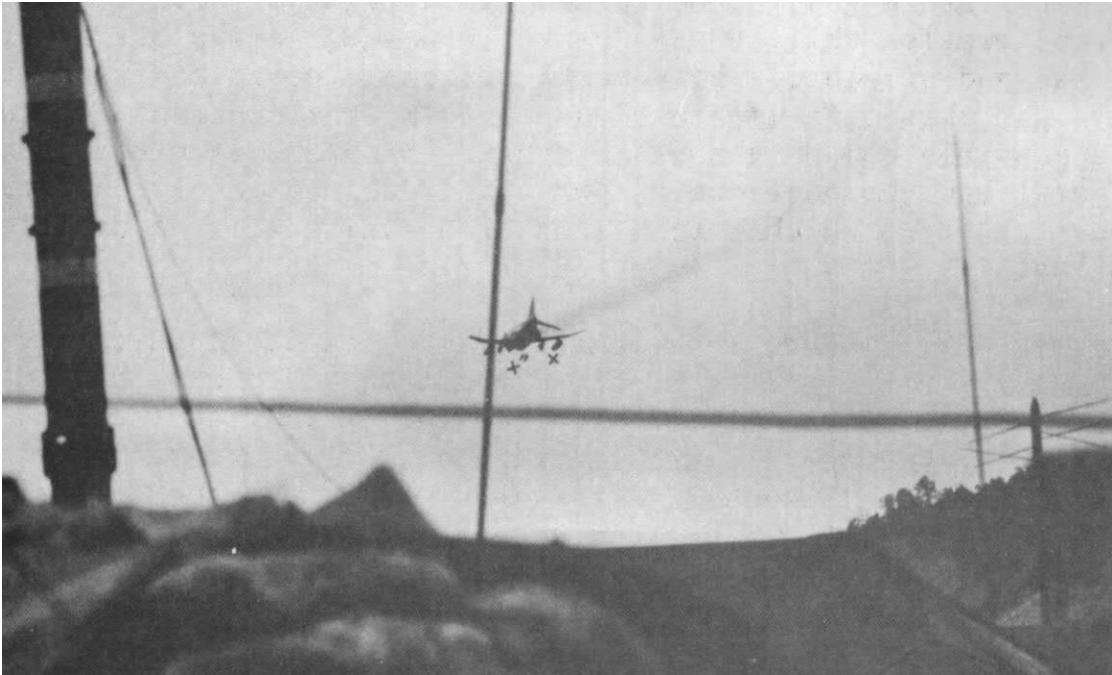
(*) High and dry meant that all ordnance had been expended. Another frequently used term was "ammo minus."

smaller stature was dubbed "Pineapple Tidbit.") But it was not the muscles which distinguished Niuatoa, it was his eyes; the man had absolutely phenomenal vision. During his recruit training, this gift had enabled him to post a score of 241 out of a possible 250 on the rifle range. Besides his vision, the corporal had the patience of Job and a deep power of concentration--qualities which were essential in his job as an artillery spotter.

One day, Corporal Niuatoa, using a pair of 20-power naval binoculars, was scanning in the direction of 305 when he picked up the muzzle flash of an enemy artillery piece; he then saw the gunners hurriedly cover the weapon with a screen. As the round sputtered overhead on its way to Khe Sanh, the corporal noted the position and reported his discovery to the company commander. Referring to a map, Captain Dabney could not get anything other than a general idea of the location because the site was from 12,000 to 13,000 meters away and the terrain in that area was so mountainous that he could not pinpoint the exact contour line. Not so Corporal Niuatoa, he could see exactly where the gun was and kept his eyes glued to the binoculars. Normally, he would have adjusted on the target with marking rounds but the site was beyond the range of friendly artillery. The only way the gun could be taken out was with aircraft.

While Pineapple Chunk maintained his reference point, an O1-E Birdog aircraft arrived on the scene, and was directed to the general area of the artillery position. On the heels of the spotter craft came several flights of Marine A-4 Skyhawks armed with 500-pound bombs. Although the TAC(A) didn't know exactly where the target was, he rolled in and cranked off a smoke rocket. The puff from the 2.75-inch rocket wasn't visible to the Marines on 881S but the billowing clouds left by the 500-pound bombs of the first A-4 were. Using standard artillery terminology, Corporal Niuatoa adjusted: "Left 2,000, add 1,000." The corrections were passed to the TAC(A) who fired another rocket, on which an A-4 pilot placed another string of bombs. Gradually, the bracket was closed until a Skyhawk in the fourth flight scored a direct hit and the gun position erupted in a series of secondary explosions.(140)

The NVA troops, however, were not always on the receiving end; they frequently dished it out. In addition to numerous helicopters shot down around the combat base, several of the speedier jets were also knocked out of the sky. During one



Marine F-4B Phantom delivers Snakeye bombs on enemy trenches. Large tail fins retard the descent of the bombs. (Photo courtesy David D. Duncan)



Corporal Robert J. Arrotta (center), controlled over 200 airstrikes from Hill 881S. (Photo courtesy Major William H. Dabney)

close air support mission, an A-4 flown by Major William E. Loftus of Marine Attack Squadron 311 received heavy battle damage and the pilot realized that he could not make it to the coast. Not wanting to end up in "Indian Country," he nursed his crippled Skyhawk toward Khe Sanh and ejected right over the base. As the smoking A-4 knifed into the lush jungle growth and erupted in a brilliant orange fireball, Major Loftus floated down and landed in an outer ring of barbed wire just outside the Company B, 1/26 perimeter. Lieutenant Dillon, the 2d Platoon commander, took several men out and helped extricate the major who had become hopelessly entangled in his parachute shroud lines and the barbed wire. After being freed, Major Loftus grinned and told the lieutenant: "If you weren't so damn ugly, I'd kiss you." After a quick medical check-up, the major climbed aboard a helicopter and returned to his squadron at Chu Lai for another plane and another day.(141)

One of the closest escapes, however, occurred to the southwest of the base. In late January, Lieutenant Colonel Harry T. Hagaman, Commanding Officer of Marine Fighter Attack Squadron 323, and his Radar Intercept Officer, Captain Dennis F. Brandon, were leading a flight of F-4B Phantoms against what the TAC(A) described as a "suspected" anti-aircraft position. The enemy gunners confirmed their presence during the first pass. As Lieutenant Colonel Hagaman's F-4B, armed with napalm and 250-pound Snakeeyes, skimmed low over the treetops, the North Vietnamese cut loose and laced the belly of his plane with a stitch of 50 caliber shells. The aircraft shuddered under the impact and burst into flames. Captain Brandon, a backseat veteran with over 300 combat missions, knew instantly when he heard the series of ominous "thuds" that the Phantom had been mortally wounded; he quickly pulled his face curtain and ejected. Lieutenant Colonel Hagaman stayed with the bucking Phantom momentarily in a vain effort to stabilize the aircraft by using his rudders. The delay almost cost the pilot his life because the F-4B began to tumble end-over-end barely 100 feet above the ground. Suddenly the world outside became a spinning blur of blue and green. The second time that he saw green--indicating that the aircraft was inverted--Lieutenant Colonel Hagaman started to pull his alternate ejection handle which was located between his knees. In the second that it took the escape mechanism to function, the Phantom flipped upright and the ejection cartridges blasted the pilot from the flaming cockpit. Seconds later, the plane cartwheeled into the ground and exploded. The pilot was so low when he "punched out" that the chute had scarcely deployed when his feet touched the ground. Both crewmen hid in the tall

elephant grass within earshot of the North Vietnamese who were searching for them. Within minutes, rescue helicopters lumbered on the scene and, while the downed crew's wingman made dummy passes to discourage the enemy soldiers, the choppers darted in and plucked the shaken, but otherwise uninjured, Marines to safety. (*) (142)

If there was anything that could top that performance, it was the spectacular air shows provided daily by B-52 Stratofortresses of the 4133d Provisional Heavy Bombardment Wing, based at Andersen Air Force Base, Guam, and the 4258th Strategic Bombardment Wing in Thailand. The B-52 pilots did not count on finesse as much as they did on sheer power because each Stratofortress carried a 27-ton payload of 108 mixed 500- and 750-pound bombs. Since these giants had the means to virtually move mountains, the Arc Light strikes were used on area targets such as troop concentrations, marshalling points, supply depots, and bunker sites. The result of the enemy build-up around the base was an enormous number of targets located in dispersed but common areas and such complexes were ideal for heavy bombers. These targets were programmed into computers aboard the aircraft and the strikes were conducted from altitudes above 30,000 feet. To the bomber crews, it was an impersonal type of warfare because, from above the overcast, they rarely even saw their bombs explode. The bombs did not have to be seen to be felt. (143)

When several flights of B-52s worked over a target, the results were awesome. The exploding bombs churned up strips of the terrain several thousand meters long and the ground for miles around literally shook from the blasts. Many enemy casualties were sustained from the concussion alone. One entry from a captured North Vietnamese diary read: "18 February: The heavy bombing of the jets and B-52 explosions are so strong that our lungs hurt." In some instances, NVA soldiers were found after an Arc Light strike wandering around in a daze with blood streaming from their noses and mouths. (**) Often the

(*) Both crews suffered sore backs from the ejection but no other injury. Lieutenant Colonel Hagaman became the third CO in a row from VMFA-323 to leave an F-4B via the ejection route. Captain Brandon returned to action and eventually compiled 400 combat missions--a first for Marine Radar Intercept Officers.

(**) To catch stunned survivors above ground, the 1/13 batteries frequently put massed artillery fire into the target area 10 to 15 minutes after the bombers departed.

internal hemorrhaging induced by the concussion was so severe that it resulted in death. Quite understandably, such missions could not be unleashed too close to the Marines.(144)

In the early stages of the conflict, Arc Light strikes were not authorized within a prescribed distance of friendly lines. The same rule had applied during the heavy fighting at Con Thien the year before and the NVA had taken advantage of the buffer zone by moving troops and supplies in as close to the Marine base as possible to avoid the bomber raids. They tried the same thing at Khe Sanh. When American airborne observers noted enemy bunker complexes cropping up near the KSCB, the no-bomb line was moved in to about half of the original distance. At first the regimental commander was afraid that the resulting concussion would collapse his own bunkers and trenches; as it turned out, the enemy fortifications were the only ones which suffered. The first few B-52 raids inside the old line touched off scores of secondary explosions and undoubtedly snapped the North Vietnamese out of their sense of security. The closer strikes also served as a morale booster for the defenders who flocked from their bunkers to watch, what the Marines called, "Number One on the hit parade."(145)

According to the regimental Target Intelligence Officer (TIO), Captain Mirza M. Baig, the B-52 was an accurate weapons system which the FSCC employed around Khe Sanh much the same as the other supporting arms. About 95 percent of the Arc Light missions were targeted at the 26th Marines headquarters.(*). Requests were submitted to the 3d Marine Division Air Officer 15 hours prior to the drop at a rate of 8 strikes every 24 hours. Up to three hours before the strike, the TIO, upon direction, could divert the bombers to new unscheduled targets, but after that the Stratofortresses were restricted to their original target. The response time was later trimmed even more by using cells of three B-52s which left Guam and Thailand every three hours; this put the bombers over Khe Sanh every hour and a half. In spite of this streamlining, the B-52s were never as responsive

(*) General Westmoreland gave his constant personal attention to the targeting of these strikes and while most of the targets were generated by the 26th Marines Headquarters, General Westmoreland personally approved the requests. Based on intelligence he also directed or diverted B-52 raids from Saigon. To keep right on top of this aspect of the battle, the general slept at night in his Combat Operations Center during the siege.

or flexible as the droves of fighter/bombers which were overhead constantly. Nevertheless, the devastating power and psychological effect produced by the Stratofortresses, coupled with the surprise factor, made them an extremely valuable adjunct. (*) (146)

The type of strike which most impressed the regimental commander, however, was the ground-controlled radar bombing. Although these raids lacked the punch of an Arc Light strike, they were as accurate and flexible as dive-bombing attacks and could be conducted in the worst weather. In fact, the technique was designed especially to cope with the inherent bad weather which accompanied the monsoons in Southeast Asia when attack aircraft could not get below an overcast to hit the target.

The controlling agency at Khe Sanh for these strikes was Air Support Radar Team - Bravo (ASRT-B), Marine Air Support Squadron 3 which had moved from Chu Lai on 16 January. The ground controllers operated from a heavily reinforced van which housed their sensitive computer equipment and used the TPQ-10 radar to guide aircraft to their target; thus, the missions were called TPQs. (**) (147) The radar emitted a pencil-shaped beam which detected and locked on to the aircraft. Using target coordinates provided by the FSCC, the controller programmed the enemy position, ballistic characteristics of the bombs, current winds, 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 corrections in airspeed, altitude, and heading which the operator passed on to the pilot. The controller closely monitored his set and, at a predetermined release point, called a "Mark" to the pilot who "pickled" his bombs. (***) In specially-equipped aircraft, such as the A-4

(*) The 26th Marines Command Chronology does not list sorties but strikes which were made up of several aircraft and 430 strikes were recorded.

(**) The van, as well as crew living quarters, was emplaced underground and was heavily sandbagged. The sturdiness of the bunker was an important factor because of the heavy shelling. One enemy round scored a direct hit on top of the bunker with no damage to the fragile equipment. The computer van remained operational throughout the siege.

(***) The term "pickled" is slang used by pilots which means to drop their ordnance.

Skyhawk and the A-6 Intruder, the bombs could be released automatically from the ground. One ground controller could handle a single plane, a section (two planes), or a division (four planes) on the same pass as long as the pilots flew in a tight formation and the radar did not break lock. One of the controllers' favorite aircraft was the A-6 because it packed such a heavy wallop; a single Intruder usually carried 28 500-pounders. Any fighter/bomber, however, could be used as long as it carried low-drag ordnance and the pilot could make a smooth run.(148)

Even though most TPQs were conducted from around 14,000 feet, the accuracy of ASRT-B was phenomenal. When new personnel arrived at Khe Sanh, they were given several check drops on a nearby hill to test their proficiency before the newcomers were allowed to conduct strikes near friendly troops. The first drop was always within 40 meters of the target and, after they adjusted there was virtually no error. Calibration drops were also conducted twice weekly to ensure the accuracy of the equipment. One member of the FSCC stated that, if he were in a foxhole and under attack, he would have no qualms about calling an ASRT-B controlled TPQ within 35 meters of his position. The rule of thumb which the FSCC generally applied when determining a safe distance for normal operations, however, was one meter from the friendlies for every pound of conventional ordnance being delivered. Thus, for TPQs, a 250-pound bomb would not normally be dropped within 250 meters of Allied troops, a 500-pounder within 500 meters, and so on. This criteria was not established because the men on the ground lacked confidence in the system but because of the large fragmentation pattern produced by the bombs. Besides, anything inside the prescribed radius could be handled just as effectively by artillery, mortars, and direct fire weapons. In an emergency, the regimental commander would have undoubtedly lifted the restriction. Concerning the quality of support he received from ASRT-B, Colonel Lownds said, "Anything but the highest praise would not be enough."(149)

In addition to its accuracy, the TPQ 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-B set a new squadron record for a single 24-hour period by controlling aircraft which delivered 486 tons of ordnance on 105 separate



A-6 Intruder, under TPQ control, provides precision bombing around Khe Sanh despite poor weather. (USMC Photo A422000)



B-52 Stratofortresses flew strikes daily in support of the 26th Marines. (Photo courtesy USAF)

targets. After that, the record was approached frequently but never broken. During the siege, ASRT-B controlled 4,989 TPQs in support of the 26th Marines.(150)

Beginning on 20 February, ASRT-B also assisted with supply drops whenever the Khe Sanh MATCU was inoperable. Normally, the controllers could have guided the transport pilots to an exact release point but, at Khe Sanh, the C-130s had to fly directly over the station and the TPQ-10 would break lock. (*) (151) Therefore, the ASRT personnel used the same technique as the MATCU controllers and called a "Mark" when the Hercules was over the eastern threshold and the pilots completed the runs with Doppler navigation and stop watches. The only problem was that, when the ASRT conducted supply drops, it was drawn away from the primary mission of handling TPQs.(152)

While air support was vital to the defense of the base, Colonel Lownds felt that his artillery played an equally important role. When the fighting first broke out, the colonel surmised that the side which managed to keep its artillery intact would win the battle. The Marine artillery emerged almost unscathed. Many incoming rounds landed within the battery positions, however, very few actually hit the gun pits and throughout the operation only three artillery pieces at the base were destroyed; one was a 155mm howitzer parked alongside the loading ramp awaiting airlift to Dong Ha.(**) Generally the pieces, were tucked away inside heavily sandbagged revetments and, while the crews were often showered with fragments, it would have taken a direct hit, squarely on top of the weapon, to knock out a howitzer. Fortunately for the Marine gunners, the North Vietnamese scored only one such a hit which led the regimental commander to the conclusion: "Either they were amazingly inaccurate or we were amazingly lucky."(153)

The enemy's failure to silence Lieutenant Colonel Hennelly's batteries was a big point in favor of the Marines. While American news reporters gave wide coverage to the number of shells falling on the base, they frequently neglected to mention that 1/13 answered each enemy round with 10 of its own. Throughout

(*) When a TPQ-10 broke lock, the radar beam strayed from the aircraft and inputs to the computer were interrupted. The operator also lost visual contact on the radar screen.

(**) One 105mm howitzer on 881S was also destroyed.

the battle, 1/13 cranked out 158,891 mixed rounds in direct support of the 26th Marines. The methods employed by the FSCC were reminiscent of those used in World War I. Time On Target (TOT) by massed batteries, Harassment and Interdiction (H&I) by battery volley instead of a single piece, artillery boxes, rolling barrages, and battery zones were a few techniques adopted by the FSCC which more than lived up to its motto: "Be Generous."(*)

Since the enemy did most of his maneuvering under the cover of darkness, that was when the Marine and Army batteries were the most active. Captain Baig, who wore one hat--Target Intelligence Officer--in the S-2 section and another--Target Information Officer--in the FSCC later described a good night's work:

An average night's pattern of pre-planned fires was as follows: Combined TOTs from 9 batteries (4-6); separate battalion TOTs (Army 4-6, Marine 10-15); battery multiple volley individual missions (40-50); battery H&Is (20-30). Normal 1 gun, 1 round H&Is were not used; this type of fire was of little value. Marine and Army artillery were employed in target areas and at ranges to reduce to a minimum check fires caused by the arrival of TPQ and reconnaissance aircraft. Later, as we learned finesse, air was given the targets south of the base and west of the maximum range of the 175mm guns; 1/13 was given any targets whose range required a maximum ordinate of less than 14,000 feet (altitude of TPQ run); and the 175mm guns were assigned targets to the north, northwest, and east of the base. Such were the pre-planned fires.(155)

In addition to volume, reaction time was a key factor. Unless friendly aircraft in the target area necessitated a check fire, artillery response was immediate--no matter what the weather. To test the proficiency of the Fire Direction Center and the gun crews, Colonel Lownds periodically walked into the

(*) Not every artillery round that left Khe Sanh was high explosive. During March, Lieutenant Colonel Hennelly's battalion had accumulated more ammunition than it could safely store. Since the ammo would not fit in the berms and presented a hazard above ground, the decision was made to fire it all. This excess included some 90-odd rounds of green smoke. On 17 March--St. Patrick's Day--the Marines fired all the green smoke rounds on known enemy positions to honor the patron saint of the Fighting Irish.



A 105mm howitzer of 1/13 lashes out at NVA troops surrounding Khe Sanh. The artillery battalion was in direct support of the 26th Marines. (USMC Photo A190832)



The 175mm guns of the 2d Battalion, 94th Artillery, USA were in general support of the Khe Sanh garrison. This gun was located at Camp J. J. Carroll. (USMC Photo A190709)

FSCC bunker, pointed to a spot on the huge map which adorned the wall and directed Lieutenant Colonel Hennelly to hit it. The coordinates were quickly sent to the FDC where they were either fed into the FADAC computer or worked out manually and the firing data was then passed on to the gun crew. After adjusting the tube, the gunners slammed a round home and sent it on its way. The entire process usually took less than 40 seconds. This "instant artillery" constantly hampered enemy movement within the TAOR and helped break up numerous attacks.(156)

The defensive fire plan adopted by the FSCC was separate from and not to be confused with the final protective fires employed by the defenders who manned the perimeter. The artillery batteries were used to prevent the enemy assault forces from reaching the wire and to cut off the lead elements from reinforcements. The fact that the North Vietnamese usually attacked with their battalions in column made it somewhat easier for the FSCC to isolate the assault elements from the reserves. When the enemy launched his attack, the FSCC placed a three-sided artillery box around the lead battalion; three batteries of 1/13 executed this mission. The fourth battery then closed the remaining side, which faced the friendly positions, with a barrage that rolled from one end of the box to the other--much like a piston within its cylinder. The NVA force in the box could not escape and could not avoid the rolling barrage. Those North Vietnamese who spilled out of the open end of the box were subjected to the final protective fires of the Marines along the perimeter.

At the same time 1/13 worked over the assault force, the FSCC put a secondary box into effect for the benefit of the back-up units. The Army 175mm batteries were responsible for two sides which were about 500 meters outside the primary box. On order, the gunners rolled their barrages in toward the sides of the primary box and back out again. The third side was sealed by continuous flights of aircraft under the control of the TPQ-10 radar. Whenever B-52s could be diverted in time, Arc Light strikes were used to saturate the approach routes to the battle area.(157)

Another key factor in the defense of Khe Sanh was the manner in which Lieutenant Colonel Hennelly's FSCC coordinated their air effort with the artillery so that the two components were complimentary. One prime example was the Mini-Arc Light which was devised by the Assistant Fire Support Coordinator, Captain Kenneth O. W. Steen and the TIO, Captain Baig. As the

name implies, this technique was used against an area target the same as a B-52 strike, only the former could be organized and employed much quicker. When intelligence reports indicated that NVA units were in a certain region, the FSCC plotted a 500 by 1,000-meter block in the center of the suspected area or across a likely route of march. Two A-6 Intruders, each armed with 28 500-pound bombs, were called on station for a TPQ and the batteries at Khe Sanh, Camp Carroll, and the Rockpile were alerted for a fire mission. Thirty seconds before the two A-6s dropped, the 175mm batteries, concentrating their fire on one half of the block, salvoed the first of approximately 60 rounds. At the same time the A-6s rippled their load down the middle of the block, the 1/13 batteries opened up on the second half with around 200 155mm, 105mm, and 4.2-inch rounds. The trajectory and flight time of all ordnance were computed so that the bombs and initial artillery shells hit at the same instant. The saturation of the target area was such that any enemy soldiers caught in the zone during the bombardment simply ceased to exist.(158)

During the second week in February, a special Mini-Arc Light was directed against a major NVA headquarters. Two members of the 26th Marines S-2, Majors Robert B. Coolidge and Jerry E. Hudson, learned from their various sources that a force-wide meeting of NVA commanders and their staffs would occur in an abandoned schoolhouse near the Laotian border. A beefed-up Mini was prepared to welcome the delegates. For this strike, the target block was reduced to 500 by 300 meters around the schoolhouse which would take in, as one of the planners stated, "the hangers-on and other idlers who usually congregate around large staffs." Twenty minutes after the meeting was scheduled to start, the trap was sprung. Two Marine A-6 Intruders and four F-4B Phantoms unloaded 152 500-pound bombs into the block in concert with the opening volleys of eight artillery batteries (total of 350 artillery rounds).(159) The target was obliterated, but whether or not this unusual ambush netted any NVA brass-hats was never ascertained.

