KHE SANH
(Operation Niagra)
22 January - 31 March

HQ PACAF
Directorate, Tactical Evaluation
CHECO Division

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OPERATION NIAGARA

Introduction

Operation NIAGARA was a concentrated air effort executed by the 7th Air Force Commander in early 1968 to disrupt a potential major offensive in northwestern I Corps and the contiguous area of Laos. An extensive enemy build-up in the western DMZ area in late 1967 and early 1968 indicated that a major offensive was developing, with the estimated objective of overrunning Khe Sanh and other friendly positions located astride Route 9—the most readily accessible infiltration route for North Vietnamese forces bypassing the DMZ into South Vietnam. It was further estimated that the enemy would launch his offensive on or about 30 January—when the South Vietnamese would be observing the Lunar New Year. Thus, at the direction of COMUSMACV, the 7th Air Force Commander and his operations and intelligence staff planned and directed SLAM-type operations in the NIAGARA area several days prior to the Tet Holidays. These operations were accorded the highest priority, and were applied on a sustained basis.

SLAM-type operations began in the NIAGARA area on 22 January, with 595 tactical strike sorties (including 7AF, USMC, and USN) and 49 B-52 sorties flown against enemy targets. When Operation NIAGARA officially terminated on 31 March 1968, over 24,400 tactical strike sorties and 2,500 B-52 sorties had been flown. This was the greatest sustained concentration of airpower in the Vietnam conflict to date. The purpose of this report is to bring the statistical weight of effort into proper perspective through the narrative study and documentation of significant developments. It addresses in
particular those operational areas of 7th Air Force evaluative concern--i.e.,
operational problems and lessons learned, coordination and control, the
development of targets and tactics, and the responsiveness of airpower to
the tactical situation.

During the progress of NIAGARA operations, COMUSMACV designated the
Deputy Commander for Air Operations as the single manager for control of
tactical air resources (strike and reconnaissance) throughout South Vietnam
and the extended battle area. The Deputy Commander for Air was specifically
charged with the responsibility for coordinating and directing the tactical
air effort. Although Operation NIAGARA precipitated the single management
directive, the intricacies of this subject deserve more in-depth treatment.
A separate Project CHECO study, "Single Manager for Air in SVN," addresses
the single manager concept for control of tactical air resources as applied
in South Vietnam and the extended battle area. Only those specific problems
resulting from divided control in the NIAGARA area are discussed in this
text.

The Tactical Situation

A fair assessment of the developing situation was that the enemy, within
his available resources, had been temporarily stalemated by aggressive
joint air/ground operations, and that he would now make a major attempt to
reverse this tactical situation. This attempt would require a greatly
increased infiltration effort. Thus, while promoting increased talk of
negotiations on the international front, the enemy had used monsoon cover
and the Christmas truce to accelerate his infiltration of men and materiel
to the southern assembly areas, which included Cambodia. The stage for widespread offensives in South Vietnam and Laos was being set.

A comparison of truck sightings in the infiltration corridors clearly shows the quantum surge in the enemy's infiltration capability to support the upcoming offensive. As an example: for the first nine months of 1967, there was a monthly average of 480 truck sightings. Sightings surged to 1,116 in October, 3,623 in November, and 6,315 in December; this is in sharp contrast to the monthly average of 256 sightings during the last three months of 1966. Although there had been a major improvement in TAF capabilities for truck detection, the surge was still evident. Friendly ground forces were engaged in small-scale operations throughout the country. COMUSMACV advised his staff in early January that "the enemy has completely shifted his strategy". He reported that enemy forces had moved from the defense to the offense, and were "on the move everywhere".

Although enemy activity was on the rise throughout the southern infiltration corridors and tactical zones, the greatest threat appeared to be in the III Marine Amphibious Forces (MAF) tactical area of responsibility (TAOR) in northern I Corps. Over the past several months, the Marine TAOR had closed northward, and fixed positions had been established across the northern portion of I Corps to effect a barrier below the DMZ. Also, several large scale ground operations had been executed by III MAF to counter the growing threat throughout the northern provinces, and U.S. Army and ARVN ground units had moved northward to strengthen the Allied posture. As the threat grew, further augmentation of the Marine ground capability became necessary, as did
the application of increased B-52 and tactical airstrikes in support of the critical ground situation.

A prelude to Operation NIAGARA was III MAF's Operation SCOTLAND, which had been conducted since November 1967 to counter the growing threat to Khe Sanh, Camp Carroll, Quang Tri City, and other positions in northwestern I Corps. During mid-January, the undeniable threat in the Khe Sanh area prompted the greatest concern. Not only had the enemy positioned a large number of forces around Khe Sanh, but intelligence sources reported that Routes 92 and 9 in Laos showed signs of an increased logistical movement into this area--indicating a pivot point for operations leading toward Khe Sanh.

To exploit this situation, COMUSMACV ordered an all source intelligence effort directed by MACV J-2 to develop target boxes for B-52 strikes. A maximum B-52 effort was applied against targets generated by this program. Known as NIAGARA I, this effort was executed in mid-January. Planning for SLAM-type operations around the Khe Sanh area (NIAGARA II) envisioned the employment of all available USN, USMC and USAF strike, reconnaissance, and electronic warfare aircraft resources as required. Lower scales of activity were contemplated consistent with threat levels.

In planning for NIAGARA, COMUSMACV advised the CG, III MAF on 6 January 1968:

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

Following a meeting with COMUSMACV on the tactical situation, the 7th Air Force Commander advised his operations and intelligence staff on 9 January that a major enemy offensive within the next few weeks was deemed a certainty. He cautioned, however, that the offensive could be directed against targets throughout South Vietnam. His memorandum of 9 January advised:

"The enemy now has the better part of the 325th, 304th and 300th Divisions in the vicinity of Khe Sanh. From the disposition of these forces, it would appear that Khe Sanh is the intended target. However, there is no hard evidence to support this course of action as the enemy's intention. The build-up of forces and materiel seems to indicate a much broader objective than Khe Sanh. He may be in the midst of a major build-up to wrest the initiative from us throughout the country. All of the talks of negotiation may be a trap to get the bombing stopped so as to accelerate the delivery of more equipment into SVN with the objective of a military victory in 1968. He may be after much bigger game than Khe Sanh."

The Commander cautioned his staff that action in all four Corps Tactical Zones (CTZ) was on the upswing. There were no large unit fights at the time, but there was a significant increase in small unit actions. He advised:

"It is expected this trend will continue. MACV thinks the number of enemy actions is at an all time high since 1965--certainly higher than at any time in my tour. All of these small unit fights seem to tie together a general strategy of offensive actions at all levels throughout the country. Many of the attacks are directed against local leaders. The obvious aim is to tighten control on the local people. His fight has always kept the objective of controlling the people uppermost."
This would prove to be a sound assessment of the developing situation when the enemy launched his Lunar New Year offensive a few weeks later. In the meanwhile, the disposition of enemy forces in the NIAGARA area represented a very real threat to the Marines at Khe Sanh, while also presenting "an undeniable opportunity for concentrated airstrikes on a sustained basis."

Mounting enemy infiltration, coupled with intelligence estimates that Tet was the key date in enemy planning, prompted a strong sense of urgency concerning the defense of Khe Sanh. The 7AF Commander directed his staff to assemble a planning team for NIAGARA. "I want to emphasize the urgency of the plan," he stated, "You have authority to draw on whatever staff assistance is needed. Marines must be brought in as the plan develops. It must be our best effort to support their defenses at Khe Sanh."