The Micro-Arc Light was executed in the same manner as the Mini except smaller amounts of ordnance were used and the block was cut down to 500 by 500 meters. Any aircraft on station would suffice, preferably ones armed with 12 to 16 500-pounders. Artillery fire was reduced to 30 rounds from the 175mm guns and 100 mixed rounds from Lieutenant Colonel Hennelly's battalion. The advantage of the Micro was that it could be put into effect within 10 minutes while it took roughly 45 minutes to plan and

execute the Mini. On an average night, three to four Minis and six to eight Micros were executed, usually to the south and southeast of the base; both were extremely effective.(160)

The massive firepower supporting the Marines would have been almost useless had they not known where and when to employ it. The 26th Marines intelligence section was responsible for this facet of the operation and these people had more than a passing knowledge of the enemy's past strategy. At Dien Bien Phu and Con Thien, the Communists had followed a fairly predictable pattern--not unlike the classic siege of the 18th Century. There were three distinct phases involved in this type of campaign: arrival on the scene and encirclement of the garrison, construction of siege works and support facilities, T-ing the sapheads and final assault. After investing the base, the North Vietnamese first established numerous forward logistic bases within a few thousand meters of the base. Under the cover of darkness, the enemy soldiers dug a series of shallow trenches, interlaced with supply bunkers, leading from these points toward the American positions. The first trenches began to appear at Khe Sanh around 23 February and the heaviest concentration was to the south and southeast. Once in close, the main trenches branched off into ones which paralleled the Marines' lines; these secondary trenches, which from the air looked like long fingers reaching greedily toward the base, were the ones from which the NVA assault troops intended to attack.(161)

At first, the defenders tried to prevent the enemy from moving in too close to the base. The routes into the valley were saturated; artillery H&I fire and frequent air strikes were employed but such tactics only tended to slow down the enemy and force him to bypass certain routes--they did not stop him. Constant, massed artillery would have effectively blocked infiltration but that alternative was, from a logistics standpoint, impossible. The S-2 personnel recommended that the best way to counter the enemy was to allow the North Vietnamese to close and pursue their siege tactics and then, to borrow a phrase used by General "Chesty" Puller (then a colonel) on 28 November 1950 when his regiment was surrounded near the Chosin Reservoir in Korea, "that simplifies our problem of finding these people and killing them."(162)

The S-2 section utilized a multitude of sources to develop an accurate picture of the enemy's activity around the base. While much of this information was self-generated, the 26th

Marines received substantial intelligence support from the MACV, III MAF, and 3d Marine Division Headquarters. Ground and aerial observers, photo reconnaissance, infrared imagery, target lists of higher headquarters, crater analysis, shell/flash reports, and agent reports were all tools of the intelligence community at Khe Sanh. By comparing this information with the knowledge of enemy doctrine as applied in past situations, the S-2 staff was able to accurately estimate the intentions of the NVA on a day-to-day basis.

One good example of how this intelligence produced hard results occurred in late February. From their various inputs, the two men who were responsible for the earlier attack on the NVA staff conference, Majors Coolidge and Hudson, pinpointed the exact location of 12 artillery positions and 2 major ammunition depots. These targets were concentrated in two main areas to the south of the base. Air strikes were called in on the enemy positions and, after the planes departed, the whole area erupted in secondary explosions which lasted for the next 40 minutes. Two weeks later, these officers repeated a similar performance in another area.(163)

The activities of the intelligence community at Khe Sanh and higher headquarters were vital to the conduct of the battle. Almost every major attack against the 26th Marines was picked up well in advance by the S-2 section. Whenever enemy activity was detected, the information was passed to the FSCC and this was the signal for Colonel Lownds to put his defensive fire plan into effect. The base was placed on Red Alert, the primary and secondary boxes fired, and saturation air strikes were employed. This method of cutting off the attack force by massed fires, once the S-2 section had provided a warning, proved to be a decisive factor in thwarting the major enemy thrusts which came late in February.(164)

PART VII

THE TURNING POINT

While the supporting arms continued to whittle away at the enemy's strength, the defensive posture of the 26th Marines grew more formidable with each passing day. By the end of February, the Americans and South Vietnamese had erected some 510 bunkers, dug miles of trenchline, and laid hundreds of minefields and trip flares. Each sector was guarded by a maze of double-apron, tanglefoot, and concertina barbed wire obstacles. (*) The Marines also had sophisticated anti-infiltration equipment such as the Night Observation Device, the PPS-6 ground-surveillance radar, and the Starlight Scope; all of which could detect infiltrators along the wire during nighttime and other periods of reduced visibility. (165) Wherever these apparatus were employed, the number of enemy killed along the perimeters increased and the number of probes decreased.

In addition to the standard issue, the men improvised many of their own jerry-rigged gadgets. Drawing from his childhood experiences on the farm, Colonel Lownds devised a type of electric fence which was employed along some of the company fronts in the main perimeter. The plan was simple; the Marines figured out which strands of barbed wire the enemy would more than likely cut to penetrate those obstacles and they attached trip wire in a circuit. Flashlight batteries were the power source and the network of wires tied into a central switchboard located in each company CP. When a North Vietnamese soldier clipped the barbed wire, he short-circuited the system and one of the warning lights on at the switchboard went out. A few grenades in the right place or a broadside from a Claymore mine and the snooper usually became another grim statistic.

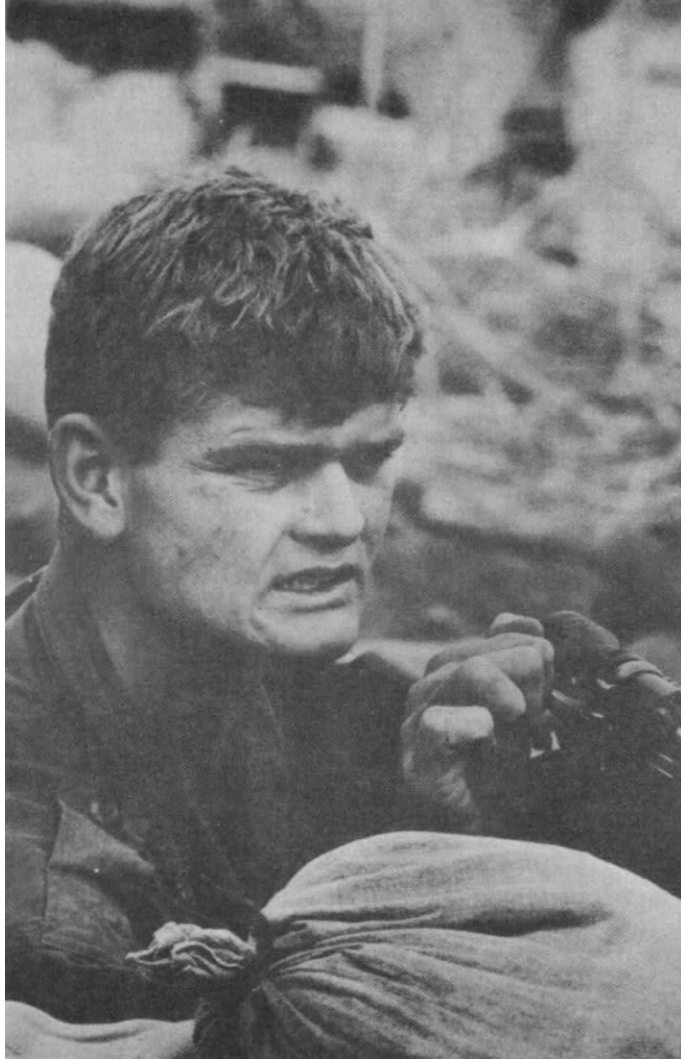
On the hill outposts, the fougasse was used extensively. The Marines dug holes along the slopes which faced the enemy

(*) Tanglefoot, as the name implies, is a barbed wire entanglement that is stretched low to the ground and is usually used between larger barriers. Concertina comes in rolls which are laid side by side or on top of each other. Double-apron obstacles are simply barbed wire fences in depth.

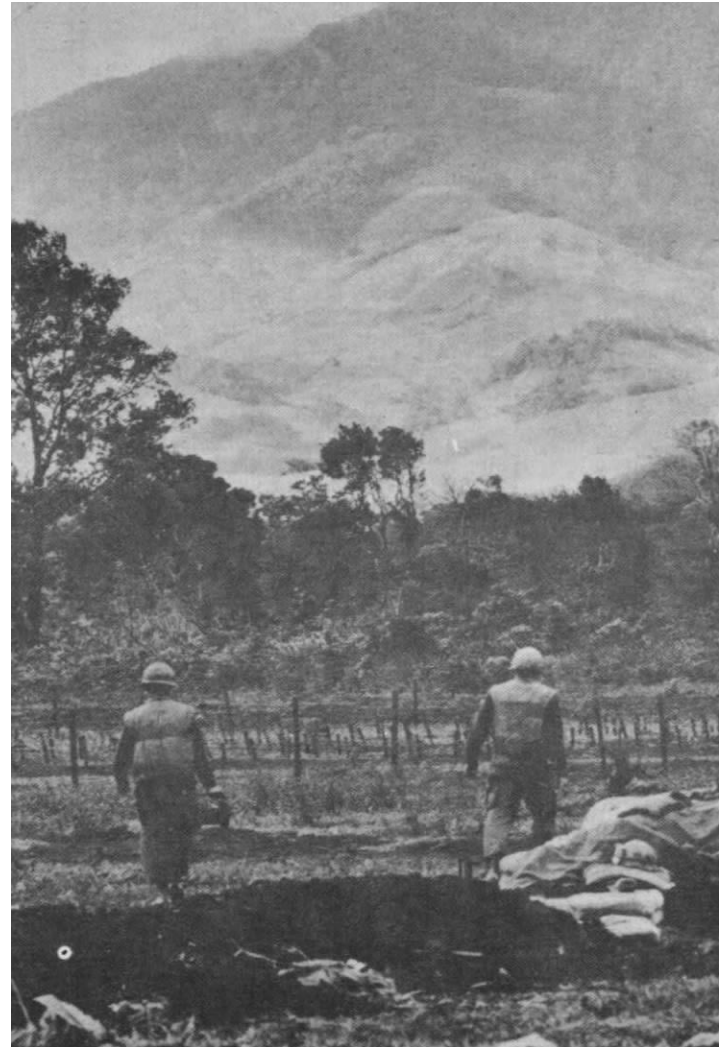
and embedded barrels or cans of mixed gasoline and diesel fuel. The detonator for this volatile concoction was usually a grenade, a blasting cap, or a pound of C-4 plastic explosive taped to the container. The triggering device was a wire leading back up the hill to the Marine positions. When attacked, the defender simply jerked the wire and detonated the lethal munitions.(166)

The Scout Sniper Platoon attached to the 26th Marines provided another kind of deterrent. At least one team of these hand-picked, specially-trained sharpshooters was assigned to each company. Using commercial, bolt-action rifles with high-powered scopes, the snipers preyed on individual NVA soldiers who carelessly exposed themselves around the fringes of the perimeter. Patience was a must in this business and the marksmen often waited for days until their quarry appeared. When the snipers finally got a chance to practice their deadly art, the results were almost unbelievable. As though they were firing for record on a rifle range, they calculated the wind, adjusted their slings, took steady positions, and slowly squeezed off their shots. Many North Vietnamese who felt safe beyond 1,000 meters of the Marine positions never received a chance to ponder their mistake. The psychological impact was also a factor. One can imagine the eerie feeling experienced by an NVA soldier who had just seen a comrade "zapped" and never heard the report of the rifle that did the trick.(167)

By no stretch of the imagination did the 26th Marines have a monopoly on good snipers. The NVA marksmen, armed with rifles and scopes which were comparable to those of their American counterparts, lurked around the edges of the perimeters--especially the hill outposts--and waited for a target. Although none of this deadly business could be categorized as humorous, there was one sniper incident on Hill 881S which could not help but evoke a chuckle. The men of 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 rifleman scored frequently and had wounded 10 Marines in the period of about a week, all of whom were medevaced. In addition to being a hazard, the sniper was also a general nuisance. A man moving from one place to another within the perimeter was always hurried on his way by slugs which kicked up dirt at his heels or buzzed past his head like angry hornets. Thus, the Marines were constantly waiting for the culprit to expose himself and one day a glint off the telescopic sight proved to be his undoing. The Marines marked his position and, on Captain Dabney's order,



Sniper attached to Company E, 2/26 on Hill 861A waits for a target. (Photo courtesy David D. Duncan)



Men of 1/26 lay wire along Blue Sector. Dong Tri Mountain is in the background. (Photo courtesy David D. Duncan)

lugged a 106mm recoilless rifle from the northern side of the hill, sighted in, and blew the sniper away--tree and all. The victory was short lived because his successor proved equally as effective. More Marines were hit. The second rifleman lasted about as long as the first before he suffered the same fate at the hands of the 106mm gunners.

His replacement, however, was a complete wash-out. Expending between 20 and 30 rounds a day, the misfit flailed away for over a week without hitting anyone. In the process, he too gave himself away. After the Marines had manhandled the 106 into position for the third time, and were sighting in, one private, after deep thought, approached the company commander with a proposition: "Skipper, if we get him, they'll just replace him with someone who might be able to shoot. He hasn't hit anyone so why not leave him there until he does." It was so ordered. The sniper's ineptitude had saved his life and he blasted away for the rest of the battle and never touched a soul. (*) (168)

The incident with the snipers pointed out the advantage of having 106mm recoilless rifles on the hills. Unlike the artillery pieces at Khe Sanh, the 106mms were used in a direct fire role and because of their extremely flat trajectory, they could be employed when attack aircraft were in the target area. Another feature which endeared these weapons to the Marines was their extraordinary accuracy. The recoilless rifles were used with great finesse, especially against the well-camouflaged enemy gun positions which ringed the outposts. In most cases, it required minute adjustments to put a round squarely on target and knock out these emplacements. This was evident in one instance when a 106mm on 881S was used to silence an NVA 12.7mm machine gun which had been spraying Marine helicopters.

The automatic weapon was situated inside the mouth of a small tunnel which had been cut deep into the side of a hill located north of the Company I, 3/26, perimeter. The tiny aperture, which faced south, restricted the gunner's fields of fire but that was no drawback because he only concentrated on

(*) To rub salt into the wound, the Marines devised a red flag--Maggies Drawers--like the ones used on rifle ranges to signal that the shooter had missed the entire target, and waved it every time the sniper fired.

the resupply choppers as they hovered over the Marine positions. On the other hand, the small opening prevented the gun from being knocked out by anything except a direct hit from the front. Once the men on 881S had pinpointed the heavily camouflaged site, they went to work with their 106mm. Out of necessity, their firing routine was erratic; the gunners cranked off a round, dived for cover when enemy mortars responded, jumped up, adjusted the weapon, and fired again. While spotters guided them with such unorthodox jargon as "Right a tad," or "Up a hair," the gunners repeated the process and slowly closed in on the enemy position. Finally, one glowing round disappeared completely into the side of the hill and a split second later there was a muffled explosion from deep within. Smoke belched out the mouth of the tunnel and the NVA machine gun was no more. This performance was repeated several times during the battle with the same results.(169)

The three 105mm howitzers on 881S were also used extensively in the direct fire role and were especially useful against targets of opportunity. The ever-present fog around the hill reduced the number of such targets but on one occasion a momentary break in the weather yielded an extremely lucrative prize. When the fog suddenly lifted, an alert Company I machine gunner spotted a 20-man column of North Vietnamese slowly climbing Hill 758 which was due south of 881S. They were carrying what appeared to be several mortar tubes. The Marine immediately opened fire and even though the range was 1,200 meters he managed to hit several of the enemy soldiers. Instead of scattering, the remaining NVA troopers clustered around their fallen comrades and this proved to be a fatal error. The C/1/13 gunners attached to Company I sprang to the 105mm howitzer on the south side of the hill, quickly knocked aside the parapet, and depressed the tube for a downhill shot. Using a combination of point detonating and VT fuzes which were set to explode 50 feet above the ground, the gunners slammed a dozen rounds of direct fire into the midst of the tightly packed enemy soldiers. By the time the fog closed in again, there was no sign of life on the opposite slope. The action was so brief, that the first report received at the 3/26 CP was a laconic message from Captain Dabney that 20 North Vietnamese had been sighted, engaged, and killed.

There were also innovations inside the compound. Ever since 21 January, the NVA gunners had concentrated their fire on the base ammunition dumps. Originally there were two large caches but the main one was totally destroyed on the opening

day of the battle. After that, Colonel Lownds decentralized his stores in several widely-scattered berms which were large, 12-foot-deep trenches, gouged out of the ground by bulldozers. One end of the berm was sloping so that 2½ ton trucks could be driven down a corridor between two flanking stacks of ammunition which lined the sides of the trench. This arrangement greatly facilitated loading because the Marines could stand on top of the stacks and pass rounds onto the bed of the truck which was at their level. The driver then backed out of the berm and took the ammunition to the distribution points of the various units. The ammunition was not only dispersed, it was also segregated according to type. This way, if a berm of artillery high-explosive shells was hit, fire fighters were not hampered by tear gas or white phosphorous fumes. On three occasions, ammunition stores were hit but the resulting devastation never reached the proportion of that on the 21st.(170)

Although the berms were prime targets, the ASRT, MATCU, FDC, 26th Marines communications center, and other units which depended on sophisticated and delicate equipment suffered from the heavy shelling. Consequently, they all had one common problem--maintenance. The normal difficulties associated with keeping the various radars, radios, antennae, generators, and cooling components in an "up" status were complicated by the constant incoming, the dust, and the limited supply of replacement items. The vans and bunkers were heavily sandbagged but antennae and some communication lines were exposed and frequently knocked out by enemy rounds.(*)(171) The speed with which the vital installations were returned to operation served as a tribute to the technicians who maintained the equipment under the most adverse conditions imaginable. In one instance, a 122mm rocket exploded a scant seven meters from the ASRT-B van and sheared off most of the radio antennae. Thanks to several trouble shooters who braved the intense barrage and repaired the damage, the station was back on the air within 20 minutes(**) Such performances were routine. The ASRT normally

(*) To keep the North Vietnamese from zeroing in on his communication bunkers, Colonel Lownds ordered that fake antennae be placed on every structure at Khe Sanh--including the four-holders.

(**) The ASRT-B radar antennae sustained over 200 hits from shell fragments but continued to function near maximum efficiency throughout the siege.

operated 23 hours a day and shut down one hour for maintenance. The MATCU, which was essential for ground-controlled approaches and paradrops, was kept operable 95 percent of the time.(172)

Major John A. Shepherd, Communications Officer of the 26th Marines, was responsible for the vast network which enabled the ground commanders to keep abreast of the situation and in touch with their units. The major praised the accomplishments of his men, stating that they "provided support in winning every battle, firing every round of artillery, controlling every air strike, and providing the means to receive every bean and bullet." There were six radio relay teams which kept open 52 channels between Khe Sanh and the outside world. In addition, there were five external teletype nets in operation 24-hours a day. Radio relay provided voice and teletype links to agencies at Dong Ha and Da Nang. For classified information, there were two secure voice circuits operating full time. One net linked the Combat Operations Center of the 26th Marines to that of the 3d Marine Division at Dong Ha. The other, the Regimental Tactical Net, enabled Colonel Lownds to disseminate hot information to his battalion commanders.

To protect it against the artillery, mortar, and rocket attacks, all communication equipment was either underground or heavily sandbagged. Major Shepherd moved his communications center into a shelter which was made from 4 conex boxes, 16 feet underground.(*). This nerve center housed the teletype equipment and switchboards which provided service for 65 on-base subscribers and 40 external radio relay voice circuits. In spite of the protective measures, the antenna and internal wire system sustained damage on a daily basis. Following every barrage, wiremen tracked down cuts and spliced them and repaired damaged antennae so that the various nets were back in operation within minutes. The maintenance and repair of the electronic devices used for perimeter security placed an additional burden on the communicators.(173)

While trucks and forklifts were not exactly delicate equipment, the base motor transport personnel had their share of problems. These vehicles were used constantly. During the summer and fall of 1967, they were used to haul rock for the repair of the runway. Throughout the siege, the drivers

(*) A conex box is a large metal container primarily used to sea-lift cargo.

carried ammunition from the berms to the distribution points and supplies from the drop zone to the combat base. Many of the trucks were in bad shape and mechanics worked around the clock to keep them rolling. The biggest headache was caused by flat tires, of which the constant shelling produced an abundance; the drivers became paste and patch experts of the highest order. More often than not, these men were caught out in the open when the enemy decided to pound the base. Since their cargo usually contained high explosives, the drivers had good reason to be apprehensive. Some simply bailed out of the cabs during the attacks and dived for cover; others, performing a wild imitation of the Grand Prix, raced for revetments. Needless to say, the base speed limit of five miles per hour was frequently violated.(174)

When there wasn't any work to do, many Marines created some and the threat of enemy tunnels provided a powerful motivation. When the word spread that the enemy might try to dig under the base, the tunnel ferrets went to work. Many of the defenders became fascinated with the prospects of uncovering a "mole" and their antics were near comical. It was not uncommon to see a man crawling around in front of his position, patting the ground with the flat side of a shovel, and listening for hollow spots. Others drove metal stakes into the ground and listened with stethoscopes by the hour for tell-tale signs of digging. If they heard something, the next step was to dig a large hole in front of the enemy so that he would tunnel himself into a trap. Some self-appointed water witches walked around with divining rods and waited for the downward tug which meant that they had discovered a subterranean intruder. When the news media got into the act and publicized the possibility of tunnels, the regimental commander began receiving scores of letters from around the world with "If I were you" themes. One American planter who lived in Sao Paulo, Brazil, wrote and suggested that the Marines purchase commercial sensors like the ones he used to detect bugs which fed on the roots of his trees. Another suggested that the defenders strap hand grenades onto rats and turn them loose in the tunnels.(175)

Unknown to the Marines at the time, the enemy never tried to tunnel under the base. The KSCB sat atop a plateau, and the slopes were wrinkled with deep ravines. Colonel Lownds later surmised that the enemy would have had to go so deep to keep from breaking the surface that such excavations were impractical. The men of Company K, 3/26 did, however, discover one tunnel leading toward Hill 861 and called in air strikes

against it; at the base itself, the North Vietnamese limited their digging to trenches.(176)

Unlike the phantom tunnels, the trenches were very real and served as a constant reminder of the enemy's intentions. These networks were quite understandably a source of concern to the defenders who watched with fascination and no small apprehension as the trenchlines drew closer and closer each day. Working at night or under the cover of fog, the North Vietnamese often moved their lines forward as much as 200-300 meters at a time. There were several methods used to counter the trenches with artillery and tactical air strikes being the most prevalent. Lieutenant Colonel Hennelly's batteries provided constant fires during the night especially to the east and southeast where the heaviest enemy siegeworks were concentrated. The VT-fuzed ammunition with its deadly airbursts no doubt hampered the enemy efforts considerably. During the day, attack aircraft hit the trenches with every type of aerial ordnance from 20mm cannon fire to 2,000-pound bombs. At night, TPQs were run to within about 250 meters of the wire while Mini and Micro Arc Lights were targeted from 500 to 1,500 meters.(177)

In addition, the Marines along the perimeters concocted their own schemes which added to the displeasure of the enemy. During the day, Lieutenant Colonel Wilkinson's men registered on the close-in trenches with their M-79 grenade launchers; these shotgun-like weapons fired a 40mm projectile to a maximum range of about 375 meters and produced a frag pattern approximately 5 to 10 meters in diameter. At night when the North Vietnamese were digging, the Marines periodically lobbed these rounds into the trenches and disrupted the sappers.(178)

In spite of the harassment, the NVA launched several attacks against the base from the trenchlines during the last 10 days in February. At 1245, 21 February, the North Vietnamese fired 350 mortar, rocket, recoilless rifle, and artillery rounds into the eastern sector and followed up with a company-sized probe against the 37th ARVN Ranger Battalion. The enemy troops, however, did not attempt to close with the South Vietnamese and, after a distant fire fight, withdrew at about 1500. Although no body count was ascertained, the Rangers estimated that 1/13 artillery and their own defensive fires had claimed from 20 to 25 of the enemy. Six Marines from 1/26 and 18 Rangers were wounded during the encounter.(179)

On 23 February, the base received the worse shellacking

of the siege. In one eight-hour period, the installation was rocked by 1,307 rounds--a total which surpassed the daily high received at Con Thien in 1967. Many of the rounds came from the 130mm and 152mm artillery pieces in Laos. The runway took several hits but the Seabee and Marine working parties filled the craters and quickly replaced the damaged strips of runway matting. At 1600, the barrage touched off a fire at one of the supply points and 1,620 rounds of 90mm and 106mm ammunition were destroyed. Cumulative friendly casualties for the day were 10 killed, 21 medevaced, and 30 wounded but returned to duty.(180)

Two days later the Marines suffered one of their most serious setbacks. On the morning of the 25th, the 1st and 3d Squads, 3d Platoon, B/1/26 departed Grey Sector on a patrol to the south of the base; the patrol leader was a second lieutenant. The two squads were reinforced by an 81mm mortar FO, an S-2 representative, a Kit Carson Scout, one rocket team, and a machine gun section (two guns).(*) Each man carried 500 rounds of ammunition and six grenades; each machine gun team had 1,800 rounds. Their mission was to sweep to the south along a well-defined route and attempt to locate an enemy mortar which had been harassing the Marines. The patrol leader was assigned three checkpoints from which he was to radio his position and progress to the company commander, Captain Pipes. The lieutenant was under strict orders to follow the planned route and keep within sight of the base as much as possible.(181)

Around 0900, the two squads reached their first checkpoint; the lieutenant made the required radio report and the Marines started on the second leg of their trek. Unknown to Captain Pipes, the patrol had deviated from course and was actually about 600 meters south of its scheduled route. Shortly after his first transmission, the lieutenant spotted three NVA soldiers walking along a road which branched off Route 9 and ran northwest into the FOB-3 compound. The North Vietnamese were apparently trying to suck the Americans into a trap--a trick as old as war itself. In spite of warnings from the Kit Carson Scout, the young patrol leader took the bait and pursued the three men; the decision was to cost him his life.(182)

The Marines moved south across the road, chased the North Vietnamese and ran head-on into an ambush. A heavily reinforced

(*) Kit Carson Scouts were enemy ralliers who scouted for the Allies.