7th Air Force Planning

COMUSMACV advised that he considered it imperative that "maximum air firepower available" be used to meet the enemy threat in I Corps. He also emphasized the requirement to "effect detailed application of air resources in I Corps," which would require a more centralized direction of the air effort in the threat area. To this end, he defined the command and control procedures which would apply in NIAGARA operations:

"To meet the threat in the Quang Tri - Thua Thien area, I have directed my Deputy Comdr MACV Air, Gen Momyer, to develop a plan to concentrate all available air resources (SLAM-type Operation). The direct support of Marine units by the 1st MAW is not affected by this plan. The initial area of concentration will be around the Khe Sanh (NIAGARA II) area. Depending upon the tactical situation the area will be shifted. Dep COMUSMACV for Air Operations will coordinate the details of this air
Figure 1
plan with the 1st Marine Air Wing and III MAF as appropriate. I have charged him with the overall responsibility for air operations for the execution of this plan. He will coordinate and direct the employment of the tactical air, Marine air, diverted airstrikes from out of country air operations, and such naval air that may be requested. B-52 strikes will be coordinated through him.

"Until further notice, it is directed that III MAF make available to 7AF all tactical bomber sorties not required for direct air support of Marine units. These sorties will be initially committed to the NIAGARA operation.

"I wish to stress the absolute necessity for coordination of all elements of the command to bring our firepower against the enemy in the most effective manner. The serious threat we face in I Corps and the Saigon in particular, demands this. I have directed my Air Deputy to ensure in my name that these air resources are applied to this end."

To insure that adequate air resources and tactical flexibility were available to the 7AF Commander, COMUSMACV requested authority from CINCPAC to divert as much of the air effort committed to ROLLING THUNDER "as may be considered necessary to counter the enemy build-up in Quang Tri Province". This included both Thailand based USAF aircraft and Seventh Fleet resources. CINCPAC concurred, but advised that "it is essential" that interdiction efforts in Route Package I and Laos be continued. This authority for Thai-based aircraft to conduct strikes against targets in I Corps marked the first use of Thai-based aircraft in South Vietnam (SVN). The rules of engagement had previously restricted use of these aircraft to strikes in Laos and North Vietnam (NVN).
From the outset of NIAGARA planning, the 7AF Commander directed his staff to make a major effort to insure that effective coordination between participating forces was accomplished. He further directed that the air effort be geared to the overall defense plan for the tactical area. As advised in a message to III MAF on 19 January:

"Deputy COMUSMACV for Air is preparing an outline plan to insure that all elements of air planning for support of Operation NIAGARA are complete and that command, control, and coordination arrangements among forces involved are adequate to the full scale of intensity of possible air operations."

Specific planning for operations as approved by COMUSMACV in NIAGARA II called for a maximum B-52 effort, with follow-up reconnaissance—both visual and photo. Tactical air would expend under FAC control. Airborne Command and Control Center (ABCCC) aircraft orbiting over Laos would control the SLAM effort. The ABCCC would serve as an extension to the 7AF Tactical Air Control Center (TACC), and would be tied into the Marines at Khe Sanh and Dong Ha for artillery fire. Intensified armed reconnaissance into and leading out of the NIAGARA area would be required, and all roads leading from Laos into the area were to be interdicted. The 7AF Commander also directed that SLAM surveillance and suppression were to be available if required, and that Air Defense CAP be prepared to screen off offensive air that might covertly develop. He also directed on the spot analysis at the TACC for indications of enemy attempts to put an airfield into operation in Laos and Route Package I. Detailed photo coverage would be directed for both day and night.
TACC directed the "Covey" FACs flying out of Da Nang and Ubon Air Bases to place first priority on support of Operation NIAGARA. The Marine ground forces would be given full ALO/FAC support whenever required. The I Corps VR program would also receive top priority. They advised the 20th Tactical Air Support Squadron (TASS) to "keep ahead of FAC and aircraft requirements and notify TACC of additional needs available". Hq 7AF TACC also directed that it was essential that "7AF FACs develop and report all suspect activities observed in the threat area." In addition to the Laotian portion of the threat area, "all routes and trail nets leading into the Khe Sanh area" would be covered extensively for troops and logistic support infiltrations.

A special 7AF NIAGARA Intelligence Control Center was also established to effect an around the clock priority effort to insure the effective management of intelligence resources. This will be discussed later under "Targeting and Tactical Response".

Control and coordination limitations had been of recurring concern during joint air/ground operations in the III MAF TAOR. Thus, when COMUSMACV issued the execution order for NIAGARA II on 22 January, the 7AF Commander in turn directed his operations and intelligence staff to effect immediate coordination with III MAF officials. 7AF officials proceeded that afternoon to III MAF at Da Nang to brief and coordinate plans for air support of NIAGARA II. Present at the conference were the CG, III MAF, Comdr 1st MAW, the III MAF Chief of Staff, and several key III MAF staff officers. The 7AF Deputy Director, TACC, reported on this meeting:
"General Cushman (CG, III MAF) stated that he wanted all
the air that he could get in support of his ground forces
and that he preferred to use air to the maximum extent
possible rather than artillery because of logistic resup­
ply to the Khe Sanh area. General Cushman was concerned
about Marine ground forces deployed in and around the
Khe Sanh area and wanted to be sure that procedures were
established to ensure the safety of these troops. Also
that the 155-mm artillery at Khe Sanh could be used, when
necessary, under the control of the Fire Support Coordina­
tion Center (FSCC) at Khe Sanh. I informed General Cushman
in my opinion this coordination was easily effected through
the ABCCC and strikes made in the close proximity of Khe
Sanh would be coordinated through that facility. In addi­
tion, if communications were lost at Khe Sanh I suggested
that the Division FSCC at Dong Ha provide the necessary
coordination.

"Upon my departure from III MAF, I was convinced that
General Cushman was delighted that 7th Air Force had taken
the initiative and was providing air power to assist his
ground forces. He further informed me that the only thing
he asked was that strikes in the vicinity of his troops be
thoroughly coordinated with his controlling agencies and that
he preferred to use air rather than artillery because of
the capability to deliver greater tonnage on the enemy."

It was agreed that the ABCCC would directly control all air operations
in NIAGARA with the exception of those Marine sorties that were to be used
for close air support of Marine ground forces. It was clearly understood that
the procedures established would in no way restrict Hillsboro ABCCC from
employing airpower in any area of NIAGARA, but certain coordination procedures
would be required for the protection of friendly troops and effective use
of artillery. For instance, a zone was established in the immediate vicinity
of Khe Sanh where Marine troops were deployed that would require all strikes
to be FAC controlled and with coordination through the FSCC. Outside of this
zone, and out to a circle designating the 155-mm artillery range, strikes
would be conducted after coordination with the Marine FSCC at Khe Sanh to
insure that artillery and airstrikes did not interfere with each other. In other areas contiguous to the NIAGARA area, i.e. to the east through south, existing procedures would remain in effect. A free fire zone was established outside the 155-mm artillery range. Strikes could be made in this area without coordination of the FSCC.

In specific areas designated by III MAF, in the immediate vicinity of Khe Sanh where Marine ground forces were deployed, Marine air would be used to the maximum extent possible. Additional strikes would be requested by the ground forces commander concerned. These strikes would be controlled either by FAC or MSQ/TPQ depending on the closeness of friendly troops.

It was agreed that all aircraft operating in the NIAGARA area would check in and out with the ABCCC for target/FAC assignment with the exception of those Marine aircraft under FAC control conducting close air support of Marine ground forces in the immediate Khe Sanh area. The ABCCC would maintain coordination of these strikes through the Marine sub-DASC at Khe Sanh, or the airborne DASC if on station. When Marine aircraft were not used in this role they would contact the ABCCC to be put on other targets.

With these agreements, the Deputy Director, TACC, departed Da Nang for Udorn to brief the ABCCC crews and to fly on Hillsboro ABCCC on 23 January to insure that these procedures were workable. He reported to the TAF Commander:

"While acting as the ABCCC Commander (Hillsboro) on the 23d I found that these procedures were effective and the operation went rather smoothly. The only problem
encountered was initial coordination with the FSCC at Khe Sanh. ABCCC was unable to maintain radio contact with the FSCC. The orbit of ABCCC was moved in an attempt to gain constant radio contact; however, only intermittent contact was obtainable. Following this failure we established procedures to maintain constant radio contact with the Marine airborne DASC (really a TACP) that was on station between Da Nang and Khe Sanh. Once this procedure was established we had no more problems of coordinating strikes. For the first day I felt the operation went very well. However, procedures will continue to be refined and closer coordination attained.

"Based on my experience on the 23d, I feel that the ABCCC can successfully handle 100 to 750 strike sorties in a 24 hour period so long as these sorties are not allowed to gang up at any one period. This situation can easily be prevented by proper scheduling and maintaining adequate tankers on station."

Despite these early agreements, coordination and control problems did arise in NIAGARA, especially during the first three weeks. These problems, along with certain developments in this area of concern, are addressed under "Coordination and Control". Also, there was considerable coordination in other areas which are not addressed by this study. One example was coordination between COMUSMACV and the U.S. Ambassador to Laos on SLAM operations in the Laotian portion of the NIAGARA area. Ambassadorial concurrence was obtained, and prior approval on a large list of B-52 targets was given to insure no delay in the effective application of this weapons system. Along with other necessary restrictions, a no-fire zone was drawn around a friendly Laotian outpost just across the border on Route 9. This restriction was lifted shortly after NIAGARA operations began, when this outpost was overrun by NVN forces.
The Fall of "Elephant"

Several days prior to the beginning of NIAGARA, it was reported that the enemy had effectively restricted movement by friendly forces operating out of the Marine Base Camp at Khe Sanh and surrounding outposts. At this time, the III MAF had ten ground reconnaissance teams located at Khe Sanh. A MACV report advised that these teams had been able to accomplish "some ground reconnaissance", but had not produced "tangible" intelligence. Patrol range had been limited to an eight to ten kilometer radius of Khe Sanh because this was the limit of supporting fire available. Also, enemy counter reconnaissance patrols were able to screen the location and movement of units, and prevented the collection of data by engaging friendly patrols.

By the time NIAGARA operations began, the situation had become more critical. Enemy forces had already begun sporadic but continuous shelling of the Khe Sanh Base Camp, and friendly outposts were effectively pinned down. Selected notes from the MACV Combat Operations Center log on 21-22 January tell the story:

- At 210430 K/3/26 USMC on Hill 861 received a ground attack from an estimated 200-300 enemy. Friendly position was not penetrated and contact became sporadic until approximately 1200H when enemy broke contact. Sporadic small arms fire continued throughout the afternoon.

- At 210505H the Khe Sanh Combat Base received an unknown number of mortar rounds. Incoming mortar fire continued until 1200H. Evening of 21 January, the enemy began probing the perimeter wire defenses to the south and west of the airstrip. L/3/26 USMC repulsed the probe killing 25 enemy.

- Friendly casualty report for the day -- 14 KIA, 43 WIA.
Three kilometers NNE of Khe Sanh at 211700H, three UH-1Ds in support of ARVN forces received heavy ground fire on approach to LZ. One UH-1 touched down in LZ, received heavy fire, and exploded. The other two UH-1Ds aborted mission and returned to Khe Sanh.

On 22 January, both Khe Sanh and Hill 881 came under enemy mortar bombardment. Enemy positions taken under fire by tactical air and 105 fire.

At 221300H, unknown number of civilians continue evacuating village of Khe Sanh to area near combat base.

Approximately 1500H, an H-34 helicopter was shot down on Hill 881-S while on resupply mission. Vicinity Hill 881 an H-34 was shot down by enemy fire. Patrol located aircraft but could not locate crew.

Twelve kilometers SSE of Khe Sanh at 221525H, an F-4B on CAS mission was hit by enemy ground fire and crashed.

Eight kilometers NW of Khe Sanh at 221730H, 1/3/26 USMC observed 30-40 enemy. Artillery missions and tactical air strikes directed on enemy positions. Results, 21 KIA.

UPDATE. Twelve kilometers south of Khe Sanh at 211500H an air observer directed eight fixed wing strikes on enemy positions. Results, 40 KIA.

In the meanwhile, heavy enemy movement continued on the Laotian side of the NIAGARA area, and on the night of 23 January, an estimated three battalions of NVA soldiers attacked the Laotian outpost blocking Route 9 into South Vietnam. This friendly Laotian element, located at Ban Houi Sane, was officially known as BV-33, but was better known by its radio call sign -- "Elephant", especially to 7AF Covey FACs. These FACs were staging out of Khe Sanh prior to NIAGARA, but had been relocated to Da Nang and Ubon as the Khe Sanh situation became critical. The Elephant forces had proved to be a valuable intelligence source to the FACs, who not only maintained radio contact, but often flew into the camp's STOL strip for a visit with the BV-33 Commander.
As previously stated, 7th Air Force had gone to great lengths to preclude inadvertent strikes against the Elephant contingent, as well as other friendly positions on both sides of the border. A no-strike zone was drawn around the friendly positions, and the ABCCCs, the FACs, and all strike pilots were thoroughly briefed on these restricted areas. After 24 January, strike restrictions in the Elephant area were lifted--NVA forces had overrun the Elephant contingent.

The attack on Elephant was supported by seven armored vehicles which had advanced along Route 9. Weather was extremely bad in the area during the enemy advance, and this severely restricted air support for the Elephant forces. One Covey FAC described the weather:

"On 24 January, I took off at 3:30 in the morning to support Elephant who was in the process of being overrun. When I arrived in the area, Candlestick was there flaring the battle scene. The scene was low overcast, probably up to around 2,000 to 3,000 feet solid, with a high overcast based at about 12,000 feet or so. We were unable to work visually in the area at all...."

Because of weather conditions, all strikes made in support of Elephant had to be directed in by the Marine TPQ ground directed radar bombing system located at Khe Sanh. The FAC reported:

"Candlestick and I were flying through the layers; Candlestick flaring at the request of Elephant. Elephant reported he was under heavy ground attack. He reported tanks and trucks coming down Route 9 from west to east. His outer perimeter had already been breached, and he was calling for air strikes."
"Since we were unable to define the situation on the ground, all we could do was to take coordinates given to us by Elephant and relay them to Alleycat (Night A-BCCC) and have them TPQ it with Casement Bravo (Marine control at Khe Sanh). Even if the TPQs were pinpoint in accuracy, the problem here was that the NVA were moving so fast that by the time the TPQs hit, they were probably well away from the target area and continuing with the attack.

"We had two Yellowbirds (B-57s) in the area with fire bombs, but we could not expend them because we could not identify the battle on the ground. We just had to sit up there, rather frustrated, and TPQ to help them out. Just before dawn, Elephant reported that they were being overrun. I could hear the machine guns and mortars in the background as he talked rather sadly over the radio....."

Lt Col Souloung advised the FAC that he was going to have to evacuate the command post and retreat to the east toward the Lang Vei Special Forces Camp -- just across the border in South Vietnam. The BV-33 Commander later reported that he radioed for help to Lang Vei and requested helicopter airlift, but helicopters were not available. He then directed his people to evacuate on foot across the border toward Lang Vei. This group included 276 BV-33 troops, approximately 200 Meo troops, 33/ and approximately 2,300 refugees, some of whom were BV-33 dependents.

Midway, the BV-33 Commander contacted an indigenous soldier at Lang Vei and again asked for helicopter support. He was given an affirmative answer, but none arrived by 1700 hours. The refugees continued to move along Route 9. Their withdrawal was covered by air. The weather cleared slightly during the day, and while one FAC directed strikes in against the former Elephant command post, another FAC followed the refugees. Covey 263..."
located the refugees on the road, and began directing strikes in on bridges behind them. Probably due to these strikes, enemy pursuit was not aggressive.