NVA company was entrenched just south of the road in a crescent-shaped bunker complex, the tips of which curved to the north. When the trap was sprung, the patrol was caught squarely in the center and, in essence, was double-enveloped by stationary positions. At first the Marines opened up and gained the advantage but the enemy fire gradually built to an overwhelming crescendo and the patrol became pinned down. When the lieutenant realized the full implications of his predicament, he dispatched the 1st Squad to flank the NVA emplacements from the west. The maneuver might have worked but the squad leader did not hook out far enough to the west before turning back in on the enemy positions. Instead of hitting the tender flank, the 1st Squad walked into more blistering, frontal fire. When the lieutenant was unable to raise the squad leader on the radio, he sent one of his few unwounded men, Hospitalman 3d Class Frank V. Calzia, a U. S. Navy corpsman, to find out what had happened. The corpsman returned later and reported that every man in the 1st Squad, except one, was dead.(183)

Captain Pipes immediately realized that his men were in trouble and, upon direction of higher authority, sent the 2d Platoon to the aid of the patrol. The cunning North Vietnamese anticipated such a move, however, and positioned a blocking force in the path of the relief column. The two separated Marine units were engaged in heavy fighting for about four hours before the remnants of the patrol could break contact and withdraw through the positions of the 2d Platoon. Marine tanks rumbled into the southern portion of the compound but supporting fires were restricted by ground fog and the proximity of the combatants. As he pulled back, the patrol leader was hit in both femoral arteries and bled to death before reaching the perimeter. His radioman, Corporal Rolland R. Ball, a full-blooded Sioux Indian, carried the lieutenant's body back to the base. Friendly casualties during the day were 1 killed, 25 missing and presumed dead, 13 medevacs, and 8 wounded but returned to duty; the bodies of the missing men were all recovered. Enemy losses were undetermined. The action on the 25th sobered the men of Company B and there was one predominant thought in their minds. Captain Pipes probably understated the feelings of his men when he said: "We are anxious to repay the loss." Before the siege ended, Company B did just that.(184)

The flurry of activity to the east and south of the base led General Tompkins and Colonel Lownds to believe that the major enemy thrust was imminent. Recalling the accuracy of the North Vietnamese lieutenant's previous predictions, they felt

sure that the attack would come from the east. From various other reports, they knew that large NVA units were massing around a deserted plantation to the south and an old French fort near the junction of Route 9 and the two roads which tied in with the KSCB. Although the North Vietnamese had not secured the hill outposts according to the first phase of their plan, time was running out. Each day, the skies over Khe Sanh cleared a little more as one of the enemy's greatest allies, the monsoons, slowly abandoned him. If American airpower, unhindered by the weather, were ever fully brought into play, the enemy's task would have been next to impossible. The NVA launched a heavy attack against the base on 29 February; whether it was in fact the main prong of the Communist offensive, historians may never know for sure.(185)

Largely because of the quick response by the FSCC and the overwhelming firepower at its disposal, the enemy attack never got up a full head of steam. Early in the evening of 29 February, current intelligence showed that the enemy was on the move. Each succeeding report indicated that the North Vietnamese were heading toward the eastern perimeter. The FSCC sprang into action and called on all assets to saturate the enemy's route of march. Massed artillery, TPQs, as well as Mini and Micro Arc Lights were targeted in blocks to the east, southeast, and south. Flights of B-52s, diverted from other targets, arrived overhead in two and a half hours and added to the carnage before the enemy troops had moved completely through the killing zone.(186)

At 2130, a battalion from the 304th NVA Division launched the first attack against the 37th ARVN Ranger Battalion. The South Vietnamese responded with their final protective fires; 1/13 contributed thousands of conventional and special artillery rounds while strike aircraft streaked in and raked the attacking force. The enemy pulled back without even breaching the outer defenses. The first assault was followed by one at 2330 and another at 0315 (1 March); both were similarly stifled short of the wire. The North Vietnamese finally called it quits and withdrew with those bodies which they could retrieve. When the Rangers investigated the next morning, they found 78 dead NVA soldiers huddled in three successive assault trenches a few hundred meters from the perimeter. Some were in a kneeling position as if they had been killed just before going over the top. Many had been peppered by the artillery airbursts and were covered with small holes. Crude devices made from bamboo strips and laced with blocks of TNT lay beside many of the

bodies. These were obviously to be used as bangalore torpedoes but the sappers never had the chance. The slaughter along the perimeter, however, was nothing compared to the losses sustained by the NVA reserves.(187)

While the S-2 personnel could never ascertain the exact number of enemy killed, they felt reasonably certain that an entire NVA regiment had been virtually wiped out. The eastern approach was saturated with tons of high explosives; the road junction, the plantation, the old French Fort, and all bottle-necks along the enemy's route were heavily hit. Montagnard tribesmen, who inhabit the surrounding hills, later reported finding from 200 to 500 North Vietnamese bodies at a time stacked in rows along the trails and roads leading to the base. It was obvious that they had been caught while on the march and mangled by air raids and piston-like artillery concentrations. While many of the defenders at the KSCB never fired a shot, what was believed to be the long-awaited enemy onslaught came and passed with a whimper instead of a roar.(188)

Even though the North Vietnamese continued to probe throughout March, it was obvious that they had shot their bolt on the night of 29 February/1 March. The NVA never mustered another large ground attack against the base; the battle had reached a turning point. Having had their fingers burned too often, the North Vietnamese settled into a wait-and-see strategy. They continued to pound the base with artillery but exerted no major ground effort; instead they lurked in the hills and waited for patrols which ventured too far from the perimeter.(189)

The waiting game proved to be just as disastrous for the enemy as had his previous strategy. The month of March was marked by clear skies over Khe Sanh and there were only five days during which weather hampered flight operations. While the overcast had never interfered with Arc Light strikes or TPQs, the retreat of the monsoons was a blessing for the attack pilots and fighter/bombers swarmed into the valley like locusts. The number of close air support sorties in March almost doubled the amount flown the previous month. Any enemy movement within the TAOR during the day invariably drew a flight of sleek jets, prop-driven A-1 Skyraiders, or helicopter gunships within minutes. The trenches and bunker complexes inside the B-52 line were also worked over daily to insure that the NVA stayed at arm's length. What's more, the unrestricted visibility enabled the TAC(A)s and airborne observers to ferret out and call in artillery on the enemy gun positions which had been

hammering the base. For the most part, 1/13 had been limited to intelligence-generated concentrations during February, but the good weather in March provided Lieutenant Colonel Hennelly's men with something they could sink their teeth into--observed targets. Enemy gunners no longer enjoyed a reprieve and each round they fired was an invitation to instant retaliation. With Birddogs or Hueys overhead, the enemy seldom even fired and this was no small consolation to the men at the base. The clear skies and accurate supporting fires were a potent combination and the number of confirmed enemy dead recorded in March increased approximately 80 percent over February.(190)

The enemy's plight at Khe Sanh was echoed, albeit in veiled terms by his propaganda broadcasts. The Radio Hanoi, English-speaking announcer, Hanoi Hanna--the Communist's anemic version of Tokyo Rose--gradually shifted her theme from, "We will crush Khe Sanh" to "Ho Chi Minh would be unhappy if we wasted our time on only 6,000 Marines." The Communists also attempted to sell the line that 20,000 North Vietnamese had "tied down" the 26th Marines. Such rationale smacked of sour grapes. This illogical reasoning would be similar to a defeated football coach saying that he didn't really want to win the game, only keep the other team "tied down" for an hour or so. At the KSCB itself, there were a few feeble attempts to sway the defenders. On 10 March, an incoming mortar round released about 200 propaganda leaflets. The following day, an NVA loudspeaker blared a message to the 37th ARVN Ranger Battalion which invited the South Vietnamese to "join their brothers from the North in driving out the Americans." There were no takers. The psychological effort was just one more indication that the enemy was hurting.(191)

About mid-March, the 26th Marines S-2 began noting an exodus of major NVA units from the Khe Sanh TAOR. Most of these reports came from mountain tribesmen who provided valuable information on enemy troop dispositions throughout the siege. The 325C NVA Division Headquarters was one of the first to pull out toward Laos, followed by elements of the 95C and 101D Regiments which also relocated to the west. About the same time, the 304th NVA Division withdrew several thousand meters to the southwest. The enemy still retained enough troops around the base to maintain pressure and thus the shelling and probes continued.(192)

Closely correlated with the enemy's retrograde movement was another large influx of refugees into the KSCB. Most were

Montagnards who had inhabited the smaller villages surrounding the base and unfortunately had become the pawns of war. When the fighting first broke out, the Allies advised them to evacuate their homes and move overland to Cam Lo or else they would be exposed to fire from both sides. During the period 23-28 January, 1,050 Vietnamese and tribesmen with their families were air evacuated to Da Nang and then on to Quang Tri City. About the same time, some 1,800 tribesmen completed an overland trek from Khe Sanh to Cam Lo by way of the the Ba Long Valley. Later an additional 3,000 or more attempted to reach Cam Lo, but during the journey, the North Vietnamese intercepted this group and directed them back into the Khe Sanh area. Presumably, the NVA used the Montagnards to screen troop movements and confuse American intelligence. The next surge of refugees into the combat base occurred in early February following the attack on Lang Vei. On 7 March, the tribesmen again started to filter into the base. They were screened, interrogated, and processed for evacuation in the FOB-3 compound. As many as 661 were airlifted to eastern Quang Tri Province in a single day and the total for March was 1,432.(193)

Although the enemy had scaled down his forces, the heavy incoming continued to plague the Marines. On the average, the base received about 150 rounds a day during March. During the course of a normal day, the preponderance of fire was from the 82mm mortars but on peak days the greatest number of rounds was from the heavier artillery. On 23 March, the KSCB received its heaviest daily saturation of the month--1,109 rounds. Of these, over 30 percent were from the enemy's big guns in Laos. In addition to the indirect fire, the Marines took a sprinkling of recoilless rifle shells; but these weapons were easy to spot because of their large back blast and thus were vulnerable to air attack and counterbattery fire.(194)

During March, the defenders, on order of General Cushman, began to push out from the perimeter. On 8 March, the ARVN Rangers conducted a series of sweeps east of the runway. The first patrol made no contact but the next two became heavily engaged with an NVA force of unknown size. The Rangers attacked and poured into the enemy trenches, got eye-ball to eye-ball with "their brothers from the North" and killed 26. On the 24th, a patrol from Company A, 1/9, made contact with two NVA platoons which were dug in approximately 1,500 meters northwest of Lieutenant Colonel Mitchell's main perimeter. The Marines attacked the enemy emplacements and in a four-hour battle killed 31 North Vietnamese. During the fighting, a UH-1E helicopter

of VMO-6 was shot down while supporting the Marines but the crewmen were rescued. (*) Friendly casualties were five killed, four medevaced, and two with minor wounds. The largest encounter, however, came on 30 March when Company B, 1/26, received a chance to settle an old score. The target area was the same complex, approximately 850 meters south of the perimeter, where the B/1/26 patrol had been ambushed on 25 February. (195)

The attack had been planned by the battalion commander, Lieutenant Colonel Frederick J. McEwan (who relieved Lieutenant Colonel Wilkinson on 1 March) and his operations officer, Major Charles E. Davis III, with careful attention to every detail. In fact, the 1/26 staff had been working on this attack for a month. The sweep was also closely coordinated with the FSCC to ensure that the maximum supporting arms were available. To support Company B, Lieutenant Colonel Hennelly's staff worked out a variation of the defensive fire plan with nine batteries participating. Marine artillery (1/13) formed the primary box and rolling barrage while the Army 175mms and TPQ-10 controlled aircraft were responsible for the sides of the secondary box. The latter fell on the high ground adjacent to the objective which might influence the battle. The plan called for Captain Pipes to move his unit into the primary box and follow approximately 75 meters in trace of the rolling barrage. As the company advanced, the entire cylinder also advanced. Outside the primary box, the sides of the secondary would open and close over the terrain like a giant accordian. One extremely important factor was that the artillery fire would not necessarily alert the enemy of the impending attack because the same technique had been used so frequently in that area. The element of surprise still belonged to the Marines.

At 0800, Captain Pipes' men swept out of a draw and, under the cover of heavy fog, crossed the access road which ran from the Route 9 junction to the FOB-3 compound. This jumping off point had been secured by one platoon during the night. To their front and flanks, waves of exploding artillery shells churned up the terrain. At the same time, four 106mm recoilless rifles and six .50 caliber and M-60 machine guns provided overhead fire; a type of support "which would have warmed the heart of 'Manila John' Basilone." (**)

(*) The pilot was badly burned in the crash and died that night.

(**) Gunnery Sergeant John Basilone was a Medal of Honor winner

manned by an NVA battalion, were roughly 100 meters southeast of the road and extended along a 700 meter front. The enemy troops occupied heavily fortified bunkers, trenches, and fighting holes. Although the objective was indeed formidable, Company B was not to be denied that day.(196)

After about 10 minutes of continuous supporting fire, Company B moved swiftly into final assault positions and Captain Pipes directed the FSCC to collapse the two artillery boxes. The fire was shifted to cut off any enemy reinforcements from reaching the battle area and to suppress NVA artillery and mortars. As if on cue, the dense fog suddenly lifted; the last thing that many enemy soldiers saw that morning was two Marine assault platoons with fixed bayonets only a few yards in front of their positions. The surprise was complete. Pipes' men poured into the trenches and swarmed over the startled defenders before they could react. While one element laid down a base of fire with small arms and machine guns, Marines armed with flame-throwers, grenades, and satchel charges rushed through the trenches to sear and blast enemy emplacements. The men of Company B carried out their grisly work for over three hours and, by noon, the trenchworks had become a smoking tomb for 115 North Vietnamese.

The only effective resistance during the battle was enemy mortar fire. Eventually, the NVA placed about 100 rounds on the attacking force. One of these scored a direct hit on the company CP and killed the radio man, the artillery FO, and the 81mm mortar FO. The company commander was also hit. A mortar fragment passed through Captain Pipes' arm and lodged in the side of his chest about two inches from his heart. Pipes not only survived, he continued to direct the attack.

With the loss of his two forward observers, the captain had to handle the coordination of supporting arms by himself. Fortunately, Lieutenant Colonel McEwan and Major Davis had made allowances for such a possibility. During the planning phase, they plotted general fire zones in the objective area and assigned each one a call sign (e.g. Apples, Oranges, Grapes, etc.) Captain Pipes knew where these zones were located and whenever

in World War II. During an action at Edson's Ridge on Guadalcanal, Basilone's machine gun section fired over 26,000 rounds in one night and helped break up a fanatical Japanese attack. Manila John was later killed on Iwo Jima.

he wanted to hit a target he simply told the FSCC, "Fire Apples" or "Fire Oranges." In short order, the designated zone was saturated with mortar and artillery rounds. Pipes utilized this technique throughout the rest of the battle.(197)

Once the Marines had consolidated the objective, they collected their casualties which included nine dead and returned to the perimeter. As Company B retired, the primary and secondary boxes closed back in around the Marines and walked them home. During the battle, the raiding force was shielded by some 2,600 artillery shells and 1,000 mortar rounds. On the return trip, NVA artillery tracked the column; ironically, one casualty during the withdrawal was an NVA prisoner who was killed by his own fire. Lieutenant Colonel McEwan later described the operation as a "classic raid." He attributed the success to the detailed planning, the coordination with the FSCC, and Captain Pipes' precise execution which "adhered to the tactical fundamentals and principles of war."(*) For his part, the captain was later awarded the Silver Star and the entire company received a warm congratulatory message from General Westmoreland. The debt had been paid in full.(198)

This purge to the south of the base marked the last significant encounter of SCOTLAND and, at 0800 on 31 March, the operation was officially terminated. The operational control of the 26th Marines was passed to the U. S. Army 1st Air Cavalry Division (1st ACD), commanded by Major General John J. Tolson, III, and Operation PEGASUS commenced. The Army division, along with the 1st Marines and the 3d ARVN Airborne Task Force started the push from Ca Lu to reopen Route 9, relieve the pressure on the KSCB, and destroy remnants of the NVA units in the Khe Sanh TAOR. In effect, the siege was over. Cumulative friendly casualties for SCOTLAND, which began on 1 November 1967 were 205 friendly KIA, 852 medevaced, and 816 minor wounded. The extent of NVA losses was never determined and more than likely

(*) Another interesting point was that the attack was largely carried out by inexperienced troops. During the siege, Company B suffered considerable casualties and most of the replacements were fresh from the States. Major Davis later commented that the conduct of these Marines during the operation spoke highly of the type of training that they received before arriving in Vietnam. This ability to adapt quickly plus the high quality of small unit leadership was, in Davis' opinion, a key factor in the Marine victory.

never will be. The Marines counted 1,602 enemy bodies along the perimeters but the total number of North Vietnamese dead was probably between 10,000 and 15,000. The enemy always carried off his dead when possible and many others undoubtedly died in the surrounding hills and were not found by anyone. There was little doubt that the heart of two crack NVA divisions had been ripped out at Khe Sanh. The full impact of the suffering endured by the enemy, however, did not become evident until the Marine, Army, and ARVN troops began mopping up operations around the base. (*) (199)

(*) The breakdown of fixed-wing tactical sorties under Operation NIAGARA follows: Marine-7,078, Seventh Air Force-9,684, and U. S. Navy-5,167. These figures were derived from 1st MAW Command Chronologies and Project CHECO, Southeast Asia Report. The two sources do not agree on Marine sorties (Project CHECO credits USMC aircraft with 6,385); 1st MAW records in this case have been cited. Statistics for B-52 strikes and Marine helicopter operations have been previously incorporated in the text.

PART VIII

THE BREAKOUT

The blueprints for a major Allied drive into the Khe Sanh Plateau had been on the drawing boards at III MAF Headquarters in the embryo stage since late January. The 1st ACD was slated for the campaign since that division had displaced from Bong Son, in II Corps, and arrived at Phu Bai on 22 January. Three days after he assumed operational control of the new division, General Cushman directed General Tolson to prepare a contingency plan for the relief of Khe Sanh. This action eventually resulted in Operation PEGASUS but there was a series of events which delayed its start until April. The first was the disruptive Communist TET Offensive and the resulting Battle of Hue City which raged until 25 February. Throughout February and early March, the 1st ACD was busily engaged in and around the old imperial capital. Logistics was another consideration. General Westmoreland had initiated a supply build-up in I Corps during December 1967 but III MAF did not yet have sufficient stock levels to support an operation the size of PEGASUS, especially while the heavy fighting still continued in Hue. Finally, the poor weather prevented large-scale helicopter operations in the Khe Sanh area.(200)

An alteration of the command structure in I Corps also indirectly affected the proposed operation. Until the early part of 1968, the three divisions in I Corps (1st MarDiv, 3d MarDiv, and the U. S. Army Americal Division) were under the direct control of General Cushman, CG, III MAF. General Westmoreland, however, was convinced that a critical, if not the most critical, phase of the war was taking shape in I Corps and had begun to pump reinforcements into the two northern provinces. These included the 1st ACD and the 101st Airborne Division. To keep closer tabs on the action in the north, General Westmoreland also established a forward echelon of his MACV Headquarters, under the Deputy, ComUSMACV, General Creighton W. Abrams, at Camp Hochmuth, Phu Bai on 9 February. There was little formal change in the command structure; General Abrams simply acted as an agent for ComUSMACV in an advisor/coordinator role. On 10 March, however, the structure did change; MACV Forward was converted to Provisional Corps, Vietnam (PCV) and placed under the operational control of General Cushman, CG, III MAF. PCV's new commander, Lieutenant General William B. Rosson, U. S. Army,

assumed control of all American combat forces operating in the northern two provinces, less the southern portion of Thua Thien. At that time the three major U. S. units in the area were the 3d MarDiv, the 1st ACD, and the 101st Airborne Division. In addition, the reinforced ARVN 1st Division was operating in this region. In essence, PCV was established to provide closer supervision over growing U. S. forces and coordination with the Vietnamese units in the northern area.(201)

As the operations around Hue tapered off, General Cushman, on 29 February, directed General Tolson to take the plans for PEGASUS back off the shelf. During the first week in March, General Tolson met in Da Nang with Generals Cushman and Abrams for a discussion of the operation.(*). The mission was three-fold: relieve the Khe Sanh Combat base, reopen Route 9 from Ca Lu to Khe Sanh, and eradicate any NVA elements within the area of operations. In addition to the three brigades of the 1st ACD, General Tolson was to assume operational control of the 26th Marines, the 1st Marines, and the 3d ARVN Airborne Task Force. D-day was tentatively set for 1 April--depending on the weather. With the basic directives, General Tolson returned to Camp Evans, and settled down to detailed planning with his division staff. During the next few weeks, there were numerous planning and coordination meetings with III MAF, PCV, the 3d Marine Division, 1st Marine Aircraft Wing, Seventh Air Force, and representatives of the attached units.(202)

The logistics portion of the plan hinged around construction of a base and airfield near Ca Lu which could accommodate C-7 Caribou transports and later C-123s. Before work could be initiated, elements of the 3d MarDiv had to secure and repair the stretch of Route 9 between Ca Lu and the Rockpile so that supplies, fuel, ammunition, and construction material could be stockpiled. Once this was accomplished, a joint task force of engineers--the 11th Engineer Battalion, Fleet Marine Force, the 1st ACD's 8th Engineer Battalion, and Navy Mobile Construction Battalion 5--began construction of an airfield, parking ramps, logistical facilities, and defensive positions. By the time the lead assault elements were ready to jump off in the attack, the installation was 83 percent completed. The base was dubbed Landing Zone (LZ) Stud.