Hillsboro ABCCC reported on the BV-33 withdrawal:

"Elephant had been overrun before Hillsboro (daylight call sign) took station and the survivors and refugees were travelling along Route 9 toward Khe Sanh. Covey FACs remained over the column throughout the day and saw them into the compound at Lang Vei. The presence of the FAC aircraft apparently prevented further harassment. Elephant reported three medium tanks supporting the battalion attacking him. FAC recce the area and reported tracks of some type of vehicle with cleated treads but found no tanks. Route 9 was interdicted and a bridge bombed for a precautionary measure after the refugees had proceeded west of it."

An Army debriefing officer reported later on the BV-33 arrival at Lang Vei:

"Advanced platoon arrived at Lang Vei SF Camp, where they were disarmed as were rest of unit arriving later. Lt Col Boulang lobbied with Commander of USSF, a Lt Col, who ordered that weapons be given back to BV-33. He then told BV-33 CO to deploy his unit in defense positions at Old Lang Vei Camp (approx 1,000 meters north of SF Camp). Refugees were herded to location approximately 800 meters east just off Rte 9. BV-33 stayed at their positions at Lang Vei and made several patrols accompanied by USSF personnel. BV-33 lost 1 officer, MIA, and two USSF on these patrols. After the 27th of January, adequate amounts of food were prepared, both rice and C-ration, but no arms, ammo, clothing nor shovels to dig adequate defense positions. Medical aid provided BV-33 WIA..."

The Laotian soldiers and refugees were now in a zone of comparative
safety, but only temporarily. Within two weeks, the Lang Vei Special Forces Camp would also be overrun and would no longer represent a haven. The attack on Elephant was the first indication of enemy armored vehicles being in the area. Although the BV-33 Commander was usually a reliable source of intelligence, his report of tanks was viewed with skepticism by some officials, primarily because there was no visual sighting of tanks prior to the Lang Vei attack. Tracks had been sighted, but these could have been made by vehicles other than tanks. Bad weather and camouflage techniques successfully masked the enemy's true intent.

Loss of the Elephant camp meant the loss of a valuable intelligence source. Lt Col Soulage had often been able to advise the Covey FACs of enemy movement in the Route 9 area, and his forces had been the first to detect the enemy's construction of a new road bypassing Route 9 into Quang Tri Province. This new road, which was well concealed beneath the jungle canopy, was being constructed in the Co Roc Mountain area just south of Route 9. Some of the more lucrative targets struck in the Niagara effort were in the Co Roc Mountain area. During the period 7-17 January, BV-33 guerrilla teams operating southeast of Ban Houei Sane also discovered extensive enemy positions in vicinity of Co Roc Mountain (XD 741 316). Their observation was reported as follows:

- On 11 January, a team found an occupied 50-man foxhole complex at the top of Co Roc Peak.
- On 13 January, a patrol observed 75 NVA soldiers and sighted heavy ground fire, including 50-caliber machine guns, firing at an aircraft.
On 15 January, a team observed a hut with a long wire antenna set up next to it. The area showed signs of heavy foot traffic in the immediate vicinity.

On 16 January, two caves were discovered, one of which contained two tons of rice. Three enclosed structures were located nearby which could house 30 men each. Approximately 900 meters SE of the caves, an extensive bunker complex was discovered. The team counted five hundred bunkers, and reported that many were of 10-man capacity. One large bunker was estimated to be for a regimental command post. The other bunkers were constructed with gun ports for defensive action.

Loss of the Elephant Camp reemphasized a lesson learned in the Vietnam conflict. When small friendly garrisons and outposts have been subjected to determined, heavy enemy assaults, tactical airpower has been essential to successful defense and/or evacuation. Under conditions favorable to the enemy, e.g. inclement weather, tactical airpower has not always been able to preclude them from being overrun. Radar directed strikes have helped to offset weather disadvantages in Vietnam, but such strikes are limited when forces are closely engaged. The impact of new weapons, such as wide area anti-personnel mines (WAAPM), on similar situations has yet to be determined. Similar attacks have been broken when defending forces were able to withstand the assault until the weather cleared, or when the defending forces called in strikes on their own positions. Of course, a larger fixed position such as Khe Sanh would be a different matter. Launching a major assault against
positions such as Khe Sanh would mean the massing of enemy forces, thus making them extremely vulnerable to airpower -- especially when it was applied on a SLAM-type basis.

Although superior enemy forces usually had little difficulty overpowering small fixed positions in bad weather, their usual tactic was withdrawal rather than attempting to hold the position once it was abandoned by the occupants. This precluded effective air bombardment of the abandoned position, and quite often forced aircraft to expend on uncertain withdrawal route targets. However, enemy withdrawal and tactical air effectiveness in this particular situation presented a departure from the norm. Enemy objectives in the area offered limited withdrawal alternatives. Movement in any direction still placed the enemy in the NIAGARA targeting area, and the extensive application of B-52s and tactical airpower under the NIAGARA concept reduced the probability of escape.

NIAGARA and the Tet Offensive

Obviously, the attack on BV-33 was designed to eliminate surveillance of enemy movement in the area. Continued surveillance by the Covey FACs, the Special Forces at Lang Vei, and other outposts and patrols helped offset the loss of the BV-33 camp. Reports on heavy enemy movement in the area continued to be made. On the day the Elephant camp was evacuated, a Marine outpost three kilometers northwest of Khe Sanh reported that two rows of its defensive wire had been cut and replaced as to indicate it was undisturbed. On the same date, other outposts and patrols in the vicinity.

SECRET
of the Khe Sanh combat base reported extensive enemy troop movement to
the east on Route 9. Heavy enemy troop movement was also reported in
the vicinity of Lang Ve.

Refugee movement on Route 9 presented a problem. Covey FACs re-
ported over 1,000 refugees on Route 9 from the Laotian border to Lang
Ve, and in certain instances their presence helped protect enemy forces
from air strikes. In one instance, a target 500 meters northeast of
Lang Ve was passed to Hillsboro for immediate air strike. The target
was described as a troop concentration and command post three miles south-
west of Khe Sanh. A FAC in the area reported 200-300 refugees on Route 9,
500 meters from the target, and 500 more on a trail from the target to
Route 9. The target was not struck because of the proximity of the
refugees, and the possibility that the troop concentration was in actuality
a group of refugees. Again, monsoon weather was favorable to enemy move-
ment, and hindered visual confirmation.

On 26 January, Covey 252 and another FAC were flying over the Special
Forces Camp at Lang Ve, when the Elephant Commander and members of the
Special Forces Group reported trucks moving down Route 9 toward their
positions. As Covey 252 reported:

"Of course, we foresaw a reenactment of the disaster
at Elephant. We requested some napalm and CBU and a
flareship, none of which were available. We ended up
hitting the coordinates where the trucks were supposed
to be located with some M-117s -- a flight of F-100s.
We notified JAF that we considered it necessary to have
napalm and CBU available, to use on troop concentrations
and vehicles."
Khe Sanh was already effectively pinned down, with airlift being the only means of resupply and evacuation of personnel. The Marine base camp was under constant fire from enemy mortars, rockets, and artillery, and much of their own artillery ammunition had been destroyed when enemy rounds hit their ammo dump on 22 January. New enemy positions were springing up all around Khe Sanh defensive positions, with reinforcements continually moving into the area. It appeared that a major assault on Khe Sanh was imminent. In addition to other intelligence sources, an NVN officer who rallied at Khe Sanh airfield on 20 January said that "beginning with Khe Sanh, every U.S. base between the Laotian border and Con Thien is to be taken before Tet." 45/

In view of the increased activity in I Corps, COMUSMACV contacted the American Ambassador and requested that the planned truce during the Tet Holidays be cancelled. Concomitantly, the 7AF Commander advised that enemy actions in the NIAGARA area were considered to be "preparatory to the main battle". He advised his Deputy Chief of Staff for Operations on 24 January:

"When the main thrust comes we will know it by the level of coordinated preparatory fire followed by assaulting enemy infantry. All the air we have available will be shuttled night and day. Our tactics will be predicated on that basis. Whenever it is possible, we should mass the B-52s and then follow with the TAC air. This has always been sound and we shouldn't get away from it here. This is the tactic I will propose to General Westmoreland when the main battle begins."
The strikes Monday afternoon (22 January) against the 300 troops according to the refugees from Khe Sanh was far more effective than first report. According to reports given by these people at least four hundred or more NVA troops were killed by the CBU attack. We should continue to employ a balanced load of hard bombs and CBUs. The bombs to open up the canopy with CBUs to get exposed personnel. We will find in this battle more concentration of troops than has been the case in the past. Consequently, CBU-28 and 24s should be our primary weapon if the situation develops as described.

"Again I want to be sure you fully understand my guidance on the total use of the forces. We must provide close air support to troops who are in contact. It doesn’t matter where this is. These requirements will be met above all others. I construe troops in contact to also include helicopters, AC-47s or any other air vehicle which is engaging enemy troops. Since the battle in Khe Sanh may go on for an extended time we must be in a posture to sustain our effort. Hold back our surge until I decide to make the all out effort.

"We must continue with the interdiction in Laos and Rt Pkg 1. Strikes in the North will be reduced when the weather is bad to bolster the interdiction effort in Laos. If the weather breaks we will go for a maximum effort in Laos providing there is not a crisis at Khe Sanh. If there is a crisis at Khe Sanh, it will take priority over all strikes in the North."

Further guidance was provided by the 7AF Commander on the 24th:

"Until the enemy commits himself at Khe Sanh the level of effort should be balanced against the interdiction program in Laos. Particular attention should be given to Route 9. I expect this to be the main supply route. As soon as the refugees are cleared, and under FAC control to be sure of their clearance, I want to keep this route interdicted night and day. You should be working on it west of Elephant area now. Combat Skyspot should be utilized when the weather is bad.

"First thing tomorrow morning (25 Jan) put strikes against the Elephant Airfield. This field should be kept knocked
out. I would also like to keep all potential operating locations for MiGs which are within range of the Khe Sanh area knocked out. We know the airfields, so it is a matter of coordination between ourselves and the Navy."

From this point on, concentrated airpower would provide the primary defense for the Khe Sanh area. Weather was extremely unfavorable, but ground directed radar strikes would help offset this disadvantage. There was no shortage of lucrative targets, and the SLAM effort insured around-the-clock availability of strike aircraft. From 22 through 29 January, over 3,000 tactical strike sorties were flown into the NIAGARA area. Bomb damage assessment (BDA) for these strikes was reported as follows:

- 346 secondary explosions and fires,
- sixteen trucks destroyed and seven damaged,
- 18 gun positions destroyed and three damaged,
- 29 bunkers destroyed and ten damaged,
- 181 structures destroyed and 65 damaged,
- and 241 KBA. This BDA was reported by visual sighting, and is undoubtedly deflated in view of the extremely bad weather at the time. Well over 200 B-52 sorties were also flown in NIAGARA during this period.

Even approximate BDA on these strikes was prohibited by severe weather conditions and the lack of ground follow-up. ARC LIGHT BDA will be discussed later in this study.

On the day before Tet, the Vietnamese Government cancelled the 36 hour ceasefire throughout South Vietnam. In the NIAGARA area on the 29th, reports from special air delivered sensors indicated "a lot of activity in Khe Sanh area". These reports said further:
"Many troop movements of large and small units from Lao border as far south as ten miles below Khe Sanh. All movements toward Khe Sanh seems to be big push."

Then, the enemy launched his widespread Tet Offensive. While maintaining pressure against friendly positions in the NIAGARA area, the enemy struck Saigon, Hue and 34 of 45 provincial capitals, and numerous U.S. and Vietnamese military installations. Demands upon airpower during the Tet Offensive emphasized more than ever the need for centralized control of all air resources under the Deputy COMUSMACV for Air Operations. The foremost consideration facing the 7AF Commander was to insure airpower responsiveness to requirements generated by multiple widespread tactical situations, while maintaining the required weight of effort in Operation NIAGARA. On 30 January, the Commander directed that all air units maintain a 1.2 sortie rate and be prepared to surge upon his direction. He directed the following priority for the air effort:

- Adjust to meet live targets as first priority.
- Carrier forces to be directed against the enemy headquarters in NIAGARA and in support of Khe Sanh.
- Thailand-based forces to be applied against Laos LOCs (1) and in support of Khe Sanh (2).
- SVN-based 7AF resources to provide emergency support Pleiku and other Corps areas (1) and Khe Sanh (2).
- Marine forces: (1) Khe Sanh, (2) Camp Carroll, and (3) Emergency support.

Authority to frag and divert Thai-based strike aircraft into specific areas of South Vietnam, along with the planned input of carrier
forces, helped provide adequate resources and the operational flexibility required to insure that the NIAGARA air effort was not diluted. The NIAGARA sortie rate during the initial Tet thrust shows clearly that Khe Sanh and Camp Carroll were not left exposed while airpower responded to other tactical requirements. For the first three days of the Tet Offensive, the sortie rate in the NIAGARA area was actually higher than it had been on the previous three days. 1,113 tactical strike sorties and 86 B-52 sorties were flown in NIAGARA during the three days prior to Tet, while 1,164 tactical and 123 B-52 sorties were flown the first three days of the offensive.

Responsiveness was a requirement that impacted as much on FAC, reconnaissance and intelligence as it did on strike operations. Twice during NIAGARA, major shifts of emphasis were made to deal with critical tactical requirements. The first on 2 February entailed a 40-hour "crash" targeting effort designed to preempt enemy action against Camp Carroll, near the eastern edge of the NIAGARA area. The second, occasioned by the rocket bombardment of Tan Son Nhut that began on 18 February, required redeployment of FACs and an urgent redirection of the reconnaissance and targeting effort until the threat could be brought under control. Both these tasks were successfully accomplished without seriously impairing the targeting of the enemy threat to Khe Sanh, although they severely tasked the human and material resources available.

By 2 February, the expected enemy assault against Khe Sanh had not developed. COMUSMACV estimated on 2 February that the attack would develop
"tonight or tomorrow morning". He also anticipated an attempt by the enemy to overrun Camp Carroll at the same time. Accordingly, the 7AF Commander provided directions for the air effort:

"Weather will be bad in both areas. We need to increase our Sky Spot effort in both areas tonight and tomorrow. General Westmoreland also requested that we bring the Sky Spot in as close as we can. Coordinate this effort with the Marines to maximize the effort of the CSS.

"CBUs are released for use in the same area. The restrictions set forth in MACV wire apply. Be prepared to use these weapons as requested or required. Alert three wings of possible use.

"If attack at Khe Sanh/Camp Carroll does come tonight or tomorrow, I want to apply maximum effort as soon as the weather permits. Due to the other battles, we should plan on using as much effort from out of country forces as feasible. We should stay with the 500 sorties from the Navy with plans for requesting another 100 sorties. We should not lose sight of the possibility the enemy may launch other concerted attacks at Pleiku, Kontum, Quang Tri City, Hue, and conceivably, DaNang. Thus, there may be large demands at one time. In that case, we will use all our country forces in SVN and thin out other requirements in the south."

Concerning this possible major effort by the enemy, the following 7AF actions were taken to make optimum use of in-country forces:

The force was notified to be prepared to go to an increased state of alert and surge as required.