(*) It was around this time that PCV was formed and General Abrams departed I Corps. General Rosson then became a key figure in the planning of the operation.

On 25 March, D-6, the 1st Squadron, 9th Cavalry (1/9 CavSqd), operating from LZ Stud, began extensive reconnaissance in the PEGASUS area of operations to pave the way for the initial air assaults. The mission of the unit was "to find the enemy, destroy his antiaircraft capability, acquire hard intelligence for exploitation, and locate and prepare suitable landing zones." Since General Tolson had little concrete information on exact enemy locations, the activities of the 1/9 CavSqd were essential to the operation. The squadron fanned out from LZ Stud in ever increasing concentric circles under the cover of tactical air, B-52 strikes, and the 8-inch and 105mm batteries which had been moved to Ca Lu. During this phase, the air cavalrymen called in 632 tactical air strikes, 49 specially fuzed construction sorties (Daisy Cutters), and 12 Arc Light strikes on enemy antiaircraft positions, troop concentrations, and future landing zones.(203)

As a prelude to PEGASUS, the 3d MarDiv launched a regimental-size, diversionary attack in eastern Quang Tri Province. On 30 March, Task Force KILO, comprised of the 2d Battalion, 4th Marines; the U. S. Army 3d Squadron, 5th Cavalry; and the 3d Battalion, 1st ARVN Regiment pushed northward from Dong Ha on a search and destroy sweep through the Gio Linh coastal plain area between the Cua Viet River and the DMZ. In addition, a company from the 101st Airborne Division was used as a reconnaissance force and to convey a picture of greater weight and diversity of attack. Although the foray was primarily designed to confuse the NVA and draw attention away from the mailed fist which was poised at Ca Lu, the Allies of Task Force KILO killed 150 North Vietnamese during the first day.(204)

At 0700 on D-day (1 April), two battalions controlled by the 1st Marines (2/1 and 2/3), which had moved from Phu Bai to LZ Stud several days before, spearheaded the attack to the west. Meeting only light resistance, 2/1 wheeled to the north of Route 9 and secured its objective while 2/3 swept through and consolidated the area to the south of the road. With both flanks screened by the infantry, the 11th Engineer Battalion began the mammoth task of renovating Route 9. Later in the day, elements of the 3d Brigade (Bde) 1st ACD leapfrogged by helicopter to positions midway between Ca Lu and Khe Sanh. The 1st and 2d Squadrons, 7th Cavalry swarmed into LZ Mike which encompassed Hill 248, approximately 7,500 meters east of the KSCB. This high ground to the south of Route 9 was cradled on three sides by branches of the Quang Tri River. To the north some 3,000 meters, the 5th Battalion, 7th Cavalry air-assaulted the southern

slope of Dong Chio Mountain which was designated LZ Cates. This stretch was particularly critical because the road was sandwiched between the Quang Tri River on the south and the nearly perpendicular cliffs which towered menacingly over Route 9 to the north. Following the initial waves, the 3d Brigade Headquarters displaced to LZ Cates and established a CP. By 1650, the Flying Horsemen were in place and continued to expand both zones while 105mm howitzers of the 1st Battalion, 21st Artillery, were helilifted in for direct support. Throughout the PEGASUS area of operations, the Americans established defensive perimeters and passed the night with little or no contact.(205)

While the combat engineers continued their steady movement along Route 9, additional elements of the airmobile armada were thrown into the action. On D plus two, the 2d Brigade, 1st ACD which had been staging at Ca Lu conducted a vertical envelopment into LZ Tom and LZ Wharton which were roughly 6,000 and 8,500 meters southeast of Khe Sanh. The air assault went smoothly even though the zones were shelled by NVA gunners. By the end of the day, all 2d Brigade units were in position along with three batteries of the 1st Battalion, 77th Artillery. In the meantime, the 3d Brigade and the 1st Marines expanded their TAORs along Route 9.(206)

On 4 April, General Tolson began to put the squeeze on enemy elements to the south of the KSCB. Moving northeast from LZ Wharton, the 1/5 CavSqd attacked the old French fort near the junction of Route 9. At the same time, the 26th Marines, which had been attached to the 1st ACD since 31 March, began the long awaited breakout from the base. At 0600, three companies of Lieutenant Colonel John J. H. Cahill's 1/9 (relieved Lieutenant Colonel Mitchell on 1 April) moved out of the rock quarry perimeter and advanced on Hill 471 which was 2,500 meters due south of the airstrip. The hill was a key terrain feature since it overlooked the road junction and that segment of Route 9 which snaked to the southwest. The area was also occupied by major elements of the 304th NVA Division. After heavy prep fires, the Marines stormed up the slope in the face of light enemy fire and secured their objective at 1720.(*). Thirty North Vietnamese

(*) Although the rifle companies encountered only slight resistance during the assault, the Company A command group, while advancing toward the objective, took a direct hit from an enemy mortar. The Air Officer, Captain Walter C. Jones, III was killed as was one radio operator; the battalion Operations Officer,

bodies were strewn over the hilltop.

The men of 1/9, however, were in for a long night. Later that night, the enemy lashed out at the hill with 192 mortar and artillery rounds. The barrage was undoubtedly designed to soften up the Marines for a counterattack the next morning. The North Vietnamese might as well have saved their ammunition and their counterattack.(207)

At 0515, the 7th Battalion, 66th Regiment, 304th NVA Division, charged up Hill 471 in a vain attempt to knock 1/9 from the crest. The 66th Regiment was definitely a hard-luck outfit; it had been bloodied at Khe Sanh Village on 21 January and again during the abortive attack against the 37th ARVN Ranger Battalion, on 29 February/1 March. The enemy's string of bad luck remained unbroken on the morning of 5 April. Lieutenant Colonel Cahill's Marines stood their ground, poured withering fire into the on-rushing enemy troops, and, with the aid of artillery and tactical air strikes, smashed the North Vietnamese attack. During the one-sided exchange, one Marine was killed and 19 wounded; the 66th Regiment left 122 dead on the slopes. This fight was one of the major highlights of Operation PEGASUS.(*)(208)

The surge of Allied units into the previously uncontested domain of the 304th NVA Division continued for the next few days(**) On the afternoon of the 5th, the last element of the 1st ACD--the 1st Brigade--departed Ca Lu aboard droves of helicopters and swooped into LZ Snapper, 7,500 meters south of the base. The following morning, the 2d Battalion, 12th Cavalry (2d Brigade) moved northeast from LZ Wharton and relieved Lieutenant Colonel Cahill's battalion on Hill 471. After relief was effected,

Major Ted R. Henderson, was seriously wounded and evacuated. The Battalion Commander, Lieutenant Colonel Cahill and his Artillery Officer, First Lieutenant John K. LeBlond, Jr. were also wounded at that time but were able to continue.

(*) In addition to the Marine killed during the attack, nine were killed by enemy shelling the night before. A total of 57 Marines were medevaced.

(**) The 325C NVA Division had long since departed the area and left the 304th to continue pressure on the 26th Marines. Some elements of the 304th swung to the north of the base and replaced units of the 325C.

1/9 initiated a drive toward Hill 689 some 4,500 meters to the northwest. On the opposite side of the KSCB, the 5th Battalion, 7th Cavalry (1st Brigade) conducted a landing just 500 meters north of the Blue Sector wire. The 2d and 3d Battalions, 26th Marines fanned out to the north and northwest of their hill outposts. Company G, 2/26 bumped into an NVA company that afternoon and killed 48 of the enemy.

The initial relief of the combat base occurred at 1350 on 6 April when the lead company of the 3d ARVN Airborne Task Force was airlifted to Khe Sanh and linked up with the 37th Rangers. This move was primarily intended as a morale booster for the 37th. Two days later, after 2/7 CavSqd had completed the sweep along Route 9 and linked up with the 26th Marines, the official relief took place. At 0800 on 8 April, the 3d Brigade airlifted its CP to the base and became the new landlord. Relieved of its duties along the perimeter, Lieutenant Colonel McEwan's 1/26 saddled up and attacked to the west that day but made little contact.(209)

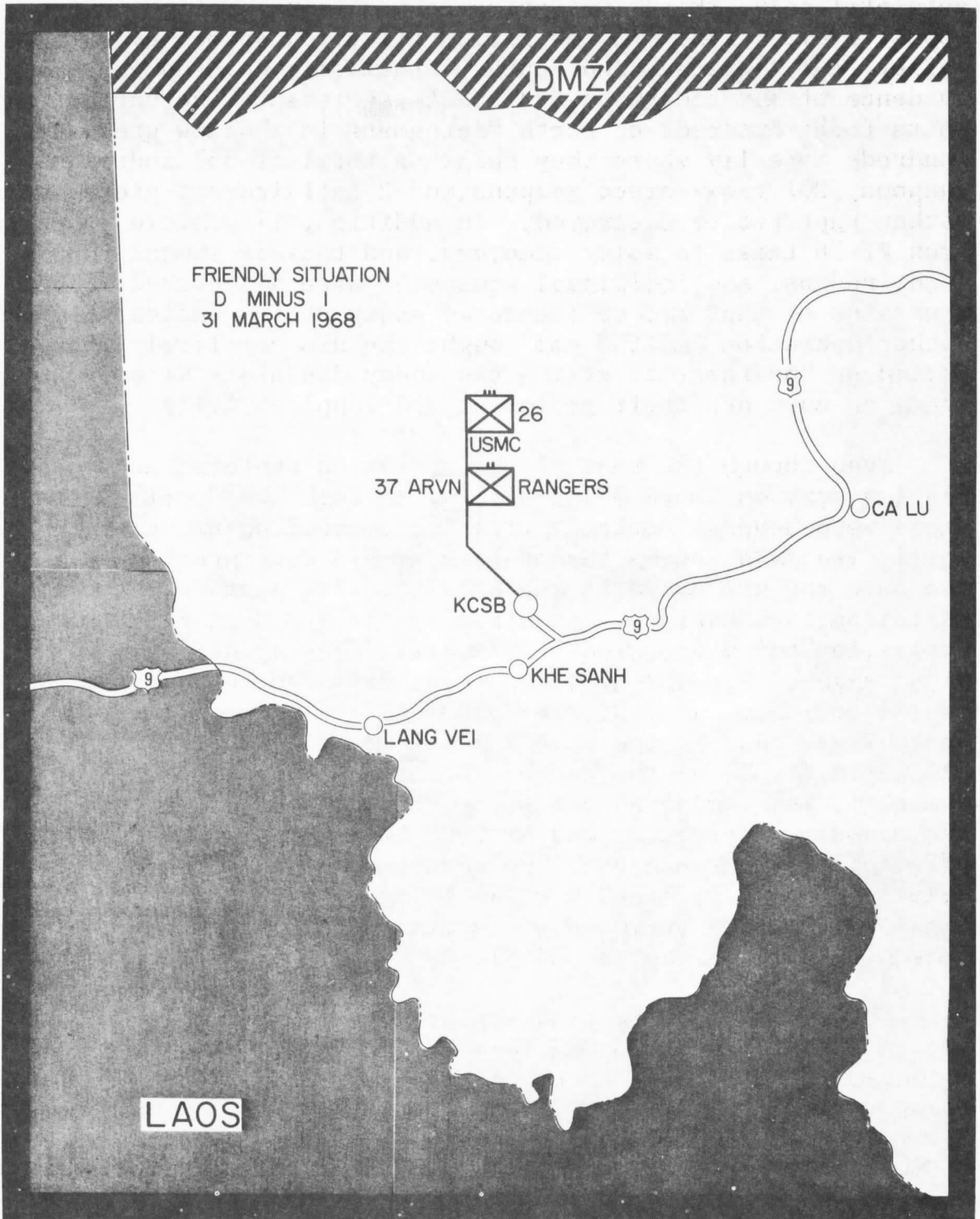
Traditionally, the lifting of a siege has been the occasion for great emotional outbursts, bands, and stirring oration; in this regard, the relief of Khe Sanh was somewhat of a disappointment. General Tolson intended for the link-up to be "as business like as possible with a minimum of fanfare" so that he could get the Marines on the offensive again. A few newsmen at the base snapped pictures of Marines shaking hands with the Cavalrymen but the men usually shrugged indifferently afterwards and went about their business. The defenders generally looked on the proceedings with sort of a "ho-hum" attitude, perhaps they felt that they had not been rescued from anything. In fact, they were right; the enemy threat had been squelched weeks before PEGASUS had gotten off the ground. "I've been at Khe Sanh for nine months," the regimental commander stated, "and if they keep me supplied, I could stay here another nine months." No doubt most men were glad they did not have to remain because the stand at Khe Sanh had not been "all peaches and cream," but, as far as the defenders being snatched out of the jaws of destruction --it just did not happen that way.(210)

With the arrival of the 3d ARVN Airborne Task Force, all maneuver elements involved in PEGASUS were on the Khe Sanh Plateau. On the 8th, the three South Vietnamese battalions (minus one company) leapfrogged from Quang Tri to LZ Stud and then conducted a helicopter assault into LZ Snake about 2,000 meters southwest of the base. In effect, the encirclement was

complete; only, this time, pressure was being applied in the opposite direction. As the Allied oil slick spread over the valley, the Americans and South Vietnamese uncovered ghastly evidence of how badly the NVA had been beaten. The various units found hundreds of North Vietnamese in shallow graves; hundreds more lay where they fell. A total of 557 individual weapons, 207 crew-served weapons, and 2 anti-aircraft pieces were either captured or destroyed. In addition, 17 vehicles, ranging from PT-76 tanks to motor scooters, and tons of ammunition, food, radios, and individual equipment were discovered. The mountains of captured or abandoned enemy stores indicated that either Operation PEGASUS had caught the NVA completely flat-footed or the remnants of the two enemy divisions were in no shape to cart off their equipment and supplies.(211)

Even though the rest of the operation centered around completing work on Route 9 and sifting through the debris of battle, there were several contacts with the retreating enemy. On 8 April, the ARVN forces turned back an NVA counterattack west of the base and killed 78 in the process. The same day, the 1st Battalion, 9th Marines, assaulted and seized Hill 689 with no opposition but discovered 37 NVA killed during a fight the previous night. Air and artillery also hammered away at the NVA; on one occasion, a U. S. Army airborne observer spotted 100 North Vietnamese in the open and called in artillery fire which accounted for 30 of the enemy. While the NVA pulled away to the west, the engineer task force crept toward the base from the opposite direction, and at 1600 on 11 April, Route 9 was officially declared open. The engineers had repaired 14 kilometers of road, replaced 9 vital bridges, and constructed 17 bypasses; General Westmoreland applauded their feat as "herculean."(212)(See Maps 8 and 9).

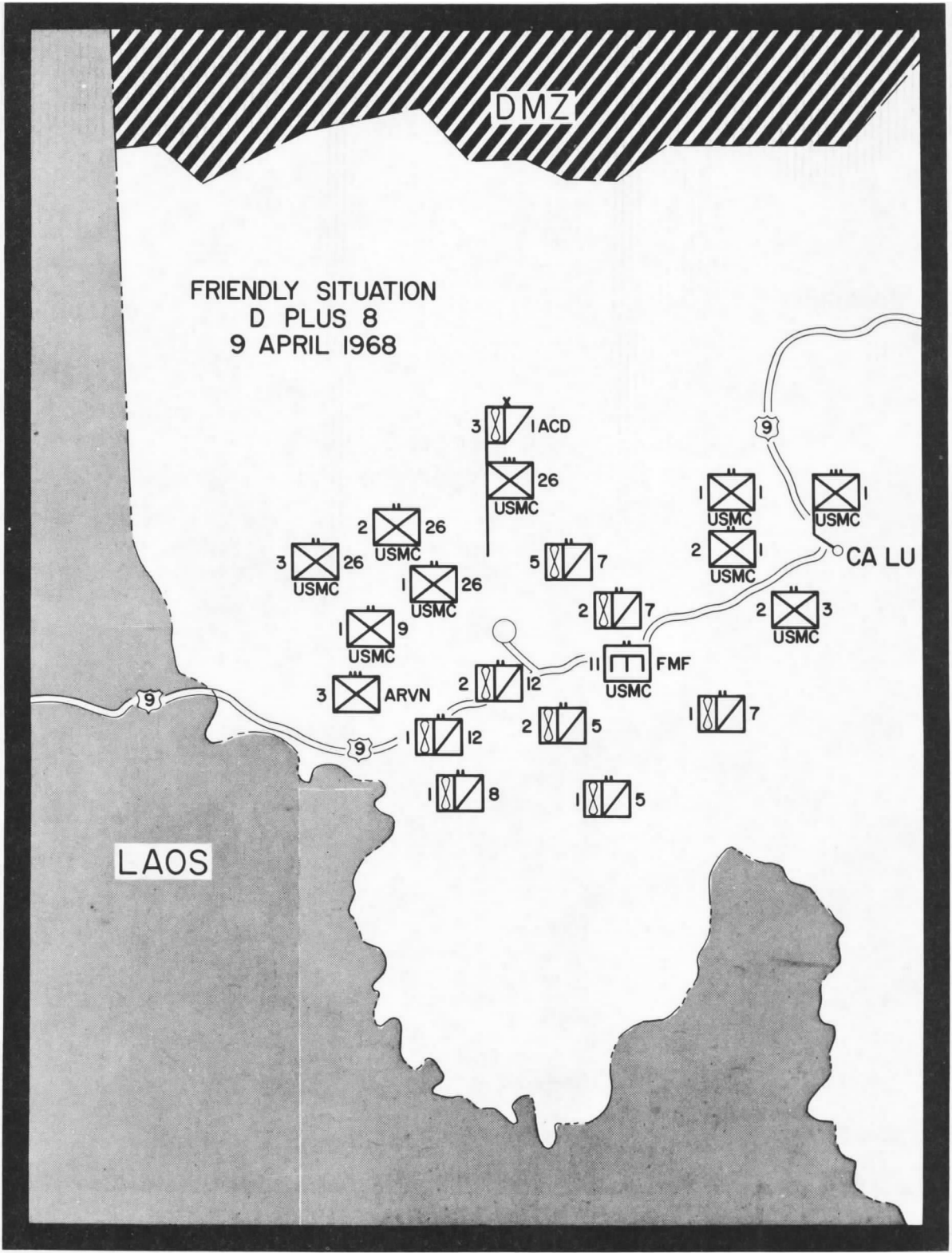
The day before the road was completed, General Tolson received a visit from the PCV commander, General Rosson, which resulted in an alteration of Operation PEGASUS. General Rosson directed his division commander to begin extracting units to Quang Tri and Camp Evans in preparation for an assault into the A Shau Valley (Operation DELAWARE). General Tolson anticipated that the operation would last much longer and had initially planned to expand his sweeps far to the south, north, and northwest. In addition, the 1st Marines was slated for air assaults into a valley west of the Rockpile. The A Shau Valley, however, was a major enemy base area and logistics complex which supported his operations in Thua Thien and Quang Nam provinces. To launch a mobile strike into this region and destroy the enemy's base



MAP 8

OPERATION PEGASUS

K.W. WHITE



MAP9

OPERATION PEGASUS

K.W.WHITE

had been a major MACV objective of long standing. Support of this operation had been one of the reasons for the troop and logistical buildup in the northern area which had begun the previous December. The weather in the A Shau Valley was now ideal for airmobile operations and General Westmoreland was anxious to get DELAWARE underway before the end of April. The following day, the 11th, all air assaults were cancelled and General Tolson began to withdraw elements from Khe Sanh. The 1st Brigade, less one battalion, was airlifted to Quang Tri City and the 37th ARVN Ranger Battalion, which had fought so valiantly, was pulled out and sent to Da Nang. Two days later, the division command post and elements of the 3d Brigade departed for Camp Evans.(213)

Another noteworthy departure was that of Colonel Lownds. The colonel, who did his job well enough to earn the nation's second highest award--the Navy Cross--turned over the reins of the 26th Marines to Colonel Bruce F. Meyers on 12 April. The new commander wasted no time; he planned and executed the attack which in effect, ended the Battle for Khe Sanh. It was scheduled for 14 April--Easter Sunday.