All CSS sorties were diverted, range permitting, to NIAGARA.

For all TOTs (Time over Target) prior to 1200, 3 Feb, bases in range of NIAGARA (Phu Cat, Tuy Hoa, Cam Ranh, Phan Rang) would load hard ordnance for CSS. They
would be launched on preplanned TOTs for better flow control. If Hillsboro could not handle the flight, it would proceed to fragged target. Loads for afternoon would depend on weather outlook.

Again, the estimated enemy assault did not develop, and after the initial Tet thrust, priorities established by MACV did reduce the air effort in NIAGARA. This reduction was primarily to meet the support required in other Corps areas, and it applied to the support required from 7AF, Navy, and Marines, as well as the diversion of selected ARclight sorties. From 23 January through 1 February, there was a daily average of 429 tactical strike sorties flown in NIAGARA. For the next ten day period, the daily average was 219 sorties. Although there was some diversion of selected B-52 sorties, the daily rate actually continued at a higher level -- an average of 36 sorties per day from 23 January through 1 February, and a daily average of 38 for the next ten days.

The tactical sortie rate going into NIAGARA continued at a substantial level. Although a major push against Khe Sanh did not develop during the initial Tet thrust, the enemy forces still represented a threat. Khe Sanh was completely surrounded and under constant artillery, rocket and mortar bombardment. This fire was coming from virtually all directions, including the village of Khe Sanh, which the enemy had occupied at will. Monsoon weather was still in the enemy's favor, and it was known that he had the capability to launch a mass assault; however, to do so would make his forces more vulnerable to airpower. Thus, the tempo of air operations was maintained at a high level.
The Fall of Lang Vei

Although there was more than sufficient advance notice that the Special Forces Camp at Lang Vei would come under heavy attack, probably backed by armored support, the enemy appeared to have little difficulty in overrunning this outpost on 7 February. An Assistant Platoon Leader in the 304th NVA Division rallied to the Lang Vei camp on 30 January, and stated that Lang Vei was to be overrun. The interrogation report said:

"Source stated his battalion, the 8th, began infiltrating in September 1967. During infiltration, the battalion was hit by B-52 strikes and lost 50 per cent of its strength to casualties, many more to desertion, and returned to NVN for replacements. His unit, subordinate to the 66th Regt, arrived in the Khe Sanh area on 20 January and on 21 January attacked the district headquarters there. Again, the battalion lost over half its strength and now has a strength of about 200 men. They are deployed immediately west of Khe Sanh village near Route 9 (KD 839383) awaiting orders to overrun the Lang Vei camp. The battalion command post and an unidentified part of the 66th Regt are in artillery-proof bunkers. Although source heard of no outside support, he stated that the 304th NVA Division is to 'help take the Khe Sanh Combat Base.'"

This source, of course, could have represented an enemy strategem, but there were even more reliable indications that Lang Vei would be attacked. Special "Igloo White" sensors detected considerable personnel and vehicle movement toward Lang Vei, and patrols and outposts continued to report heavy enemy activity in the area. Both Elephant and the Special Forces Commander had reported the same information.
The radio call sign for the Lang Vei Special Forces Camp was "Spunky Hanson", a name equally familiar to Air Force Covey FACs as that of "Elephant". Coveys flying in the NIAGARA area were in daily radio contact with the Special Forces Camp, and these pilots felt a strong personal involvement on the morning of 7 February when the urgent call came over the radio that "Spunky Hanson" was under heavy ground assault.

First indications of the attack came on the previous evening. At approximately 1840 hours on 6 February, "Spunky Hanson" reported receiving heavy high-angle enemy fire. Four hours later, the Marine Base at Khe Sanh came under heavy artillery, rocket and mortar bombardment; simultaneously, the Marine outpost on Hill 861 overlooking Khe Sanh reported an enemy ground probe. Then, shortly after midnight, the urgent call came from "Spunky Hanson" that Lang Vei was under attack from a large enemy force supported by tanks and flamethrowers.

A flareship and Covey 235 were on station directing tactical air strikes against the enemy forces; however, the strike aircraft in the area at the time were loaded with hard ordnance, which was not too effective in this particular situation. Covey 235 had expended his flares and rockets, and a relief had been scrambled from Da Nang Air Base at approximately 0015 hours. The relief, Covey 232, who had Covey 280 in the right seat of his O-2 aircraft, arrived on the scene approximately 45 minutes later. Covey 232 described the situation.
"...Weather was not the best. The southern half of Lang Vi was anywhere from 1200 to 1000 feet broken, but mostly overcast. The northern half was about the same, mostly 1200 broken. We had a flareship on station, 'Basketball', who was doing as good as he could under the weather conditions. The ground fire was very heavy, excessive, making it almost impossible to stay in one position, because the minute you did they had you under fire. Artillery was also firing into the area from Khe Sanh. I received one set of fighters, Yellowbird 59 (B-57s), right after I made the request..."

When Covey 232 arrived on the scene, "Spunky Hanson" was on the radio. Covey 232 identified himself, and "Spunky Hanson" reported excitedly:

"We have tanks in the area! We have tanks in the area! I have one tank on top of my TOC at this time, there's another tank trying to enter the gate, coming into the compound, and I think there is another one coming down the road. Forget the one on top of the TOC, but see if you can hit the one coming through the gate, and the one coming down the road!"

That was the last contact Covey 232 had with "Spunky Hanson". "They were trapped in their bunker, and apparently their equipment was damaged, and they had to go off the radio," the FAC recalled. This loss of communications made a bad situation worse. The camp was practically overrun at this time, and without communications with the ground, it was impossible to adequately differentiate between friendly and enemy ground forces.

Using a POL fire as navigational reference, the FAC located the tanks that "Spunky Hanson" requested struck. After Covey marked the targets with rockets, Yellowbird 59 expended his ordnance destroying both tanks and obtaining 15 secondary explosions. Covey
was hindered from directing strikes into the compound itself because he had lost contact with "Spunky Hanson" and could not determine the exact ground situation. He was then given instructions by the ABCCC to move out of the area to enable the Marines to fire artillery against the attacking force at Lang Vei. Covey 232 moved back from the area and assisted by spotting for the artillery.

ABCCC "Moonbeam", an additional control aircraft staged from Udorn especially for NIAGARA night operations, reported: "When Carstairs II advised all air in the Lang Vei area to withdraw while 'Firecracker' (special Marine ordnance) was executed, air was withdrawn as directed but strikes continued in all other locations in support of the rest of the Khe Sanh area. Upon completion of 'Firecracker', no agencies were able to establish radio contact with Lang Vei; since friendly were known to be in Lang Vei it was not possible to conduct additional visual or CSS strikes in extremely close air support roles of the camp."

Later, as dawn approached, Covey 688 from Ubon was on the scene supporting relief operations. The enemy had completely overrun the camp by this time, and the Special Forces defenders were trapped in their command post bunker. An element of the BV-33 battalion advised by a U.S. Army Special Forces NCO were moving in from the old Lang Vei site in a rescue attempt. Covey 252, who joined Covey 688 at 0800 hours, defined the situation at this point:
"Our advisors (Spunky Hanson) were trapped in the TOC bunker in the middle of the camp, and the NVA were swarming all over it, throwing satchel charges and smoke bombs down through the vent. The relief forces, 'Spunky Hanson 15-Alpha,' which I understand were led by Special Forces Sergeant Ashley, had moved up from the old Lang Vei Camp. But they were now pinned down by NVA machine gun fire.

"Covey 688 was in contact with 15-Alpha. He had a Canasta flight, Navy A-18, on station. There was an overcast at the time, about 500 feet base, up to about 1500-2000 feet, with very few holes in it. Also a high overcast up to about 4,000 feet. 15-Alpha, who was in contact with the trapped forces, requested that the A-18 attempt strafing passes against the enemy surrounding the bunker. The A-18 also had 500 lb and 500 lb bombs, and some napalm."