Ironically, the last engagement took place between Hills 881S and 881N precisely where, on 20 January, the whole affair had begun. The 3d Battalion, 26th Marines which had started the fight was also on hand to finish it. Ever since the 4th, Lieutenant Colonel John C. Studt's battalion (relieved Lieutenant Colonel Alderman on 15 March) had been sweeping to the north and northwest of Hill 881S and, on several occasions, had taken fire from 881N. The enemy troops still clung tenaciously to that piece of real estate from which they had directed rocket fire against Khe Sanh and anti-aircraft fire against the helicopters resupplying the Marines on 881S. Lieutenant Colonel Studt's mission was to secure the terrain between the two hills, then attack and seize 881N.(214)

Since the enemy gunners had zeroed in on the slopes of 881S with their mortars, Lieutenant Colonel Studt moved his attacking elements into position the night of the 13th. The assault companies of 3/26 slipped out of the defensive wire under the cover of darkness and moved down the forward slope of the hill along routes which were protected by security patrols. As he watched the Marines file by, the battalion's operations officer, Major Caulfield, could not help but be concerned about them. Most of the men had spent the past two and a half months in a foxhole or trench; they had received minimum rations and a maximum of enemy

shelling. All were tired and dirty; some suffered from large body sores because the water received by these men had gone into their bodies and not on them. Even though they were Marines, the major wondered how they would perform the next morning. At 0800, he received his answer.(215)

The attack, which the troops referred to as their "Easter Egg Hunt," was preceded by a deluge of supporting fire. Colonel Meyers, who flew to 881S by helicopter, observed the attack and personally ensured that sufficient supporting arms were employed. In addition to the artillery of 1/13 at Khe Sanh and the 175mm bases, 155mm and 8-inch batteries of the 1st ACD at LZ Stud were called on to help cave in the enemy bunkers. Strike aircraft worked over the hill with bombs, rockets, and napalm. The Marines who remained on 881S also provided heavy support. Besides the 60mm and 81mm mortars, these men had pooled all eight of the battalion's 106 recoilless rifles, the two remaining 105mm howitzers, and six .50 caliber machine guns which had been salvaged from downed helicopters or stripped off of trucks at the base. As the assault troops advanced, the weapons on 881S provided direct overhead fire which sometimes preceded the front ranks by no more than 50 meters. As usual, the recoilless rifles were extremely effective. One observer later remarked that when the lead elements approached a treeline, no chances were taken; the 106 gunners fired a broadside and the treeline was simply blown away.(216)

Because of the weight and speed of the attack, the enemy was never able to recover. Moving behind a wall of steel, the battalion clawed its way through the defenses between the two hills and prepared for the final push. Major Caulfield, who had worried about the Marines' weakened condition the night before, soon found the opposite was true--he was having trouble holding them back. At one point, a group of NVA soldiers who had been hammered senseless by the prep fires, broke from their positions and fled into the open. An airborne spotter directed the companies to hold up while he called in air and artillery. Scanning the front lines, Major Caulfield noticed that a handful of Marines with fixed bayonets were in hot pursuit of the enemy. The major contacted the company commander by radio and told him to collar his troops. The reply was, "Sir, I can't stop them...." Neither could the enemy.(217)

The men of 3/26 stormed the hill, swarmed over the crest, and killed anyone who stood in their way. At 1428, the objective was secured and the men signaled their victory in traditional

Marine Corps fashion, as Colonel Meyers later described:

On Sunday, 14 April (Easter), I helicoptered to 881S and with Captain Bill Dabney, Company Commander of I/3/26, personally watched the U. S. Colors (which had been fortuitously carried in a squad leader's pack) hoisted again over 881N. This was the signal (visual) that Lieutenant Colonel John Studt's assault had been completed. I watched the jungle utility-clad Marine "shinny-up" a shrapnel torn tree whose limbs had been sheared from the intensive prep fires, and affix the Stars and Stripes.(218)

With the enemy either dead or gone, the hill again lost its value. Terrain wasn't so important in the fluid Vietnam war, but people were and, in that respect, Lieutenant Colonel Studt's men had completed a very successful operation--106 North Vietnamese were dead. In addition to the enemy dead on the objective, air strikes and artillery fire had completely blanketed three large groups of NVA fleeing from the hill but because of the dense vegetation and the approaching darkness, no bodies were recovered. Two slightly shot-up North Vietnamese, one of them an officer, were captured and flown back to Khe Sanh in Colonel Meyers' helicopter. Considering the strength of the enemy defenses, Marine casualties were surprisingly light--6 killed and 19 medevaced. Lieutenant Colonel Studt stated: "...stand off plastering with supporting arms...prior to each assault was the key factor here."(219)

That night the battalion commander and his operations officer stood at the gate on 881S and slapped the men on the back as they trooped back into the perimeter. One Marine, a tall, lanky, slow-talking Kentuckian, held out a captured rifle for Lieutenant Colonel Studt's inspection--it was filthy. During the attack, the Marine had come face to face with the owner; both men raised their rifles simultaneously and pulled the trigger but only the M-16 barked out--the enemy's rifle jammed. The survivor's explanation was simply, "I cleaned my weapon last night, he didn't."(220)

The next morning at 0800, PCV terminated PEGASUS. The operation was very successful and all objectives were achieved; Route 9 was open, the enemy had been routed, and the base itself was relieved. The North Vietnamese had lost another 1,304 killed and 21 captured, while 41 U. S. Army troops, 51 Marines, and 33 South Vietnamese died. Air support again had played an

important role. There were 45 B-52 Arc Light strikes and 1,625 tactical sorties conducted during PEGASUS. Of the latter number, 650 sorties were flown by Marines, 463 by the U. S. Air Force, 436 by carrier-based Task Force 77, and 77 by the U. S. Army and VNAF. From 31 March to 8 April, U. S. Air Force C-130 and C-123 aircraft delivered 843 tons of supplies to Khe Sanh by paradrop and the low altitude extraction system. On 9 April, the strip was reopened to C-130s and the supply level at the KSCB began to grow large enough so that the 1st ACD could draw from the 26th Marines stockpile.(221)

With the termination of PEGASUS, the 3d Marine Division again assumed responsibility of the Khe Sanh area. Task Force GLICK, comprised of the 26th Marines, the 1st Marines, and the 2d Brigade(-), 1st ACD, launched Operation SCOTLAND II at 0801, 15 April. The 26th Marines, however, did not remain in the operation very long. Three days later, the new commanding officer and two of his battalions were transferred to Quang Tri Base and, for the men who had taken 77 days of the best the NVA could offer, the defense of Khe Sanh was over.(*)(222)

(*) The 2d Battalion, 26th Marines did not return to Quang Tri with the regiment but was transferred to the operational control of the 4th Marines at Camp Carroll. General Tompkins saw to it that each man who returned from Khe Sanh immediately received a hot shower, a clean uniform, and a big steak dinner. As an added touch, the 3d Marine Division band was on hand, and greeted each arrival with a stirring rendition of the "Marines Hymn."

PART IX

EPILOGUE

On 23 May 1968, several members of the 26th Marines who had fought at Khe Sanh had a reunion of sorts in Washington, D. C. and the surroundings were a far cry from the dirt and grime of the combat base. The "CP" belonged to the President of the United States, Lyndon B. Johnson. In the Cabinet Room of the White House, the Commander in Chief paused to honor the men of the 26th Marines and awarded the Presidential Unit Citation to the regiment. Colonel Lownds, whose large handle-bar mustache had been shaved off at the direction of "the highest possible authority"--his wife, and Sergeant Major Agrippa W. Smith, senior enlisted man at the KSCB, were on hand to receive the award. While it was fitting that the 26th Marines be cited as a unit, the President also praised the South Vietnamese, U. S. Army, U. S. Navy, U. S. Air Force, and Marine aviation and support units which contributed so gallantly to the defense of the installation.(223)

In some quarters, however, there were still grumblings over the Khe Sanh issue. During the siege, there had been a virtual storm of protest from critics who opposed the Administration's decision to hold the base. These doomsday prophets suffered from what some military experts referred to as the "Dien Bien Phu Syndrome." Many noted intellectuals were in the van of this group and throughout the battle they could not be convinced that air and artillery support would provide the margin of difference; they warned that the tiny base would suffer the same fate which had been meted out to the French garrison 14 years earlier.(224)

There are several reasons why Khe Sanh did not become another Dien Bien Phu. The first and most obvious being that the Americans possessed the overwhelming supporting arms which were not available to the French. Contrary to the predictions of many critics, air and artillery were decisive and more than made up for the numerical superiority of the enemy. Over 100,000 tons of bombs and 150,000 artillery rounds were delivered --and delivered intelligently--by the Americans during the siege. Much of the credit goes to the regimental commander and his staff who knew how to coordinate their different sources of firepower to achieve maximum results. The NVA learned this during the



During the presentation of the Presidential Unit Citation to the 26th Marines, President Lyndon B. Johnson (C) congratulates Sergeant Major Agrippa W. Smith (L) while Colonel David E. Lownds (R) looks on.

five major attacks against the base and hill outposts.

The ability to keep Khe Sanh resupplied was another major factor. The NVA encirclement did not coincide with the monsoon season by accident. With Route 9 interdicted, the fate of the garrison hinged on the success or failure of the airlift and apparently the North Vietnamese anticipated that it would fail. The fact that the airlift was successful in the face of heavy enemy fire and the foulest weather imaginable is indeed a tribute to the aircrews and recovery personnel but the resupply effort went much deeper than just delivering the goods. The Force Logistics Command at Da Nang augmented by U. S. Army sources at Cam Ranh Bay was responsible for the mountain of supplies and material which sustained the 26th Marines. An excerpt from the works of Winston Churchill which was selected as the motto of the Force Logistics Command best describes the vital role these logistics agencies played: "Victory is the beautiful colored flower. Supply is the stem without which it could never have blossomed."(225)

Another important facet of the defense was the close supervision and leadership provided by the senior commanders, namely CG, 3d MarDiv, CG, III MAF, and ComUSMACV. Since much of the supporting arms and all of the logistical support was handled by agencies external to the 26th Marines, constant coordination among these three headquarters was imperative. General Tompkins was the pivotal figure of the triumvirate. During his daily trips to the base, the general learned first hand what the regimental commander needed; he not only saw that Colonel Lownds received adequate support but he insured that the defenders made the most of their resources. In so doing he exposed himself to heavy enemy antiaircraft, artillery, and mortar fire as did General Cushman during his periodic visits to Khe Sanh. Commenting on the strong role played by the 3d Marine Division commander, General Cushman later said, "General Tompkins made or approved every major decision during the battle."(226)

The real hero of Khe Sanh, however, was on the opposite end of the rank scale--the individual fighting man. For 77 days the defenders waited in the trenchlines while the bulk of the credit and publicity went to the artillery, fighter/bombers, and B-52s. On several occasions the supporting arms could not prevent major enemy assaults from reaching the wire; at this point, it was the Marines or ARVN Rangers, armed with rifles, grenades, and bayonets, who stopped the North Vietnamese--often in bitter hand-to-hand combat. Without exception, the battalion

commanders were lavish in their praise of the young Americans and South Vietnamese who held the perimeter and denied the enemy a much-needed victory. In spite of the inherent hardships which accompanied the siege and the incessant shelling, the defenders were always itching for a fight. The most overused expression during the battle was, "I wish they (North Vietnamese) would hurry up and come so we can get this thing over with." When asked by a reporter if the NVA troops could take Khe Sanh, one officer answered, "Hell no, those 19-year-old Marines won't let them."(*) (227)

Finally, much of the credit for the American success at Khe Sanh belongs to the NVA. The North Vietnamese obliged the 26th Marines by standing toe to toe in a slugging contest during which they were outgunned and outfought; in effect, the enemy destroyed himself. If there was one salient feature which resulted in the enemy's defeat it might well be his rigid adherence to a siege strategy in the face of certain failure. Even when it became obvious that the Americans were aware of their master plan, the North Vietnamese doggedly pursued their siege tactics without alteration. The extremely lucrative target presented by the massed NVA forces which ringed the base was one of the main reasons the garrison was maintained. Thus, the question may be legitimately asked, "Who besieged whom?" (228)

To a lesser degree, there was a controversy over who or what had won the battle. Proponents of air power and strategic bombing were the most vocal; they felt that the B-52 had been the most decisive instrument of defense. While the Strato-fortress was a valuable asset and, without doubt played a major role, any attempt to single out one supporting arm as the ultimate weapon in the battle would be futile. The B-52 was but one part of an intricate defensive fire plan. The bombers struck targets beyond 1,100 meters of the base; tactical air and artillery took up the slack to within about 250 meters and the organic weaponry of the defenders provided close-in fires. The system was balanced and effective but, if any part were eliminated, the defenders would have paid a much higher price in casualties. Both General Tompkins and Colonel Lownds were unstinting in

(*) Many of these young men exhibited a maturity beyond their years. One message, scrawled on the back of a C-ration carton by an anonymous Marine, was found after the siege. It read: "Life has a special flavor to those who fight for it that the sheltered never know."

their praise of all supporting arms, as well as the logistical effort; they stressed, and stressed heavily, that the defense of Khe Sanh was a joint endeavor. The highly successful results were achieved through the contributions of all U. S. Services and the South Vietnamese. While the Marines had been unable to find an infantryman who could carry a 27-ton payload, neither had the U. S. Air Force come up with a B-52 which could man a foxhole. Both, in their own way, were essential.(229)

The Khe Sanh story again became news in late June 1968 and the old controversy over strategy was rekindled. Prior to leaving his post as ComUSMACV on 11 June, General Westmoreland visited PCV Headquarters in I Corps and approved the recommendations of Generals Cushman and Rosson to raze the KSCB and withdraw all Allied forces to the Ca Lu area. While General Westmoreland made the decision prior to his departure, he did not close the base at that time, because mopping-up operations were being conducted around Khe Sanh. In addition, large amounts of supplies had been stockpiled there and the general deemed it more economical to maintain the base while these stocks were consumed in support of the operations rather than backhaul them to Ca Lu. For these reasons, he left the choice concerning the optimum time to dismantle the installation up to his successor, General Abrams. When bulldozers finally began to level the bunkers and structures which had housed the 26th Marines throughout the siege, the American people wondered why the base had been so tenaciously defended if it was to be eventually abandoned. Had American blood been shed in vain? Critics of the hold-out policy argued that, in the final analysis, they had been right and those who decided to defend the base had been wrong. Such rationale pinpointed the inability of many Americans to break away from the techniques employed in past wars and recognize the peculiarities of the conflict in Vietnam.

There were several reasons for the deactivation of the KSCB since, for all practical purposes, the base had outlived its usefulness. The rationale endorsed by General Cushman and General Rosson was threefold. First, the enemy had reduced his forces and changed his modus operandi in the Khe Sanh area. Secondly, the NVA artillery in Laos had accurately targeted the base and access road which compounded the casualty and resupply problems. Finally and most important, General Cushman had sufficient assets in June to pursue the mobile offensive strategy which he had advocated strongly for such a long time. Two U. S. Army divisions (i.e. 1st ACD and the 101st Airborne) with their

inherent helicopter resources had been shifted to III MAF and, during March and April, the tremendous logistics burden associated with the introduction of these 50,000 men into northern I Corps had been alleviated. Since he had sufficient maneuver elements to go on the offense in western Quang Tri Province, General Cushman no longer needed five battalions buttoned up in Khe Sanh.(230)

An additional consideration for the abandonment of the base was President Johnson's announcement on 31 March that the U. S. would end air strikes in North Vietnam.(*). While the decision was a major step toward peace, it also enabled thousands of NVA support personnel who were responsible for road repair in North Vietnam to move further south. These workers constructed a network of infiltration arteries which bypassed the combat base and the continued policy of positioning static Allied defense installations in the path of these routes would have been inefficient and undesirable. In this regard, the best defense was a highly mobile offense and while a forward operating base for such operations was essential, the LZ Stud/Ca Lu area was much better suited than Khe Sanh.(231)

By the time PEGASUS was over, LZ Stud was in full operation. The airstrip was extended to accommodate C-123s, a Force Logistics Area was established, and local defenses were strengthened. The base was outside the range of the North Vietnamese 130mm and 152mm guns in Laos and the stretch of Route 9 from Ca Lu to the Rockpile and eventually Dong Ha was easier to keep open. Thus, two factors--enemy shelling and resupply problems--which had negated the effectiveness of Khe Sanh as a base of operations were absent at LZ Stud.

While not physically located on the Khe Sanh Plateau, the forces at LZ Stud controlled it. Two forward fire bases were established in the vicinity of the old combat base from which extensive patrolling was conducted. Ground patrols were supplemented by air surveillance. Whenever contact with the enemy was made, lightning-fast helicopter assaults were launched from LZ Stud and were supported by the artillery of the forward fire bases, tactical aircraft, and Huey gunships. The enemy was attacked by these mobile forces whenever and wherever he appeared.

(*) The attacks were halted except in the area north of the demilitarized zone where the continuing enemy buildup directly threatened Allied forward positions and where the movements of their troops and supplies clearly related to that threat.

When a major NVA unit was encountered, sufficient reinforcements were also injected by helicopter. So, the only thing that changed on the Khe Sanh Plateau, besides the face of the combat base, was the style and tempo of operations.(232)

The new strategy by no means diminished the accomplishments of the men who had held Khe Sanh; it was simply a continuation of the battle in another form. When the leaders in Hanoi finally accepted President Johnson's peace overtures and consented to meet with U. S. representatives in Paris, there was one thing that the North Vietnamese negotiators did not possess--the battle standard of the 26th Marines. An editorial in the Washington Star provided an appropriate tribute to the men of Khe Sanh:

To be sure, Khe Sanh will be a subject of controversy for a long time, but this much about it is indisputable: It has won a large place in the history of the Vietnam war as an inspiring example of American and Allied valor. One day, in fact, the victory over the siege may be judged a decisive turning point that finally convinced the enemy he could not win.(233)

APPENDIX A

BIBLIOGRAPHICAL NOTES AND FOOTNOTES

Explanatory Note: Unless otherwise noted the material in this monograph is derived from Admiral Ulysses S. G. Sharp, USN, and General William C. Westmoreland, USA, Report On The War In Vietnam, hereafter Sharp and Westmoreland, Report On The War; Maj John J. Cahill, USMC, and Jack Shulimson, "History of U. S. Marine Corps Operations in Vietnam, Jan-Jun65"; FMFPac, Operations of U. S. Marine Forces Vietnam, Mar67-Apr68, hereafter FMFPac Marine Opns in Vietnam; FMFPac, U. S. Marine Corps Forces in Vietnam Mar65-Sep67 Historical Summary, Volume I: Narrative, hereafter FMFPac HistSum; III MAF Command Chronologies Apr67-Apr68, hereafter III MAF CmdChron; 3d Marine Division Command Chronologies, Apr67-Apr68, hereafter 3d MarDiv CmdChron; 1st Marine Aircraft Wing Command Chronologies, Apr67-Apr68, hereafter 1st MAW CmdChron; 26th Marines Command Chronologies, Apr67-Apr68, hereafter 26th Marines CmdChron; 1/26 Command Chronologies, Apr67-Apr68, hereafter 1/26 CmdChron; 2/26 Command Chronologies, Jan68-Apr68, hereafter 2/26 CmdChron; 3/26 Command Chronologies, Jun67-Apr68, hereafter 3/26 CmdChron; 3d Marines Khe Sanh Operations After Action Report, 9Jun67, hereafter 3d Marines Khe Sanh AAR; VMGR-152 Command Chronologies Jan68-Apr68, hereafter VMGR-152 CmdChron; Marine Corps Command Center, Status of Forces, Apr68, hereafter MCCC Status of Forces; Defense Intelligence Bulletins Dec67-Apr68, hereafter DIA IntBul; Six Month Evaluation Report, prepared by HQ, MACV 31May68; Presentation of LtGen Robert E. Cushman, Jr., USMC, in 1968 General Officers Symposium Book, HQMC, dtd 15Jul68; CG, FMFPac msg to CMC dtd 200327Z Mar68; Combat Operations After Action Report, Operation PEGASUS (C), hereafter PEGASUS AAR; Gen William C. Westmoreland ltr to CMC dtd 14Dec68, Subj: Review of the draft manuscript "The Battle of Khe Sanh Apr67-Apr68," hereafter Westmoreland Comments; LtGen Lewis W. Walt Interviews with HistBr dtd 17Dec67 and 14Jan69; LtGen Robert E. Cushman, Jr., USMC, ltr to Deputy Assistant Chief of Staff, G-3, HQMC, dtd 26Dec68, Subj: "The Battle of Khe Sanh, Apr67-Apr68," hereafter Cushman Comments; LtGen Herman Nickerson, USMC, memo to Assistant Chief of Staff, G-3, HQMC, dtd Dec68, Subj: Review of draft manuscript, "The Battle of Khe Sanh Apr67-Apr68," hereafter Nickerson Comments; LtGen William B. Rosson, USA, ltr to CMC dtd 18Dec68, Subj: "The Battle of Khe Sanh, Apr67-Apr68," hereafter Rosson Comments; LtGen John J. Tolson, III, USA, ltr to CMC dtd 21Jan69,

Subj: "The Battle of Khe Sanh," hereafter Tolson Comments; MajGen Norman J. Anderson, USMC, ltr to HistBr, G-3 Division, HQMC, dtd 2Jan69, Subj: Khe Sanh Historical Monograph, hereafter Anderson Comments; MajGen Louis Metzger, USMC, memo to Assistant Chief of Staff, G-3, HQMC, dtd 23Dec68, Subj: "The Battle of Khe Sanh, Apr67-Apr68," hereafter Metzger Comments; MajGen John R. Chaisson comments on draft manuscript, "The Battle of Khe Sanh, Apr67-Apr68," hereafter Chaisson Comments; Interview with MajGen Rathvon McC. Tompkins, USMC, dtd 26Aug68 No. 3088 (Oral History Collection, HistBr, HQMC), hereafter Tompkins Interview; Deputy Chief of Staff (Air) comments on draft manuscript, "The Battle of Khe Sanh," dtd 9Dec68, hereafter DCS/Air Comments; BGen Robert P. Keller, USMC, ltr to Deputy Assistant Chief of Staff, G-3 Division, HQMC, dtd 17Dec68, Subj: "The Battle of Khe Sanh," hereafter Keller Comments; BGen Harry C. Olson, USMC, ltr to HistBr, G-3 Division, HQMC, dtd 13Jan69, Subj: "The Battle of Khe Sanh," hereafter Olson Comments; BGen Carl W. Hoffman, USMC, ltr to CMC (Code A03D) dtd 22Dec68, Subj: "The Battle of Khe Sanh," hereafter Hoffman Comments; Chief, USAF Historical Division Liaison Office ltr to HistBr, G-3 Division, HQMC, dtd 18Dec68, Subj: Review of Historical Study, "The Battle of Khe Sanh"; Chief, Historical Studies Branch, USAF Historical Division ltr to HistBr, G-3 Division, HQMC, dtd 22Jan69, Subj: Review of Historical Study, "The Battle of Khe Sanh"; Chief, Project CORONA HARVEST ltr to HistBr, G-3 Division, HQMC, dtd 15Jan69, Subj: Review of Draft Manuscript, "The Battle of Khe Sanh," hereafter Air Force Historical Comments; Interview with Col David E. Lownds, USMC, dtd Jul68, No. 801 674/4 (Oral History Collection, HistBr, HQMC), hereafter Lownds Jul Interview; Col David E. Lownds, USMC, Interview with HistBr dtd 13Sep68, hereafter Lownds Sep Interview; Col Frank E. Wilson, USMC, ltr to HistBr, G-3 Division, HQMC, dtd 6Jan69, Subj: Review of "The Battle of Khe Sanh," hereafter Wilson Comments; Col Bruce F. Meyers, USMC, ltr to HistBr, G-3 Division, HQMC, dtd 16Dec68, Subj: "The Battle of Khe Sanh" hereafter Meyers Comments; Interview with Col Franklin N. Pippin, USMC, dtd 24Jun68, No. 2907 (Oral History Collection, HistBr, HQMC); Interview with Col Johnnie C. Vance, Jr., USMC, dtd 20Jun68, No. 2909 (Oral History Collection, HistBr, HQMC); Col Robert D. Brown, USAF, ltr to HQMC (A03D) dtd 8Jan69, Subj: "The Battle of Khe Sanh" hereafter Brown Comments; Col Robert E. Brofft, USAF, ltr to HQMC (A03D) dtd 8Jan69, Subj: Monograph, "The Battle of Khe Sanh," hereafter Brofft Comments; LtCol John F. Mitchell, USMC, ltr to HistBr, G-3 Division, HQMC, dtd 31Jan69, Subj: Comments on "The Battle of Khe Sanh," hereafter Mitchell Comments; LtCol Harry L. Alderman, USMC, ltr to HistBr, G-3