With the Canasta A-18s in trail, Covey 688 led them through the clouds to the target, describing it as best he could. With the FAC "talking" them into the target, the A-18s were able to effectively strafe the TOC. They then remained below the 500 foot overcast in hilly terrain and continued to make strafing passes in support of the trapped forces.

Covey 252, who was still on station monitoring the situation, reported:

"...15-Alpha several times mentioned he was having trouble getting the BV-33 people with him to advance against the enemy forces and the TOC. He mentioned at one point that he practically had to use gun point to get them to move. 15-Alpha went back to the old camp alone and returned with a 37-mm recoilless rifle. He was able to silence a couple of machine gun nests with it..."

At this point, the weather began to break, allowing the A-18s to effectively expend their bombs and napalm. They began conducting strikes on the west side of the camp. Although these strikes resulted in several
fires and explosions, the NVA forces still managed to keep several of their machine gun positions in operation.

Covey 252 took over from 688 after the Canasta flight completed its strikes and returned to base. Two Air Force A-1s, Hobo 01 and Hobo 02, arrived on station with CBU, napalm, and 20-mm, and Covey 252 began directing them on strikes in the western perimeter. The objective was to suppress fire at the western end of the camp, while 15-Alpha attempted to storm the TOC. Covey reported that the Hobos were right on target, and "were flying through their own napalm smoke" to suppress the enemy fire. Although this suppressive fire was provided, the trapped men still were not rescued at this time because the BV-33 forces still reportedly refused to storm the TOC.

Shortly afterwards, a 50-man heliborne relief force led by Army Special Forces personnel from the Khe Sanh Combat Base was dispatched with the mission of joining with the BV-33 unit in a raid on the camp. Gunships and tactical air continued to conduct strikes on the TOC and surrounding area at Lang Vei in preparation for the raid. Under cover of this fire and prior to the arrival of the relief force, the friendly personnel on site took escape and evasion action.

The relief force put down at old Lang Vei and moved overland to the new Lang Vei site. Enroute, they encountered 13 U.S. personnel who had been in the camp at the time of the initial attack. Advancing into the camp under protective artillery fire and air strikes, this force was able to recover the remaining personnel.
It was later reported that nine PT-76 light amphibious tanks of Soviet manufacture had been engaged in the assault, and that five of these were eventually disabled or destroyed by air strikes. Aerial photography confirmed the use of PT-76 tanks and use of the Xe Pone River as approach route to Lang Vei. It was also reported that the attack on the camp was composed of an estimated enemy company supported by armored vehicles, including an armored personnel carrier. The defensive wire around the camp was not an effective barrier to the armored thrust. Reports from the Special Forces indicated that Cal .50 AP ammunition had no apparent effect on the armored vehicles, and the M-72 (Lightweight anti-tank weapon) was marginally effective, due to malfunction of some of these weapons.

Covey 232 reported two important lessons learned in the Lang Vei attack. These were:

1. Covey 235, the FAC on station when the attack began, had an insufficient rocket load to meet the requirements of an intense situation such as the Lang Vei attack. With only one pod of rockets (seven rockets) he had expended much of his rocket supply directing fighters against earlier targets. Thus, when the enemy struck Lang Vei, he found his target marking capability severely limited. This was later brought to the attention of the Covey Operations Officer, and the Coveys flying into the area were loaded with an additional rocket pod and two flares.

2. A series of unfortunate circumstances placed limitations on air support during the Lang Vei attack. Inclement weather decreased flareship effectiveness as well as FAC and strike operations. Not only did the FAC on station at the beginning of the attack find himself short of rockets, but the strike aircraft immediately available were armed with hard ordnance—heavy bombs for NIAGARA interdiction targets. The close ground
situation precluded the effective expenditure of such ordnance. When the relief FAC arrived on station, the situation was critical. Air support at this point could have been more effective if applied against the enemy forces closer to the friendly troops--possibly right on top of the friendly troops who were trapped in bunkers. However, the FAC could not do this without direction from the friendly forces themselves, and he found himself without radio contact with the ground. He did have radio contact with "Spunky Hanson 15A", who was attempting to rescue the trapped personnel, but "Spunky Hanson 15A" was unable to give complete information as to their location and could not provide clearance for close-in strikes. Covey 235 recommended that outposts and Special Forces Camps adopt a visual means of communication for use at night in the event radio contact is lost. Perhaps a ground flare system using various colors to keep the FAC advised of the ground situation and requirements could be adopted. As it turned out, the most significant role played by air and artillery at Lang Vei was to force temporary enemy withdrawal allowing evacuation of friendly forces.

Earlier at the Khe Sanh Base Camp, the Air Force ALO had questioned how the camp would mark its lines for visual identification if air support were required in defense of the camp. Khe Sanh officials advised that at night they would use strobe lights. The ALO commented that at night, strobe lights looked just like muzzle flashes from small arms, and this was not the "best means" to mark their lines. He suggested:

"I requested that they use some type of flare, or perhaps a 55 gallon drum with fuel oil sunken in the ground so small arms would not penetrate. They could light these around their perimeter, and it was possible that this would penetrate even a low layer of fog. This would allow them to direct air strikes even under fog conditions. It took over three weeks to get any action taken on this. No action was taken until one of the FACs wrote up the problems that he encountered at Lang Vei where they had no way of directing airpower because of no visual reference to the ground..."
The aftermath of Lang Vei's fall resulted in an unfavorable tactical situation—one which had tragic overtones. Khe Sanh, which was already crowded with some 6,000 Marines, ARVN soldiers and supporting personnel from other services, suddenly represented the only haven to several thousand refugees—both Laotian and South Vietnamese of various ethnic origins. Earlier, on 22 January, 1,050 refugees from Khe Sanh Village had been airlifted to more secure areas; however, many were required to remain behind. III MAF reported on this:

"Commanding General, I Corps, General Lam, made decision that 5,000 - 6,000 Breu who desired to be evacuated from Khe Sanh could not be permitted to do so. The official reason given was that there is no place to relocate them nor any available foodstuffs to feed them. Unofficially, however, it is felt that the age old animosity between the Montagnards and the Vietnamese was a motivating factor behind General Lam’s decision. Approximately 10,000 pounds of rice available at Khe Sanh was distributed to the Breu there to alleviate their hunger."

Another Marine report stated that during the period 25 January - 8 February 1968, some 3,000 - 4,000 Breu (Montagnard) tribesmen "congregated in the village near the Khe Sanh Combat Base". The reasons given for not evacuating them were: (1) the problem of identifying Viet Cong (VC) sympathizers among them, and (2) the lack of a suitable location and food for them in a Quang Tri Province location away from the Khe Sanh area. Further, they were unable to return to their hamlets which had come under NVA control.

In the past, the enemy had not been above using local villagers as shields for their assualts. Although this situation did not develop at
Khe Sanh, the Covey FACs reported on the situation facing the Marine Commander at Khe Sanh:

"They have a lot of Breu tribesmen, Montagnards, at Khe Sanh. Troops, not the refugees. Many of these refugees outside the camp are dependents or friends of the troops inside. They either elected or had to stay outside the base perimeter, therefore on their own, and at the mercy of the NVA. A logical application by the NVA in this circumstance would be to take the Breu families and charge the camp with the refugees in front. Naturally, the Breu troops would not fire on them, and if we fired on them, the Breu tribesmen inside would probably fire on us...."