Division, HQMC, Subj: "The Battle of Khe Sanh" hereafter Alderman Comments; LtCol James B. Wilkinson, USMC, ltr to HistBr, G-3 Division, HQMC, dtd Dec68, Subj: Response to HQMC ltr AO3D-rem S807 373 of 6Dec68, "The Battle of Khe Sanh," hereafter Wilkinson Comments; LtCol John A. Hennelly, USMC, comments on draft manuscript, "The Battle of Khe Sanh" of 15Feb69, hereafter Hennelly Comments; Interview with LtCol Edward J. A. Castagna, USMC, dtd Mar68, No. 2621 (Oral History Collection, HistBr, HQMC); LtCol Francis J. Heath, Jr., USMC, comments on draft manuscript, "The Battle of Khe Sanh, Apr67-Apr68," hereafter Heath Comments; LtCol Frederick J. McEwan, USMC, ltr to HistBr, G-3 Division, HQMC, dtd 30Dec68, Subj: Comments on "The Battle of Khe Sanh Apr67-Apr68," hereafter McEwan Comments; LtCol Johnny O. Gregerson, USMC, ltr to HistBr, G-3, HQMC dtd 3Jan69, Subj: Review of a draft copy of the historical monograph: "The Battle of Khe Sanh, Apr67-Apr68," hereafter Gregerson Comments; LtCol John C. Studt, USMC, ltr to HistBr, G-3, HQMC dtd 24Dec68, Subj: "The Battle of Khe Sanh" manuscript, hereafter Studt Comments; Interview with LtCol Harry T. Hagaman, USMC, dtd 2Mar68, No. 2548 (Oral History Collection, HistBr, HQMC); LtCol William J. White, USMC, comments on draft manuscript, "The Battle of Khe Sanh, Apr67-Apr68" n.d., hereafter White Comments; Interview with Maj William J. Sullivan, USMC, dtd 26Apr68, No. 2621 (Oral History Collection, HistBr, HQMC); Maj John A. Shepherd, USMC, ltr to HistBr, G-3 Division, HQMC, dtd 2Jan69, Subj: "The Battle of Khe Sanh, Apr67-Apr68" hereafter Shepherd Comments; Taped comments of Maj Matthew P. Caulfield, USMC, on the draft manuscript, "The Battle of Khe Sanh, Apr67-Apr68" dtd 2Jan69, hereafter Caulfield Comments; Interview with Maj Matthew P. Caulfield, USMC, dtd 10Feb68, No. 2535 (Oral History Collection, HistBr, HQMC); Maj Wayne M. Wills, USMC, ltr to HistBr, G-3, HQMC, dtd 2Jan69, Subj: Historical Monograph, "The Battle of Khe Sanh, Apr67-Apr68," hereafter Wills Comments; Maj Harper L. Bohr, USMC, ltr to HistBr, G-3, HQMC, dtd 18Dec68, Subj: Comments concerning "The Battle of Khe Sanh" hereafter Bohr Comments; Maj Jerry E. Hudson, USMC, ltr to HistBr, G-3, HQMC, dtd 2Jan69, Subj: Review of Historical Monograph of Khe Sanh, hereafter Hudson Comments; Maj Mirza M. Baig, USMC, ltr to HistBr, G-3 Division, HQMC dtd 23Dec68, Subj: Comments on draft manuscript, "The Battle of Khe Sanh, Apr67-Apr68" hereafter Baig Comments; Maj William H. Dabney, USMC, comments on draft manuscript nd, "The Battle of Khe Sanh, Apr67-Apr68" hereafter Dabney Comments; Maj William H. Dabney, USMC, Interview with HistBr dtd 10Jan69; Maj Earl G. Breeding, USMC, comments on draft manuscript dtd 22Dec68, "The Battle of Khe Sanh, Apr67-Apr68," hereafter

Breeding Comments; Interview with Capt Earl G. Breeding, dtd Jul68, No. 2121 (Oral History Collection, HistBr, HQMC); Maj Kenneth W. Pipes, USMC ltr to HistBr, G-3 Division, HQMC, n.d., Subj: Khe Sanh Manuscript, hereafter Pipes Comments; Interview with Capt Kenneth W. Pipes, USMC, dtd Mar68, No. 2621 (Oral History Collection, HistBr, HQMC); 1stLt James M. Alexander, USMC, ltr to HistBr, G-3 Division, HQMC, n.d., Subj: "The Battle of Khe Sanh, Apr67-Apr68" hereafter Alexander Comments; Interview with 1stLt James M. Alexander, USMC, dtd 26Apr68, No. 2621 (Oral History Collection, HistBr, HQMC); Interview with 1stLt William L. Everhart, USMC, dtd 10Feb68, No. 2535 (Oral History Collection, HistBr, HQMC); Interview with Sgt Timothy B. Keady, USMC, dtd Mar68, No. 2621 (Oral History Collection, HistBr, HQMC); Interview with HM3 Frank V. Calzia, USN, dtd Mar68, No. 2621 (Oral History Collection, HistBr, HQMC); LCpl Michael A. Barry, USMC, Interview with HistBr dtd 17Feb69; Cornelius D. Sullivan, et al., The Vietnam War: Its Conduct and Higher Direction (Washington, D. C.: The Center For Strategic Studies, Georgetown University, 1968) (U), hereafter Sullivan, et al., The Vietnam War; Bernard B. Fall, The Two Viet-Nams (New York: Frederick A. Praeger, 1965 ed.) (U); Colonel Robert D. Heinl, Jr., USMC, Soldiers of the Sea (Annapolis: United States Naval Institute 1962 ed.) (U); Capt Ken Kashiwahara, USAF, "Lifeline to Khe Sanh," The Airman, v. XII, no. 7 (Jul68) (U), hereafter Kashiwahara, "Lifeline to Khe Sanh"; Washington Star, 25May68, p. 13 (Early Bird) (U); Washington Star, 9Jun68, p. 1-E (Early Bird); Baltimore Sun, 25May68, p. 2 (Early Bird) (U). All documentary material cited is located in the HistBr, G-3 Division, HQMC and, unless otherwise noted, carries an overall classification of Secret.

- (1) Major John J. Cahill, USMC and Jack Shulimson, "History of U. S. Marine Corps Operations in Vietnam, Jan-Jun65," pp. 67, 68, 126 (S).
- (2) FMFPac, Marine Opns in Vietnam, Jun67, pp. 5-12 (S).
- (3) Ibid.
- (4) 3d MarDiv CmdChron, Oct68, p. 11 (S).
- (5) FMFPac, Marine Opns in Vietnam, Mar67, p. 15 (S).
- (6) 3d Marines Khe Sanh AAR, p. 7 (S); Bernard B. Fall, The Two Viet-Nams (New York: Frederick A. Praeger 1965 ed.), p. 3.
- (7) Westmoreland Comments.
- (8) 3d Marines, Khe Sanh AAR, p. 12 (S).
- (9) Lieutenant General Lewis W. Walt Interview with Historical Branch dtd 17Dec68 and 14Jan69 (S).
- (10) 3d Marines Khe Sanh AAR, pp. 7-30 (S).
- (11) Ibid
- (12) Ibid., pp. 32-33 (S).
- (13) FMFPac Marine Opns in Vietnam, May67, p. 11 (S).
- (14) Ibid., pp. 7-10, 19 (S).
- (15) FMFPac HistSum, pp. 7-17 (S).
- (16) FMFPac Marine Opns in Vietnam, Jul67, pp. 9-13 (S).
- (17) Ibid.
- (18) FMFPac Marine Opns in Vietnam Sep67, pp. 52-73 (S); 3d MarDiv ComdChron, Sep67, p. 25 (S); Chaisson Comments; Personal observations of the author.
- (19) Westmoreland Comments; Metzger Comments.
- (20) FMFPac, Marine Opns in Vietnam, Oct67, pp. 24-36 (S).

- (21) Metzger Comments.
- (22) 26th Marines CmdChron, May67, p. 4 (S).
- (23) Ibid.
- (24) 26th Marines CmdChron, Jun67, p. 4 (S).
- (25) Ibid., Jul67, p. 4 (S).
- (26) Col Lownds tape No. 801 674/4 (S); 26th Marines CmdChron, Aug67, p. 4 (S); Metzger Comments.
- (27) Wilkinson Comments.
- (28) Col Lownds Tape No. 801 674/4 (S); 26th Marines CmdChron, Aug67, p. 4 (S); Brown Comments.
- (29) 26th Marines CmdChron, Nov67, p. 4 (S).
- (30) Cushman Comments; Hoffman Comments.
- (31) 26th Marines CmdChron, Dec67, p. 4 (S).
- (32) Alderman Comments.
- (33) Bohr Comments.
- (34) Hudson Comments.
- (35) FMFPac Marine Opns in Vietnam, Jan 68, pp. 8, 9; III MAF CmdChron, Jan and Feb68 (S); 26th Marines CmdChron, Feb68, p. 60 (S); Lownds Sep Interview (S).
- (36) Lownds Sep Interview (S); 3/26 CmdChron, Jan68, p. 10 (S); Caulfield Comments.
- (37) Lownds Sep Interview (S); 26th Marines CmdChron, Jan68, p. 4 (S).
- (38) 3/26 CmdChron, Jan68, p. 3 (S).
- (39) 2/26 CmdChron, Jan68, p. 2 (S).
- (40) Ibid.; Breeding Comments; Caulfield Comments.

- (41) 26th Marines CmdChron, Jan68, pp. 3, 4 (S); Lownds Sep Interview (S).
- (42) FMFPac Marine Opns in Vietnam, Jan68, p. 10 (S).
- (43) 26th Marines CmdChron, Jan68, pp. 3, 4 (S); 3/26 CmdChron, Jan68, p. 3 (S); Alderman Comments; Dabney Comments; Caulfield Comments.
- (44) Ibid.
- (45) Dabney Comments.
- (46) Ibid.; 26th CmdChron, Jan68, pp. 3, 4 (S); 3/26 CmdChron, Jan68, p. 3 (S); Alderman Comments; Dabney Comments.
- (47) Ibid.
- (48) Cushman Comments; Tompkins Interview (S); Lownds Sep Interview (S); Wilkinson Comments; Pipes Comments; 26th Marines CmdChron, Jan68, p. 5 (S).
- (49) Caulfield Comments.
- (50) Alderman Comments.
- (51) Caulfield Comments.
- (52) Ibid.
- (53) 3/26 CmdChron, Jan 68, p. 3 (S); Caulfield Comments.
- (54) Lownds Sep Interview (S); Interview with Major Matthew P. Caulfield, USMC dtd 10Feb68, No. 2535 (Oral History Collection, HistBr, HQMC) (S); Caulfield Comments.
- (55) Dabney Comments; Caulfield Comments.
- (56) Ibid.; 26th Marines CmdChron, Jan68, p. 4 (S); Lownds Sep Interview; White Comments.
- (57) Pipes Comments.
- (58) Wilkinson Comments.
- (59) 26th Marines CmdChron, Jan68, p. 4 (S); Hudson Comments.

- (60) Interview with First Lieutenant William L. Everhart, dtd 10Feb68 No. 2535 (Oral History Collection, HistBr, HQMC) (S); Hennelly Comments.
- (61) 26th Marines CmdChron, Jan68, p. 9 (S); FMFPac Marine Opns in Vietnam, Jan68, p. 11 (S); Tompkins Interview (S); Hudson Comments.
- (62) Lownds Sep Interview (S).
- (63) 26th Marines CmdChron, Jan68, p. 9 (S).
- (64) Cushman Comments.
- (65) Ibid.; Westmoreland Comments.
- (66) Westmoreland Comments.
- (67) Ibid.; Sharp and Westmoreland, Report on The War, p. 163.
- (68) 26th Marines CmdChron, Jan68, pp. 4, 11 (S); Lownds Sep Interview (S).
- (69) Lownds Sep Interview (S); Baig Comments.
- (70) Wilkinson Comments.
- (71) 26th Marines CmdChron, Jan68, p. 4 (S); Lownds Sep Interview; Wilkinson Comments.
- (72) 26th Marines CmdChron, Jan68, pp. 3, 4 (S); III MAF CmdChron, Jan68, pp. 3-10 (S).
- (73) Sharp and Westmoreland, Report on The War, p. 158.
- (74) Presentation of Lieutenant General Robert E. Cushman, Jr., USMC, in 1968 General Officers Symposium Book, dtd 15Jul68 (S).
- (75) Sullivan, et al., The Vietnam War, pp. 101-104.
- (76) Ibid., Sharp and Westmoreland, Report on The War, p. 235.
- (77) Ibid.
- (78) Sullivan, et al., The Vietnam War, p. 99.

- (79) Ibid.
- (80) Lownds Jul Interview (S).
- (81) Ibid.
- (82) Ibid.; CG FMFPac msg to CMC, dtd 200327Z Mar68 (S).
- (83) Lownds Jul and Sep Interviews (S).
- (84) Dabney Comments.
- (85) Ibid.
- (86) Ibid.
- (87) Ibid.; Caulfield Comments.
- (88) Dabney Comments.
- (89) Lownds Jul Interview (S).
- (90) Mitchell Comments.
- (91) Lownds Jul and Sep Interviews (S); Tompkins Interview (S).
- (92) Ibid.; Mitchell Comments.
- (93) 26th Marines CmdChron, Feb68, p. 8 (S); Interview with Captain Earl G. Breeding, USMC, dtd Jul68, No. 2121 (Oral History Collection, HistBr, HQMC) (S): Breeding Comments.
- (94) Ibid.
- (95) Ibid.
- (96) Ibid.; Dabney Comments.
- (97) Ibid.
- (98) White Comments.
- (99) 26th Marines CmdChron, Feb68, pp. 8-10 (S); Tompkins Interview (S).

- (100) Ibid.; Lownds Jul Interview (S); Hennelly Comments.
- (101) Hennelly Comments.
- (102) Hudson Comments.
- (103) Wilkinson Comments.
- (104) Lownds Sep Interview; Caulfield Comments.
- (105) Anderson Comments.
- (106) Westmoreland Comments; White Comments; 26th Marines CmdChron, Feb68, pp. 4-8 (S).
- (107) DIA IntBul.
- (108) 26th Marines CmdChron, Feb68, pp. 8, 48 (S); Mitchell Comments.
- (109) Ibid.
- (110) Lance Corporal Michael A. Barry Interview with HistBr, dtd 17Feb69.
- (111) Ibid.
- (112) 26th Marines CmdChron, Feb68, pp. 8, 48, 49 (S); Mitchell Comments.
- (113) 26th Marines CmdChron, Feb68, p. 49 (S).
- (114) Ibid., p. 51 (S).
- (115) Air Force Historical Comments; 1st MAW CmdChron, Feb68, p. 8 (S).
- (116) Wilkinson Comments; White Comments.
- (117) 26th Marines CmdChron, Feb68, p. 51 (S); Kashiwahara, "Lifeline to Khe Sanh".
- (118) Ibid.; Lownds Sep Interview (S).
- (119) VMGR-152 CmdChron, Feb68, p. 4 (S); Gregerson Comments.

- (120) Kashiwahara, "Lifeline to Khe Sanh"; Meyers Comments; Brown Comments; Air Force Historical Comments.
- (121) Ibid.; Lownds Jul Interview (S).
- (122) Ibid.
- (123) Information provided by the Marine Corps Command Center on 19Feb68.
- (124) Ibid.
- (125) 1st MAW CmdChron, Jan, Feb, Mar68 (S); Wilson Comments.
- (126) Ibid.
- (127) Dabney Comments.
- (128) Ibid.
- (129) Wilson Comments.
- (130) DCS/Air Comments.
- (131) Breeding Comments.
- (132) See 1st MAW CmdChron, Jan, Feb, Mar68 (S); CG FMFPac msg to CMC dtd 200327Z Mar68 (S).
- (133) Wilkinson Comments.
- (134) CG FMFPac Msg to CMC dtd 200327Z Mar68 (S); Lownds Jul Interview (S).
- (135) See 26th Marines CmdChron, Jan, Feb, and Mar68 (S).
- (136) Lownds Sep Interview (S).
- (137) 26th Marines CmdChron, Jan, Feb, and Mar68 (S); Lownds Sep Interview; Interview with Major William J. Sullivan, USMC, dtd 26Apr68, No. 2621 (Oral History Collection, HistBr, HQMC) (S); Hennelly Comments; Gregerson Comments; Air Force Historical Comments.
- (138) 1st MAW CmdChron, Jan and Feb68 (S).

- (139) Ibid., Debrief Sheets (S).
- (140) Dabney Comments.
- (141) 1st MAW CmdChron, Feb 68, p. 2-2 (S); Pipes Comments.
- (142) Interview with Lieutenant Colonel Harry T. Hagaman, USMC, dtd 2Mar68, No. 2548 (Oral History Collection, HistBr, HQMC) (C).
- (143) Information supplied by U. S. Air Force Public Information Office, 16Oct68 (U); Chaisson Comments; Air Force Historical Comments; Brofft Comments.
- (144) Tompkins Interview (S).
- (145) Ibid.; Lownds Sep Interview (S); Kashiwahara, "Lifeline to Khe Sanh."
- (146) Air Force Historical Comments; 26th Marines CmdChron, Jan, Feb and Mar68 (S); Tompkins Interview, Baig Comments.
- (147) Gregerson Comments.
- (148) Lownds Jul Interview (S); Interview with Major William J. Sullivan, USMC, dtd 26Apr68, No. 2621 (Oral History Collection, HistBr, HQMC) (S); Gregerson Comments.
- (149) Lownds Sep Interview (S); Interview with First Lieutenant James M. Alexander, USMC, dtd 26Apr68, No. 2621 (Oral History Collection, HistBr, HQMC) (S). Hennelly Comments.
- (150) Interview with Major William J. Sullivan, USMC, dtd 26Apr68, No. 2621 (Oral History Collection, HistBr, HQMC) (S); Interview with First Lieutenant James M. Alexander, USMC, dtd 26Apr68, No. 2621 (Oral History Collection, HistBr, HQMC) (S); 26th Marines CmdChron, Jan, Feb and Mar 68 (S); Gregerson Comments.
- (151) Ibid.
- (152) Ibid.
- (153) Lownds Interview; Hennelly Comments.

- (154) Hennelly Comments.
- (155) Baig Comments.
- (156) Hennelly Comments.
- (157) Ibid.; 26th Marines CmdChron, Jan, Feb and Mar68 (S);
Baig Comments.
- (158) Ibid.
- (159) Baig Comments.
- (160) Ibid.
- (161) Ibid.
- (162) Ibid.; Interview with Lieutenant Colonel Edward J. A. Castagna, USMC, dtd Mar68, No. 2621 (Oral History Collection, HistBr, HQMC) (S); Colonel Robert D. Heinl, Jr., USMC, Soldiers of the Sea (Annapolis: United States Naval Institute 1962 ed.) p. 563.
- (163) Baig Comments.
- (164) Six Month Evaluation Report, HQ USMACV, 31May68 (S); Interview with Colonel Franklin N. Pippin, USMC, dtd 24Jun68, No. 2907 (Oral History Collection, HistBr, HQMC) (S).
- (165) 1/26 CmdChron, Jan and Feb68 (S); CG FMFPac msg to CMC dtd 200327Z Mar68 (S); Information provided by Research, Development, and Study Division, HQMC, 8Nov68 (U); Lownds Jul Interview (S).
- (166) 26th Marines CmdChron, Jan and Feb68 (S); Lownds Jul and Sep Interviews (S).
- (167) 26th Marines CmdChron, Jan, Feb and Mar68 (S).
- (168) Dabney Comments.
- (169) Ibid.
- (170) Lownds Sep Interview (S); Interview with Sergeant Timothy B. Keady, USMC, dtd Mar68, No. 2621 (Oral History Collection, HistBr, HQMC) (S).

- (171) Baltimore Sun, 25 May, p. 2 (Early Bird) (U).
- (172) Interview with First Lieutenant James M. Alexander, USMC, dtd 26Apr68, No. 2621 (Oral History Collection, HistBr, HQMC) (S); Interview with Major William J. Sullivan, USMC, dtd 26Apr68, No. 2621 (Oral History Collection, HistBr, HQMC) (S); Interview with Colonel Johnnie C. Vance, Jr., USMC, dtd 20Jun68, No. 2909 (Oral History Collection, HistBr, HQMC) (S); Interview with Major John A. Shepherd, USMC, dtd 26Apr68, No. 2621 (Oral History Collection, HistBr, HQMC) (S).
- (173) Shepherd Comments.
- (174) Lownds Sep Interview (S).
- (175) Lownds Jul Interview (S).
- (176) Ibid.; Tompkins Interview (S).
- (177) Keller Comments.
- (178) Wilkinson Comments.
- (179) 26th Marines CmdChron, Feb68, Encl 1 (S).
- (180) Ibid.
- (181) Lownds Sep Interview (S); Interview with HM3 Class Frank V. Calzia, dtd Mar68, No. 2621 (Oral History Collection, HistBr, HQMC) (S).
- (182) Ibid.; Interview with Captain Kenneth W. Pipes, USMC, dtd Mar68, No. 2621 (Oral History Collection, HistBr, HQMC) (S).
- (183) Ibid.
- (184) Ibid.; 26th Marines CmdChron, Feb68, Encl 1 (S).
- (185) Lownds Jul and Sep Interviews (S).
- (186) Ibid.; 26th Marines CmdChron, Mar68, p. 4 (S); Baig Comments.
- (187) 26th Marines CmdChron, Mar68, pp. 3, 4 (S); Wilkinson Comments.

- (188) Ibid.; Lownds Sep Interview.
- (189) 26th Marines CmdChron, Mar68, p. 8 (S).
- (190) Ibid., pp. 11, 12.
- (191) Ibid., p. 7.
- (192) Ibid., pp. 7, 8.
- (193) Ibid., p. 6.
- (194) Ibid., p. 10 (S)
- (195) Ibid.; White Comments.
- (196) Ibid.; McEwan Comments; Pipes Comments.
- (197) 26th Marines CmdChron, Mar68, pp. 9, 10, and Encl 1.
- (198) Ibid.; Baig Comments.
- (199) MCCC, Status of Forces, Apr 68 (S); Lownds Sep Interview (S); PEGASUS AAR, pp. 1-4.
- (200) PEGASUS AAR, Encl 1 (C); Westmoreland Comments; Cushman Comments.
- (201) Ibid.
- (202) Tolson Comments.
- (203) Ibid.
- (204) PEGASUS AAR, Encl 1 (C); Rosson Comments.
- (205) Ibid.
- (206) Ibid.
- (207) Ibid.; Lownds Jul and Sep Interviews (S).
- (208) PEGASUS AAR, Encl 1 (C).
- (209) Ibid.

- (210) Ibid.; Lownds Jul and Sep Interviews (S); Tolson Comments.
- (211) PEGASUS AAR, pp. 13, 14 (C).
- (212) Ibid., Encl 1.
- (213) Ibid.
- (214) 3/26 CmdChron, Apr68, p. 4 (S); Studt Comments; Meyers Comments.
- (215) Ibid.; Caulfield Comments.
- (216) Ibid.; Dabney Comments.
- (217) Caulfield Comments.
- (218) Meyers Comments.
- (219) 3/26 CmdChron, Apr68, p. 4 (S); Meyers Comments; Studt Comments.
- (220) Caulfield Comments
- (221) PEGASUS AAR.
- (222) Ibid.; 26th Marines CmdChron, Apr68, p. 4 (S); Caulfield Comments.
- (223) Baltimore Sun, 25May68, p. 2 (Early Bird) (U); Washington Star, 25May68, p. 13 (Early Bird) (U).
- (224) Ibid.
- (225) Olson Comments.
- (226) Cushman Comments.
- (227) Alderman Comments; Caulfield Comments.
- (228) Baig Comments.
- (229) Tompkins Interview; Lownds Jul and Sep Interviews (S).

- (230) Westmoreland Comments; Cushman Comments; Rosson Comments.
- (231) Ibid.
- (232) Ibid.
- (233) Washington Star, 9Jun68, p. 1-E (Early Bird) (U).

APPENDIX B

GLOSSARY

AAR	After Action Report
ABCCC	Airborne Command and Control Center
A-4 Skyhawk	A single-seat, lightweight, jet attack bomber in service with Navy and Marine Corps squadrons. Built by Douglas.
AN/PRC-25	U. S.-built, short-range, portable, frequency-modulated radio set used to provide two-way communication in the 30 megacycle to 75.95 megacycle band.
AN/TPQ-10	U. S.-built, ground-based radar system used to guide aircraft on bombing missions.
A-1 Skyraider	U. S.-built, prop-driven, attack aircraft built by Douglas.
Arc Light	Operational name for B-52 strikes in South Vietnam.
ARVN	Army of The Republic of Vietnam.
A-6A Intruder	U. S. Navy and Marine Corps twin-engine, low-altitude, jet attack bomber specifically designed to deliver ordnance on targets completely obscured by weather or darkness. Carries a heavier and more varied load than any other U. S. naval attack aircraft. Built by Grumman.
ASRT	Air Support Radar Team
BDA	Battle Damage Assessment
Bde	Brigade
B-52 Stratofortress	USAF eight-engine, swept-wing heavy jet bomber. Built by Boeing.
BLT	Battalion Landing Team

CAC	Combined Action Company
CACO	Combined Action Company Oscar
CavSqd (e.g. 1/9)	1st Squadron, 9th Cavalry
C-4	Plastic explosives
CG, 1st MarDiv	Commanding General, 1st Marine Division
CG, FMFPac	Commanding General, Fleet Marine Force, Pacific
CG, 3d MarDiv	Commanding General, 3d Marine Division
CG, III MAF	Commanding General, III Marine Amphibious Force
ChiCom	Chinese Communist
CH-53A Sea Stallion	U. S.-built, single-rotor, heavy assault transport helicopter powered by two shaft-turbine engines with an average payload of 12,800 pounds. Full-sized rear opening with built-in ramp permits loading of 105mm howitzer and carriage. External sling will accommodate a 155mm howitzer (towed). Carries crew of 3 plus 38 combat troops or 24 litters. Built by Sikorsky.
CH-46D Sea Knight	U. S.-built, medium transport, twin-turbine, tandem rotor helicopter with an average payload of 4,800 pounds. Has rear loading ramp and external sling mount. Carries crew of 3 plus 25 combat troops or 15 litters and 2 attendants. Built by Boeing.
CIDG	Civilian Irregular Defense Group
Claymore	U. S.-built, directional antipersonnel land mine employed above ground and normally in an upright position.
CMC	Commandant of the Marine Corps

CmdChron	Command Chronology
CO	Commanding Officer
ComUSMACV	Commander, U. S. Military Assistance Command, Vietnam
CP	Command Post
CS	Designation for tear gas
DASC	Direct Air Support Center
D-Day	Day scheduled for the commencement of an operation.
DIA IntBul	Defense Intelligence Agency Intelligence Bulletin
DMZ	Demilitarized Zone
EC-121 Super Constellation	USAF and USN four-engine, prop-driven, long-range, heavy transport modified with special equipment for radar early warning patrols and electronic warfare duty. Built by Lockheed.
FADAC	Field Artillery Digital Automatic Computer
FDC	Fire Direction Center
F-8 Crusader	U. S. Navy and Marine Corps supersonic, single-seat, single-engine, jet fighter with afterburner. Primarily used in South Vietnam in an attack role. Carries air- to-air and air-to-ground ordnance. Built by LTV Vought Aeronautics.
F-4B Phantom II	U. S. Navy and Marine Corps twin-engine, two-seat, supersonic fighter/attack jet with afterburners; has dual role of inter- ceptor and bomber. Of all U. S. naval attack aircraft, F-4B carries second largest payload. Built by McDonnell.
F-4C	U. S. Air Force model of the Phantom II.

1st ACD	1st Air Cavalry Division
1st MarDiv	1st Marine Division
1st MAW	1st Marine Aircraft Wing
FOB-3	Forward Operating Base 3
F-100 Super Sabre	Single-engine, jet (with afterburner) sweptwing, supersonic fighter-bomber; in production since 1953, the F-100 was the first supersonic operational fighter developed for the U. S. Air Force. Carries air-to-air and air-to-ground ordnance. Built by North American.
F-105 Thunderchief	U. S. Air Force supersonic, single-seat, single-engine, jet fighter/bomber with afterburner. Built by Republic.
FMFPac	Fleet Marine Force, Pacific
FO	Forward Observer
FSCC	Fire Support Coordination Center
GCA	Ground Controlled Approach
GPES	Ground Proximity Extraction System
Grenade Launcher, M-79	U. S.-built, single-shot, break-open, breech-loaded shoulder weapon which fires 40mm projectiles and weighs approximately 6.5 pounds when loaded; it has a sustained rate of aimed fire of 5-7 rounds per minute and an effective range of 375 meters.
Gun, 100mm M1944	Soviet-built, dual purpose field and anti-tank gun introduced toward the close of World War II; it weighs 7,628 pounds, is 30.9 feet in length and has a muzzle velocity of 900 meters per second. Maximum range is 21,000 meters and maximum rate of fire is 8-10 rounds per minute. Is recognizable by long tube, double-barrel muzzle brake, dual wheels, and sloping shield.

Gun, 130mm	Soviet-built fieldpiece which utilizes either a limber for transport or is self-propelled. Towed weapon weighs 19,000 pounds, is 38 feet in length, and has a muzzle velocity of 930 meters per second. Maximum range is 27,000 meters and maximum rate of fire is 6-7 rounds per minute. Tube has a multi-perforated muzzle brake.
Gun, 175mm	U. S.-built, self-propelled gun which weighs 62,100 pounds and fires a 147-pound projectile to a maximum range of 32,800 meters. Maximum rate of fire is 1/2 round per minute.
Hand Grenade, Fragmentation M-26	U. S.-manufactured, hand-thrown bomb, which weighs approximately one pound, and contains an explosive charge in a body that shatters into small fragments; it has an effective range of 40 meters.
H&I	Harassment and Interdiction
H&S Co	Headquarters and Service Company
HistBr	Historical Branch
HMM	Marine Medium Helicopter Squadron
Howitzer, 105mm M2A1	U. S.-built, towed, general purpose light artillery piece; the weapon is mounted on a carriage equipped with split box trails and pneumatic tires. On-carriage sighting and fire control equipment are used both for direct and indirect fire. The piece weighs 4,980 pounds, is 19.75 feet in length, has a muzzle velocity of 470 meters per second, and a maximum range of 11,155 meters. Maximum rate of fire is 4 rounds per minute.
Howitzer, 155mm M1	U. S.-built, towed, medium artillery piece mounted on a two-wheel, split-trail carriage with detachable spades. The howitzer is fired from a three-point suspension, with the trails spread and the carriage resting

upon an integral firing jack, the wheels being clear of the ground. The piece weighs 12,700 pounds, is 24 feet long, has a muzzle velocity of 560 meters per second and a maximum range of 15,080 meters. Maximum rate of fire is 3 rounds per minute.

Howitzer, 8-inch
M-110

U. S.-built, self-propelled heavy artillery piece; 37 feet long tracked carriage is identical to that of 175mm gun. M-110 has a maximum range of 16,930 meters and a rate of fire of 1/2 round per minute.

HQMC

Headquarters, United States Marine Corps

IFR

Instrument Flight Rules

KBA

Killed By Air

KIA

Killed In Action

KSCB

Khe Sanh Combat Base

LAPES

Low Altitude Proximity Extraction System

LSA

Logistics Support Area

LZ

Landing Zone

MACV

Military Assistance Command, Vietnam

MAG

Marine Aircraft Group

Machine Gun,
.50 Caliber

U. S.-built, belt-fed, recoil-operated, air-cooled automatic weapon, which weighs approximately 80 pounds without mount or ammunition; it has a sustained rate of fire of 100 rounds per minute and an effective range of 1,450 meters.

Machine Gun, M-60

U. S.-built, belt-fed, gas-operated, air-cooled, 7.62mm automatic weapon, which weighs approximately 23 pounds without mount or ammunition; it has a sustained rate of fire of 100 rounds per minute and an effective range of 1,100 meters.

_____ Marines	Designation of Marine regiment
MATCU	Marine Air Traffic Control Unit
Medevac	Medical evacuation
Mortar, 60mm	U. S.-built, smooth-bore, muzzle-loaded, single-shot, high-angle of fire weapon, which weighs 45.2 pounds when assembled and fires an assortment of high explosive and pyrotechnic rounds; it has a maximum rate of fire of 30 rounds per minute and sustained rate of fire of 18 rounds per minute; the effective range is 2,000 meters.
Mortar, 81mm	U. S.-built, smooth-bore, muzzle-loaded, single-shot, high angle of fire weapon, which weighs approximately 115 pounds when assembled and fires an assortment of high explosive and pyrotechnic rounds; it has a sustained rate of fire of 2 rounds per minute and an effective range of 2,200-3,650 meters, depending upon the ammunition used.
Mortar, 82mm	Soviet-built, smooth-bore, muzzle-loaded, single-shot, high-angle of fire weapon which weighs approximately 123 pounds when assembled and fires high explosive and pyrotechnic rounds; it has a maximum rate of fire of 25 rounds per minute and a maximum range of 3,040 meters.
Mortar, 120mm	Soviet-or Chinese Communist-built, smooth-bore, drop or trigger fired, single-shot, high-angle of fire weapon, which weighs approximately 606 pounds when assembled and fires high explosive and pyrotechnic rounds; it has a maximum rate of fire of 15 rounds per minute and a maximum range of 5,700 meters.
Mortar, 4.2 inch M2	U. S.-built, 107mm, rifled, muzzle-loaded, drop-fired weapon consisting of tube, base-plate and standard; weapon weighs 330 pounds, is 4 feet in length, and has a

maximum range of 4,020 meters. Rate of fire is 20 rounds per minute and utilizes both high explosive and pyrotechnic ammunition. (Five M2s were employed at KSCB)

Mortar, 4.2-inch
M98 Howtar U. S.-built, 107mm, rifled, muzzle-loaded, mortar; a towed weapon, the howtar is mounted on a carriage with two pneumatic tires. Tube and carriage weigh 1,289 pounds; maximum range is 5,500 meters. (Two Howtars were employed at KSCB)

M-16 U. S.-built, magazine-fed, 5.62mm gas-operated, air-cooled shoulder weapon designed for either semiautomatic or full automatic fire; fully loaded weighs 7.6 pounds, fires a maximum rate of 150-200 rounds per minute, and has a maximum effective range of 460 meters.

9th MAB 9th Marine Amphibious Brigade

9th MEB 9th Marine Expeditionary Brigade

NVA North Vietnamese Army

O1-E U. S.-built, single engine, two-seat, prop-driven light observation aircraft built by Cessna.

Ontos U. S.-built, lightly-armored tracked vehicle armed with six coaxially mounted 106mm recoilless rifles. Originally designed as a tank killer, the Ontos is primarily used in Vietnam to support the infantry.

PCV Provisional Corps, Vietnam

PF Popular Forces

PMDL Provisional Military Demarcation Line

RC-292 U. S.-built, elevated, wide-band, modified ground-plane antenna designed to operate

with and increase the distance range of various radio sets.

Recoilless Rifle,
106mm, M40A1

U. S.-built, single-shot, recoilless, breech-loaded weapon which weighs 438 pounds when assembled and mounted for firing; it has a sustained rate of fire of 6 rounds per minute and an effective range of 1,365 meters. The weapon can be singly or Ontos mounted.

RF

Regional Forces

RLT

Regimental Landing Team

Rocket, 122mm

A Soviet-built, four-piece, fin-stabilized, 9-foot long rocket weighing 125 pounds; maximum range is approximately 17,000 meters. Launcher tube and mount weigh 121 pounds and are 8.1 feet in length.

RPG-2

A Soviet- and Chinese Communist-built antitank grenade launcher; a smooth-bore, muzzle-loaded, shoulder-fired, recoilless weapon which fires a 40mm spin-stabilized round. The weapon weighs 6.3 pounds, is 3.2 feet in length, has a muzzle velocity of 84 meters per second, and an effective range of 100 meters. Maximum rate of fire is 4-6 rounds per minute utilizing High Explosive Antitank ammunition.

SLF

Special Landing Force

S-2

Intelligence section or officer

TA-4

Two-seat trainer model of the A-4 Skyhawk

TAC(A)

Tactical Air Controller (Airborne)

TAFDS

Tactical Airfield Fuel Dispensing System

Tank, PT-76

Soviet-built, 15.4-ton, amphibious tank with a crew of 3; primary armament is turret mounted 76mm gun and maximum thickness of armor is 0.6 inches.

Tank, M-48	U. S.-built 50.7-ton tank with a crew of 4; primary armament is turret-mounted 90mm gun with one .30 caliber and one .50 caliber machine gun. Can be configured with water fording equipment. Maximum road speed of 32 miles per hour and an average range of 195 miles.
TAOR	Tactical Area Of Responsibility
TET	Vietnamese Lunar New Year
3d MarDiv	3d Marine Division
III MAF	III Marine Amphibious Force
TIO	Target Intelligence/Information Officer
TOT	Time On Target
UHF	Ultra High Frequency
UH-1E Huey Gunship	A single-engine, Marine, light attack/transport helicopter noted for its maneuverability and firepower; carries a crew of three with seven combat troops or three litters, two sitting casualties and a medical attendant, or 3,000 pounds of cargo. It is armed with air to ground rocket packs and fuselage mounted, electrically fired machine guns.
UH-34D Sea Horse	A single-engine, Marine, medium transport helicopter with a crew of three; carries 16-18 combat troops or 8 litters or a normal 5,000 pound payload.
USAF	United States Air Force
USA	United States Army
JSMC	United States Marine Corps
USN	United States Navy
VC	Viet Cong

VFR	Visual Flight Rules
VHF	Very High Frequency
Viet Minh	The Vietnamese contraction for Viet Nam, Doc Lap Nong Minh Hoi, a Communist-led coalition of nationalist groups which actively opposed the Japanese in World War II and the French in the early years of the Indo-China War.
VMA	Marine Attack Squadron
VMFA	Marine Fighter/Attack Squadron
VMGR	Marine Aerial Refueler Transport Squadron
VMO	Marine Observation Squadron
VNAF	Vietnamese Air Force
VT	Variable Timed fuze for artillery shell which causes airburst over target area.

APPENDIX C

CHRONOLOGY

1962

Aug U. S. Army Special Forces establish CIDG camp at Khe Sanh.

1966

Apr 1/1 sweeps Khe Sanh plateau during Operation VIRGINIA.

Oct 1/3 occupies KSCB; CIDG displaces to Lang Vei.

1967

Feb 1/3 replaced by single company, E/2/9.

15 Mar Company B, 1/9, replaces E/2/9 as resident defense company.

20 Apr Combat assets at KSCB pass to operational control of Col Lanigan's 3d Marines which commences Operation PRAIRIE IV.

24 Apr B/1/9 patrol engages large enemy force north of Hill 861 and prematurely triggers attack on Khe Sanh; "Hill Fights" begin.

25 Apr 2/3 and 3/3 airlifted to KSCB to counter enemy drive.

28 Apr After heavy prep fires, LtCol DeLong's 2/3 assaults and seizes first objective--Hill 861.

2 May LtCol Wilder's 3/3 seizes Hill 881S after four days of heavy fighting.

3 May 2/3 repulses strong enemy counterattack south of 881N.

5 May 2/3 secures final objective--Hill 881N.

11-13 "Hill Fights" terminate with 940 NVA and 155 Marine
 May KIA. 3d Marines shuttled to Dong Ha as 26th Marines
 (FWD) and 1/26 move into Khe Sanh.

13 May Col Padley, CO 26th Marines (FWD), relieves Col
 Lanigan as Senior Officer Present at Khe Sanh.
 Elements of 1/26 occupy combat base, Hills 881S,
 861, and 950. Operation CROCKETT commences.

13 Jun Due to increasing enemy contacts, LtCol Hoch's
 3/26 airlifted to KSCB.

16 Jul Operation CROCKETT terminates with 204 NVA and 52
 Marines KIA.

17 Jul Operation ARDMORE begins.

12 Aug Col Lownds relieves Col Padley as CO, 26th Marines.

13 Aug Due to lack of significant contact around Khe Sanh,
 Company K and L, 3/26, transferred to 9th Marines
 and Operation KINGFISHER.

17 Aug Khe Sanh airfield closed to normal traffic for
 repair of runway.

3 Sep Remainder of 3/26 withdrawn to eastern Quang Tri
 Province.

27 Oct Air strip reopened to C-123 aircraft.

31 Oct Operation ARDMORE terminated with 113 NVA and 10
 Marines KIA.

1 Nov Operation SCOTLAND I begins.

28 Nov MajGen Tompkins assumes command of 3d MarDiv.

13 Dec LtCol Alderman's 3/26 returns to Khe Sanh because
 of increased enemy activity in Khe Sanh TAOR.

21 Dec 3/26 conducts five-day sweep west of base and uncovers
 evidence of enemy buildup around KSCB.

1968

- 2 Jan Five NVA officers killed near western edge of main perimeter.
- Intelligence reports indicate influx of two NVA divisions, and possibly a third, into Khe Sanh TAOR.
- 16-17 LtCol Heath's 2/26 transferred to operational control of 26th Marines and arrive KSCB; 2/26 occupies Hill 558 north of base.
- ASRT-B of MASS-3 displaces from Chu Lai to Khe Sanh to handle ground controlled radar bombing missions.
- 17 Jan Team from Company B, 3d Reconnaissance Battalion ambushed near Hill 881N.
- 19 Jan While searching ambush site, patrol from I/3/26 comes under fire from estimated 25 NVA troops and withdraws under cover of supporting arms. Two platoons from M/3/26 helilifted to Hill 881S as reinforcements for I/3/26 which prepares for sweep toward 881N the next day.
- 20 Jan Capt Dabney's I/3/26 attacks and, with the aid of air and artillery, badly mauls NVA battalion entrenched on southern slopes of 881N; 7 Marines and 103 North Vietnamese KIA.
- On strength of testimony of captured NVA lieutenant that enemy attack is imminent, I/3/26 is withdrawn to 881S and base placed on Red Alert.
- DASC of MASS-3 displaces to Khe Sanh.
- 20-21 Estimated NVA battalion attacks K/3/26 on Hill 861. After penetrating southwestern portion of Marines' perimeter, the enemy is repulsed leaving 47 dead; NVA reserves are hit by heavy air strikes and artillery fire.

- 21 Jan KSCB comes under heavy mortar, artillery, and rocket attack which destroys main ammunition dump. NVA battalion attacks and partially overruns Khe Sanh village before CAC and RF companies drive off enemy. After second attack, Col Lownds withdraws defenders to confines of combat base.
- 22 Jan ComUSMACV initiates Operation NIAGARA to provide massive air support for Khe Sanh.
- LtCol Mitchell's 1/9 arrives KSCB and takes up positions which encompass rock quarry southwest of combat base.
- E/2/26 is relocated from Hill 558 to prominent ridge-line northeast of 861 as covering force for flank of 2/26; E/2/26 passes to operational control of 3d Battalion. New position is called 861A.
- 23-28 Jan Large number of tribesmen and families are evacuated from Khe Sanh area to avoid hostile fire.
- 27 Jan 37th ARVN Ranger Battalion arrives KSCB and takes up positions in eastern sector of combat base.
- 30 Jan Communists launch nation-wide TET Offensive.
- 5 Feb NVA battalion attacks E/2/26 on Hill 861A in concert with heavy shelling of KSCB. Enemy gains foothold in northern sector of Company E perimeter but is driven out by savage counterattack; 109 NVA and 7 Marines KIA.
- 7 Feb Special Forces camp at Lang Vei overrun by enemy battalion supported by PT-76 Soviet-built tanks; first use of NVA tanks in South Vietnam.
- 8 Feb Some 3,000 indigenous personnel, both military and civilian, from Lang Vei move overland to Khe Sanh. After being searched and processed, several hundred refugees are air evacuated.

- 8 Feb A/1/9 combat outpost 500 meters west of 1/9 perimeter hit and partially overrun by reinforced NVA battalion. During three-hour battle, reinforcements drive NVA from Marine position and with aid of supporting arms kill 150 North Vietnamese; Col Lownds decides to abandon outpost and units withdraw to 1/9 perimeter.
- 10 Feb Marine C-130 of VMGR-152, hit by enemy fire during approach, crashes after landing at Khe Sanh and six are killed.
- Feb- Paradrrops, low-altitude extraction systems, and
Apr helicopters are primary means of resupplying 26th Marines due to bad weather and heavy enemy fire.
- 21 Feb After heavy mortar and artillery barrage, NVA company probes 37th ARVN Ranger lines but withdraws after distant fire fight. It is estimated that 25-30 NVA were killed.
- 23 Feb KSCB receives record number of incoming rounds for a single day--1,307.
- First appearance of enemy trench system around KSCB.
- 25 Feb B/1/26 patrol ambushed south of KSCB; 23 Marines KIA.
- 29 Feb- Estimated NVA regiment maneuvers to attack 37th ARVN
1 Mar Ranger positions but fail to reach defensive wire.
- 6 Mar USAF C-123 shot down east of runway; 43 USMC, 4 USAF, and 1 USN personnel killed.
- 7 Mar Large groups of refugees begin to filter into the combat base and are evacuated.
- 8 Mar ARVN patrols attack enemy trenchline east of runway and kill 26 North Vietnamese.
- 15 Mar American intelligence notes withdrawal of major NVA units from Khe Sanh area.
- 23 Mar KSCB receives heaviest saturation of enemy rounds for the month of March--1,109.

- 24 Mar A/1/9 patrol kills 31 NVA west of 1/9 perimeter.
- 25 Mar 1/9 CavSqd, 1st ACD begins reconnaissance in force operations east of Khe Sanh in preparation for Operation PEGASUS.
- 30 Mar B/1/26 attacks enemy fortified position south of combat base and kills 115 North Vietnamese; 9 Marines are KIA.
- Operation SCOTLAND I terminates with 1,602 confirmed NVA and 205 Marines KIA; estimates place probable enemy dead between 10,000 and 15,000.
- Task Force KILO launches diversionary attack along Gio Linh coastal plain to divert attention away from Ca Lu where 1st ACD, and 1st Marines are staging for Operation PEGASUS.
- 1 Apr Operation PEGASUS begins; 2/1 and 2/3 (1st Marines) attack west from Ca Lu along Route 9. Elements of 3d Bde, 1st ACD conduct helo assaults into LZ Mike and Cates. Joint engineer task force begins repair of Route 9 from Ca Lu to Khe Sanh.
- 3 Apr 2d Bde, 1st ACD assaults LZs Tom and Wharton.
- 4 Apr 1/5 CavSqd moves northwest from LZ Wharton and attacks enemy units near old French fort; 1st Battalion, 9th Marines moves southeast from rock quarry and assaults Hill 471.
- 5 Apr 1/9 repulses enemy counterattack on Hill 471 and kills 122 North Vietnamese.
- 1st Bde, 1st ACD departs Ca Lu and assaults LZ Snapper.
- 6 Apr One company of 3d ARVN Airborne Task Force airlifted to KSCB for the initial link up with defenders.
- Elements of 2d Bde, 1st ACD relieve 1st Battalion, 9th Marines on Hill 471; 1/9 commences sweep to northwest toward Hill 689.

- 6 Apr 1st Bde, 1st ACD helilifted north of KSCB. 2/26 and 3/26 push north of combat base; Company G, 2/26 engages enemy force and kills 48 NVA.
- 8 Apr 2/7 CavSqd links up with 26th Marines and conducts official relief of combat base. 1/26 attacks to the west.
- 3d ARVN Airborne Task Force air assaults into LZ Snake west of Khe Sanh and kills 78 North Vietnamese.
- 10 Apr LtGen Rosson arrives Khe Sanh and directs LtGen Tolson to disengage and prepare for Operation DELAWARE in A Shau Valley.
- 11 Apr Engineers complete renovation of Route 9 and road is officially opened.
- Elements of 1st ACD begin withdrawal to Quang Tri City in preparation for Operation DELAWARE; 37th ARVN Ranger Battalion airlifted to Da Nang.
- 12 Apr Col Meyers relieves Col Lownds as CO, 26th Marines.
- 14 Apr 3/26 attacks Hill 881N and kills 106 NVA; 6 Marines are KIA.
- 15 Apr Operation PEGASUS terminated; Operation SCOTLAND II begins.
- 18 Apr 26th Marines withdrawn to Dong Ha and Camp Carroll.
- 23 May President Johnson presents the Presidential Unit Citation to 26th Marines and supporting units during White House ceremony.
- 23 Jun Although forward fire support bases are maintained in Khe Sanh area, the KSCB is dismantled and abandoned. LZ Stud at Ca Lu is selected as base for air mobile operations in western DMZ area.

APPENDIX D

TASK ORGANIZATION AT KHE SANH, 24 APRIL - 13 MAY 1967

A. 3D MARINES (-) (REIN) 24APR-13MAY67

HEADQUARTERS COMPANY 24APR-13MAY67

2D BATTALION (REIN) 26APR-13MAY67

HEADQUARTERS AND SERVICE COMPANY(-)(REIN)

DET, HQBN, 3D MARDIV

DET, HQCO, 3D MAR

DET, B BTRY (REIN), 1ST BN, 12TH MAR

DET, 15TH DENTAL CO

2D CLEARING PLT (REIN), CO B, 3D MED BN

1ST PLT (-) (REIN), CO A, 3D ENGR BN

1ST PLT (REIN), CO C, 3D MT BN

1ST PLT (-) (REIN), CO C, 3D SP BN

DET, LSU, FLC

COMPANY E (REIN)

1ST SEC, 81MM MORTAR PLT

FAC TEAM

DET, MED PLT

DET, INTELLIGENCE SEC

DET, B BTRY (REIN), 1/12

1ST SQD, 1ST PLT (REIN), CO A, 3D ENGR BN

DET, 1ST PLT (REIN), CO C, 3D SP BN

COMPANY F (REIN)

DET, H&S CO

2D SEC, 81MM MORTAR PLT

FAC TEAM

DET, MED PLT

DET, INTELLIGENCE SEC

DET, B BTRY (REIN), 1/12

2D SQD, 1ST PLT (REIN), CO A, 3D ENGR BN

DET, 1ST PLT (REIN), CO C, 3D SP BN

COMPANY G (REIN)

DET, H&S CO

3D SEC, 81MM MORTAR PLT

DET, MED PLT

DET, INTELLIGENCE SEC

DET, B BTRY (REIN), 1/12

COMPANY H (REIN)

DET, H&S CO

4TH SEC, 81MM MORTAR PLT

FAC TEAM

DET, MED PLT

DET, INTELLIGENCE SEC

DET, B BTRY (REIN), 1/12
3D SQD, 1ST PLT (REIN), CO A, 3D ENGR BN
DET, 1ST PLT (REIN), CO C, 3D SP BN

COMPANY A, 1ST BATTALION, 26TH MARINES	11-13MAY67
COMPANY B, 1ST BATTALION, 26TH MARINES	11-13MAY67
COMPANY C, 1ST BATTALION, 26TH MARINES	13 MAY 67
COMPANY D, 1ST BATTALION, 26TH MARINES	11-13MAY67
COMPANY E, 2D BATTALION, 9TH MARINES	12-13MAY67
3D PLT (REIN), CO B, 1ST AMTRAC BN	
2D PLT (REIN), CO A, AT BN	
3D PLT, CO B, 3D RECON BN	
2D PLT (REIN), CO A, 3D TANK BN	
106MM RR PLT	
3D BATTALION (-) (REIN) COMMAND GROUP "A"	
COMPANY K	25-27APR67
FO TEAM, BTRY C, 1/12	
DET, H&S CO	
FO TEAM, 81MM MORTAR PLT	
FAC TEAM (-)	
DET, MED PLT	
COMPANY M	27APR-1MAY67
FO TEAM, BTRY C, 1/12	
FO TEAM, 81MM MORTAR PLT	
SCOUT/DOG TEAM	
SCOUT TEAM, 3/3	
COMPANY B, 1ST BATTALION, 9TH MARINES	25-27APR67
COMPANY K, 3D BATTALION, 9TH MARINES	25APR-13MAY67
COMPANY M, 3D BATTALION, 9TH MARINES	29APR-13MAY67
COMPANY F, 2D BATTALION, 3D MARINES	1MAY-3MAY67
COMPANY C, 1ST BATTALION, 26TH MARINES	5-13MAY67
COMPANY A, 1ST BATTALION, 26TH MARINES	12-13MAY67

BASE DEFENSE/RESERVE

COMPANY B, 1ST BATTALION, 9TH MARINES	24-27APR67
COMPANY F, 2D BATTALION, 3D MARINES	27APR-1MAY67
COMPANY E, 2D BATTALION, 9TH MARINES	1-12MAY67
COMPANY C, 1ST BATTALION, 26TH MARINES	4-5MAY67
1ST BATTALION, 26TH MARINES	12-13MAY67

SUPPORTING UNITS

DIRECT SUPPORT

BATTERY F (REIN), 2/12	24APR-13MAY67
BATTERY B, 1/12	27APR-11MAY67
BATTERY A, 1/12	13MAY

TASK ORGANIZATION AT KHE SANH, 20 JANUARY - 1 APRIL 1968

A. 26TH MARINES

HEADQUARTERS COMPANY	20JAN-31MAR68
1ST BATTALION	20JAN-31MAR68
2D BATTALION	20JAN-31MAR68
3D BATTALION	20JAN-31MAR68

B. ATTACHED AND SUPPORTING UNITS

(1) U. S. MARINE CORPS

1ST BATTALION, 9TH MARINES (LESS CO "C")	22JAN-31MAR68
CO "C", 1ST BATTALION, 9TH MARINES	23JAN-31MAR68
1ST BATTALION, 13TH MARINES	20JAN-31MAR68
1ST PROV, 155MM HOWITZER BTRY	20JAN-31MAR68
DET, 1ST SEARCHLIGHT BTRY 12TH MARINES	20JAN-31MAR68
DET, 3D ENGINEER BATTALION	20JAN-31MAR68
COMPANY "B", 3D RECON BATTALION	20JAN-31MAR68
3D PLATOON, COMPANY "D", 3D RECON BATTALION	20JAN-31MAR68
1ST PLATOON, COMPANY "A", 5TH RECON BATTALION	20JAN-31MAR68
COMPANY "A" (-) 3D ANTITANK BATTALION (REDESIGNATED ANTITANK COMPANY (-), 3D TANK BATTALION)	20JAN-31MAR68
COMPANY "A", 3D SHORE PARTY BATTALION	24JAN-31MAR68
DET, H&S COMPANY, 3D SHORE PARTY BATTALION	24JAN-31MAR68
2D CLEARING PLATOON, COMPANY "C" 3D MED BATTALION	24JAN-31MAR68

OTTER PLATOON, H&S COMPANY 3D MOTOR TRANSPORT BATTALION	20JAN-31MAR68
DET, COMPANY "B", 9TH MOTOR TRANSPORT BATTALION	20JAN-31MAR68
DET, COMPANY "A", 9TH MOTOR TRANSPORT BATTALION	20JAN-31MAR68
DET, SU#1, 1ST RADIO BATTALION	20JAN-31MAR68
DET, 3D DENTAL COMPANY	20JAN-31MAR68
DET, HEADQUARTERS COMPANY, HEAD- QUARTERS BATTALION, 3D MARINE DIVISION (POSTAL, PHOTO, EXCHANGE, ISO, AO'S, STAFF AUGMENT)	20JAN-31MAR68
COMBINED ACTION COMPANY "O" 3D COMBINED ACTION GROUP, III MAF	20JAN-31MAR68
DET, COMM CO, HEADQUARTERS BATTALION, 3D MARINE DIVISION	20JAN-31MAR68
DET, 5TH COMM BATTALION	20JAN-31MAR68
DET, 7TH COMM BATTALION	20JAN-31MAR68
DET, FORCE LOGISTICS COMMAND	20JAN-31MAR68
SUB-TEAM #1, 17TH INTERROGATOR- TRANSLATOR TEAM	20JAN-31MAR68
COMPANY "B", 3D TANK BATTALION, 3D MARINE DIVISION	20JAN-31MAR68
DET "01", HEADQUARTERS & MAINTENANCE SQUADRON, MARINE AIRCRAFT GROUP-16	20JAN-31MAR68
DET "01", MARINE OBSERVATION SQUADRON, MARINE AIRCRAFT GROUP-16	15MAR-31MAR68
DET "2" MARINE AIR SUPPORT SQUADRON 3, MARINE AIR CONTROL GROUP-18	16JAN-31MAR68
DET, HEADQUARTERS & MAINTENANCE SQUADRON-36, MARINE AIRCRAFT GROUP-36	20JAN-31MAR68

DET, MARINE AIR TRAFFIC CONTROL UNIT-62, MARINE AIRCRAFT GROUP-36	20JAN-31MAR68
<u>(2) U. S. NAVY</u>	
DET "B", CONSTRUCTION BATTALION, MOBILE UNIT-301	20JAN-11FEB68
DET, MOBILE CONSTRUCTION BATTALION-10	20JAN-19FEB68
DET, MOBILE CONSTRUCTION BATTALION-53	20JAN-13FEB68
DET, MOBILE CONSTRUCTION BATTALION-5	20JAN-24JAN68
<u>(3) U. S. ARMY</u>	
DET. A-101, 5TH SPECIAL FORCES GROUP	20JAN-31MAR68
DET, 44TH ARTILLERY	20JAN-31MAR68
DET, 65TH ARTILLERY	20JAN-31MAR68
DET, 238TH COUNTER-MORTAR RADAR UNIT, 108TH FIELD ARTILLERY GROUP	22JAN-31MAR68
DET, 1ST PLATOON (SMOKE), 25TH CHEMICAL COMPANY	9FEB-31MAR68
544TH SIGNAL DET, 37TH SIGNAL BATTALION	20JAN-31MAR68
<u>(4) U. S. AIR FORCE</u>	
DET, (OPERATING LOCATION AJ), 15TH AERIAL PORT SQUADRON	20JAN-31MAR68
DET, 366TH TRANSPORT SQUADRON, 366TH COMBAT SUPPORT GROUP	20JAN-31MAR68
DET, 903D AERO MED EVAC SQDN	20JAN-31MAR68
DET "A", 834TH AIR DIVISION	20JAN-31MAR68
<u>ARMY OF THE REPUBLIC OF SOUTH VIETNAM</u>	
37TH ARVN RANGER BATTALION	27JAN- 1APR68

APPENDIX E

COMMAND AND STAFF LIST 3D MARINES, 24 APR - 13 MAY 1967
(Period covered during "The Hill Fights")

3D MARINES

Commanding Officer	Col John P. Lanigan (24Apr67-13May67)
Executive Officer	LtCol Jack Westerman (24Apr67-13May67)
S-1	WO Charles M. Christensen (24Apr67-13May67)
S-2	Capt Adolfo Sgambelluri (24Apr67-7May67) Capt James D. McGowan (8May67-13May67)
S-3	Maj Floyd A. Karker (24Apr67-13May67)
S-4	Maj Howard L. Long (24Apr67-13May67)
Communications Officer	Capt Curtis G. Arnold (24Apr67-13May67) Capt George W. Brooks (2May67-13May67)

2D BATTALION, 3D MARINES

Commanding Officer	LtCol Earl R. DeLong (24Apr67-13May67)
Executive Officer	Maj Wendell O. Beard (24Apr67-13May67)
S-1	2dLt Billy L. Heaton (24Apr67-13May67)
S-2	Capt Robert N. Bogard (24Apr67-13May67)
S-3	Capt Douglas W. Lemon (24Apr67-13May67)
S-4	Capt Robert R. Green (24Apr67-13May67)

Commanding Officer
Headquarters and Service Company Capt Stuart R. Vaughan
(24Apr67-13May67)

Commanding Officer
Company "E" Capt Alfred E. Lyon
(24Apr67-3May67)
1stLt John F. Adinolfi
(4May67-12May67)
Capt Alfred E. Lyon
(13May67)

Commanding Officer
Company "F" Capt Martin Sorensen
(24Apr67-9May67)

Commanding Officer
Company "G" Capt James P. Sheehan
(24Apr67-13May67)

Commanding Officer
Company "H" Capt Raymond C. Madonna
(24Apr67-13May67)

3D BATTALION, 3D MARINES

Commanding Officer LtCol Gary Wilder
(24Apr67-13May67)

Executive Officer Maj Rudolph S. Sutter
(24Apr67-13May67)

S-1 2dLt John C. Ralph
(24Apr67-11May67)

S-2 2dLt Evander R. McIver III
(24Apr67-11May67)
2dLt Michael T. Montgomery
(12May67-13May67)

S-3 Capt Thomas A. Stumpf
(24Apr67-13May67)

S-4 SSgt William T. Pope
(24Apr67-30Apr67)
1stLt John H. Admire
(1May67-13May67)

Commanding Officer Headquarters and Service Company	Capt Robert W. Poolaw (24Apr67-13May67)
Commanding Officer Company "I"	Capt Christian L. Harkness (24Apr67-13May67)
Commanding Officer Company "K"	Capt Bayliss L. Spivey, Jr. (24Apr67-13May67)
Commanding Officer Company "L"	Capt John W. Ripley (24Apr67-13May67)
Commanding Officer Company "M"	Capt William R. Griggs (24Apr67-13May67)

APPENDIX F

COMMAND AND STAFF LIST 26TH MARINES, 20 JAN - 1 APR 1968
(Period covered in Presidential Unit Citation)

26TH MARINES

Commanding Officer	Col David E. Lownds (12Aug67-1Apr68)
Executive Officer	LtCol Louis A. Rann (28Sep67-1Apr68)
S-1	1stLt Robert J. Mariz (29Jan68-29Jan68) (KIA) Capt Arnold R. Nelson (30Jan68-8Feb68) Capt Anthony V. Latorre, Jr. (9Feb68-1Apr68)
S-2	Capt Harper L. Bohr, Jr. (1Aug67-7Feb68) Maj Jerry E. Hudson (8Feb68-17Mar68) Capt Thorvald P. E. Holm (18Mar68-1Apr68)
S-3	Maj Wayne M. Wills (1Aug67-22Jan68) LtCol Edward J. A. Castagna (23Jan68-1Apr68)
S-4	Maj Aubrey L. Lumpkin (17Mar68-1Apr68)
Communications Officer	Maj John A. Shepherd (16Nov67-1Apr68)

1ST BATTALION, 26TH MARINES

Commanding Officer	LtCol James B. Wilkinson (5Jul67-29Feb68) LtCol Frederick J. McEwan (1Mar68-1Apr68)
Executive Officer	Maj Charles E. Davis III (23Dec67-31Jan68) Maj Howard J. McCarty (1Feb68-1Apr68)

S-1	1stLt Stephen A. Fitzgerald (13Dec67-31Jan68) 1stLt William J. Ferral (1Feb68-1Apr68)
S-2	1stLt Anthony E. Sibley (6Dec67-13Feb68) 1stLt Ernest E. Spencer (14Feb68-1Apr68)
S-3	Maj Bruce A. Greene (23Dec67-29Jan68) Maj Charles E. Davis III (30Jan68-1Apr68)
S-4	Capt Robert C. Onslow (6Nov67-1Apr68)
Commanding Officer Headquarters and Service Company	1stLt Robert A. Brown (20Dec67-16Feb68) 1stLt Paul G. Lojkovic (17Feb68-20Mar68) Capt Lajon R. Hutton (21Mar68-1Apr68)
Commanding Officer Company "A"	Capt Ray G. Snyder (15Dec67-1Apr68)
Commanding Officer Company "B"	Capt Kenneth W. Pipes (20Dec67-1Apr68)
Commanding Officer Company "C"	Capt David L. Ernst (15Jan68-15Feb68) 2dLt Paul W. Bush (16Feb68-2Mar68) Capt Walter J. Egger (3Mar68-22Mar68) Capt Lawrence E. Seaman, Jr. (23Mar68-1Apr68)
Commanding Officer Company "D"	1stLt Ernest E. Spencer (1Aug67-13Feb68) Capt Edward J. Hughes, Jr. (14Feb68-1Apr68)

2D BATTALION, 26TH MARINES

Commanding Officer	LtCol Francis J. Heath, Jr. (Jan68-1Apr68)
Executive Officer	Maj Royce L. Bond (Jan68-1Apr68)
S-1	1stLt Richard J. Gustafson (16Jan-1Apr68)
S-2	1stLt Edwin R. Matthews (Jan68-11Feb68) SSgt Horace E. Roland (12Feb68-9Mar68) 1stLt John C. Wainio (10Mar68-1Apr68)
S-3	Maj Gerald F. Kurth (Jan68-1Apr68)
S-4	Capt Erwin J. Martikke, Jr. (Jan68-18Mar68) Capt Earle G. Breeding, Jr. (19Mar68-1Apr68)
Commanding Officer Headquarters and Service Company	Capt Stanley M. Hartman (Jan68-1Apr68)
Commanding Officer Company "E"	Capt Earle G. Breeding Jr. (Jan68-8Mar68) 1stLt Joseph R. Meeks (9Mar68-1Apr68)
Commanding Officer Company "F"	Capt Charles F. Divelbiss (Jan68-1Apr68)
Commanding Officer Company "G"	Capt Lee R. Overstreet (Jan68-1Apr68)
Commanding Officer Company "H"	Capt Charles O. Broughton (Jan68-1Apr68)

3D BATTALION, 26TH MARINES

Commanding Officer	LtCol Harry L. Alderman (21Aug67-14Mar68)
--------------------	--

	LtCol John C. Studt (15Mar68-1Apr68)
Executive Officer	Maj Joseph M. Loughran, Jr. (9Sep67-1Apr68)
S-1	1stLt Edward J. Paurazas Jr. (21Dec67-1Apr68)
S-2	2dLt Jay G. Marks, Jr. (14Jan68-1Apr68)
S-3	Maj Matthew P. Caulfield (24Nov67-1Apr68)
S-4	1stLt Jack A. Brage (16Nov67-1Apr68)
Commanding Officer Headquarters and Service Company	Capt Alfred Lardizabal, Jr. (29Nov67-1Apr68)
Commanding Officer Company "I"	Capt William H. Dabney (24Nov67-1Apr68)
Commanding Officer Company "K"	Capt Norman J. Jasper, Jr. (23Nov67-22Jan68) 1stLt Jerry Saulsbury (23Jan68-27Jan68) Capt Paul L. Snead (28Jan68-1Apr68)
Commanding Officer Company "L"	Capt Richard D. Camp, Jr. (30Jun67-29Jan68) Capt William F. Hurley (30Jan68-1Apr68)
Commanding Officer Company "M"	Capt John J. Gilece, Jr. (29Nov67-31Jan68) 1stLt John T. Esslinger (1Feb68-23Mar68) Capt Walter R. Jenkins (24Mar68-1Apr68)

1ST BATTALION, 9TH MARINES

Commanding Officer	LtCol John F. Mitchell (1Jan68-31Mar68) LtCol John J. H. Cahill (1Apr68)
Executive Officer	Maj Joseph A. Donnelly (1Jan68-1Apr68)
S-1	1stLt Peter A. Woog (1Jan68-1Apr68)
S-2	1stLt Robert J. Arboleda (1Jan68-1Apr68)
S-3	Maj Edward M. Ringley (1Jan68-16Feb68) Capt Charles B. Hartzell (17Feb68-10Mar68) Maj Ted R. Henderson (11Mar68-1Apr68)
S-4	1stLt John M. Georgi (1Jan68-1Apr68)
Commanding Officer Headquarters and Service Company	1stLt Michael J. Walker (9Jan68-13Feb68) Capt John W. Cargile (14Feb68-31Mar68) Capt Edward R. Miller, Jr. (1Apr68)
Commanding Officer Company "A"	Capt Henry J. M. Radcliffe (1Jan68-31Mar68) Capt Henry D. Banks (1Apr68)
Commanding Officer Company "B"	Capt Robert T. Bruner (1Jan68-26Jan68) 1stLt Arthur N. Mangham, Jr. (27Jan68-2Feb68) Capt John R. Williams, Jr. (3Feb68-1Apr68)
Commanding Officer Company "C"	Capt John W. Cargile (9Jan68-13Feb68) Capt Ralph H. Flagler (14Feb68-1Apr68)

Commanding Officer
Company "D"

Capt Don F. Schafer
(1Jan68-31Mar68)
Capt John W. Cargile
(1Apr68)

1ST BATTALION, 13TH MARINES

Commanding Officer

LtCol John A. Hennelly
(10Dec67-1Apr68)

Executive Officer

Maj Ronald W. Campbell
(13Jul67-1Apr68)

S-1

2dLt Daniel W. Kelly
(19Nov67-1Apr68)

S-2

1stLt Walter K. Jones
(21Dec67-4Mar68)
1stLt Leslie M. Palm
(5Mar68-1Apr68)

S-3

Capt Lawrence R. Salmon
(13Jul67-8Mar68)
Maj Gerald R. Houchin
(9Mar68-1Apr68)

S-4

1stLt Harold P. Klunk
(1Dec67-20Feb68)
Capt Tommy J. Hicks
(21Feb68-1Apr68)

Commanding Officer
Headquarters Battery

1stLt Ralph W. Dunn, Jr.
(2Aug67-20Feb68)
1stLt Walter K. Jones
(21Feb68-15Mar68)
Capt Jerome P. Rogers
(16Mar68-21Mar68)
1stLt Jacob W. Hughes, Jr.
(22Mar68-1Apr68)

Commanding Officer
Battery "A"

Capt Dennis L. Pardee
(Aug67-29Feb68)
Capt Victor B. Snider
(1Mar68-1Apr68)

Commanding Officer
Battery "B"

1stLt George G. Wood
(21Jan68-29Feb68)
Capt James C. Uecker
(1Mar68-1Apr68)

Commanding Officer
Battery "C"

Capt William J. O'Connor
(28Nov67-1Apr68)

Commanding Officer
Mortar Battery

Capt Michael T. Pierson
(5Jan68-1Apr68)

Commanding Officer
1st Provisional 155
Howitzer Battery, 3/12

Capt Joseph Taylor
(5Jan68-29Feb68)
Capt Stephen J. Hayes
(1Mar68-1Apr68)

ATTACHED UNITS

Commanding Officer
Company "A", 3d AT Battalion

Capt James O. Lea
(20Jan68-1Apr68)

Commanding Officer
Company "B", 3d Tank Battalion






Capt Daniel W. Kent
(-24Jan68)
Capt Claude W. Reinke
(25Jan68-1Apr68)

Commanding Officer
Company "A", 3d Shore Party
Battalion

1stLt Robert L. Singleton
(28Jan68-4Mar68)
Maj Howard W. Wahlfeld
(5Mar68-1Apr68)

UNIT SIZE

UNIT SYMBOLS

...	PLATOON		USMC UNIT (WHEN UNITS OF OTHER SERVICES SHOWN)
I	COMPANY		INFANTRY
II	BATTALION		ENGINEER/PIONEER
III	REGIMENT		AIR CAVALRY CP
X	BRIGADE		AIR CAVALRY

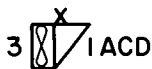
EXAMPLES



3d BATTALION, 26th MARINES



11th ENGINEER BATTALION,
FLEET MARINE FORCE



3d BRIGADE,
1st AIR CAVALRY DIVISION



1st SQUADRON, 7th CAVALRY

APPENDIX G

The device reproduced on the back cover is the oldest military insignia in continuous use in the United States. It first appeared, as shown here, on Marine Corps buttons adopted in 1804. With the stars changed to five points, this device has continued on Marine buttons to the present day.