The 3rd Marine Division reported the following developments concerning the refugees during February:

"The Breu problem was compounded by an influx of Lao refugees, Lao military personnel, Mike Force and CIDG personnel from the Laotian border area and/or from Lang Vei into the Khe Sanh area due to the deterioration of the combat situation along the border. Ninety-one Lao military and civilians were airlifted from Khe Sanh to Da Nang on 29 January while 90 Mike Force and CIDG personnel were evacuated by the same means on 28-29 January. The remainder of the Lao refugees returned to their country when the tactical situation permitted.

"On 10 February the Breu tribal leader, Mr. Anya, four Breu village chiefs and their families (a total of 30 persons) were air-evacuated from Khe Sanh to Quang Tri via Da Nang. On 13 February, approximately 1,400 Breu walked from Khe Sanh to the Ca Lu area to escape heavy fighting in Huong Hoa District. Arrangements were made to guide them from Ca Lu to the Cam Lo Refugee Center, for resettlement, by a foot march via the Baling Valley and Route 558. On 17 February, 1,150 of the Breu refugees began their march and arrived at Cam Lo on 19 February. They were joined by additional Breu traveling the same route during the period 20-23 February. At the end of that period, the number of Breu who had relocated from Khe Sanh to Cam Lo totaled 1,990."
On 16-17 February some 2,000 to 4,000 Breu attempted to displace from Khe Sanh to Ca Lu to escape the fighting but were intercepted by the NVA at XD 662 399 and were turned back to their villages along Route 9 west of Khe Sanh. Some of these people were the relatives and families of the indigenous military personnel assisting in the defense of the Khe Sanh Combat Base. The presence of these Breu civilians in villages west of Khe Sanh constituted a serious detriment to 3d Marine Division artillery fires along the axis of Route 9. Arrangements were being made, as February ended, to air evacuate those Breu who desired to do so from Khe Sanh as airlift became available.

For the second time in two weeks, the Laotian BV-33 soldiers and villagers felt the brunt of an enemy attack—first, their own camp in Laos and now the Lang Vei Special Forces Camp. The following log of events as related by the BV-33 Commander to the U.S. Army Attache at Vientiane on 17 February best tells their side of the story:

6 Feb 68: Attack on Special Forces Camp began. On this day BV-33 issued approximately 24 hand grenades. The U.S. Camp overrun by enemy tanks and many U.S. Special Forces trapped in command bunker.

7 Feb 68: One U.S. Special Forces personnel escaped to BV-33 and requested BV-33 help. Col Soulang sent a company to the U.S. Camp and was able to rescue approximately 7 U.S. Special Forces personnel including U.S. LTC who was seriously wounded. Enemy had not occupied camp but had pulled back approximately 300 meters to avoid artillery fire and air strikes. BV-33 then radioed Xom Cham (Khe Sanh) for evacuation helicopters. U.S. Special Forces Major at Xom Cham stated he would send two helicopters, one for U.S. and one for BV-33 but when helicopters arrived they picked up only U.S. Special Forces and South Vietnamese. They did not return. At this time enemy mortar and artillery fire intensified. LtCol Soulang gave orders to his unit commanders that they were to break up into small groups and attempt to reach Khe Sanh if possible. If not, to try to evade into Laos. Later, a light observation plane was sighted and Lt Col Soulang made radio contact requesting evacuation helicopters. Two were dispatched and took two loads of BV-33 personnel.
to Khe Sanh. Upon return to Lang Vei, one helicopter picked up a number of Lao soldiers, other returned empty. Enemy shelling and firing was intense and there was no one left to pick up. BV-33 had lost approximately 26 from enemy fire and U.S. air strikes. Refugees had already arrived at Khe Sanh on foot. They had moved as soon as attack on Lang Vei had begun. The 40 men who were picked up by helicopter and 74 who walked to Khe Sanh were disarmed and placed in craters or holes holding approximately 15 to 20 men and guarded by U.S. Marines. They felt as if they were being treated as POWs. Lt Col Soulang alone was allowed to keep his side arm. No food was issued to either BV-33 or refugees.

8 Feb 68: After Soulang remonstrated with a U.S. Special Forces Major, weapons were returned to the BV-33 personnel but they were required to remain outside the wire. No food on this day either except that U.S. soldiers and marines shared with them.

9-10 Feb: Enemy mortars, rockets, and artillery rounds continue to fall and refugees and BV-33 still had not received any food. U.S. and SVN officers allegedly said existing rice not for Lao. Refugees decided on the 10th of February to try and return to Laos. They feared that they would die at Khe Sanh and preferred to die in Laos rather than Vietnam. Refugees walked back to Laos on Route 9 on the 10th.

11 Feb: Lt Col Soulang and 113 personnel evacuated to Da Nang by C-130.

12-14 Feb: BV-33 personnel were disarmed again at Da Nang but were fed, bathed, clothed, comfortably housed and treated well in all respects. Lt Col Soulang and two officers went to Saigon to contact Lao Embassy at this time. Wounded were taken care of. An Air Force Civic Action Team was primarily responsible for their efforts on behalf of BV-33.

15 Feb 68: BV-33 evacuated from Da Nang to Savannakhet, Laos by Royal Laotian Air Force C-47 aircraft.
After hearing Lt Col Soulang's report, one high ranking Laotian military official, General Boun Pone, CG Tactique Sud, reportedly said that after what happened to BV-33 that the Laotian Forces Armee Royale "must consider South Vietnamese as enemy because of their conduct". He pointed out, however, that he was not too concerned with "what happened in the past", but rather "more interested in getting back as many refugees and BV-33 personnel as possible". Many evading members of BV-33 did eventually make their way back to friendly lines and were able to make contact with American agents in Laos. Others were not so fortunate. Many of the refugees were either killed by NVN forces or pressed into porterage service for the enemy.

The Covey FACs observed the refugees on several occasions moving at various points between Khe Sanh and the Laotian border. On 8 February, Covey 252 was over Khe Sanh at approximately 0745 hours. He was advised by the Khe Sanh control agency that "people were walking from east to west", from Khe Sanh City toward Lang Vei. There were several hundred of them in small groups along the road, and the Marines were "seriously considering" directing artillery fire against them. Fortunately, Covey 252 suggested that he first take a closer look at these people. He was able to identify them as refugees, and they were not fired upon.

Heavy refugee movement continued on Route 9 over the next few days, and on several occasions the Covey FACs were able to make confirmation of the noncombatant role of these persons--thereby precluding the
In response to a request from the Marine control agency at Khe Sanh, the FACs moved away from Route 9 to direct strikes against mortar and rocket positions on a ridgeline approximately one kilometer from the Khe Sanh runway. Canasta 403, a flight of four Navy A-IHs, were on station with Mk-8s, Mk-82s, and 20-mm. The Coveys directed the Canasta flight on one bombing run against the ridge, received one secondary explosion, and then "held them high" when Khe Sanh radioed that they had lost contact with the outpost on Hill 861.

Covey 252 received the outpost coordinates from Khe Sanh, and immediately flew over the area. He first observed several men huddled in trenches. The FAC recalled:

"I couldn't really tell whether they were friendly or enemy troops, because the color of the uniforms all looked the same. They looked like our people, but there was always the possibility that our people had been overrun and were attempting to regain their positions. As remote as this was, it was still a possibility, and it prevented us from making immediate strikes."

Khe Sanh control finally gave clearance for the FACs to direct strafing and bomb runs on the northwest base of the hill which was in defilade from Khe Sanh's suppressive fire. According to the FAC, the suppressive fire from Khe Sanh was effective except for the backside of the hill, where the enemy were actually located. The FAC described the Canasta 403 strikes:

"They did a fantastic job of placing their bombs and strafing passes right up the hill toward the outpost. While attacking, they would suppress the NVA fire, but as soon as I would hold them off, to survey our effectiveness,
enemy assault against Khe Sanh was forthcoming. A COMUSMACV assessment on 10 February said: "Attacks by elements of up to six regiments are probable against Khe Sanh. These attacks can be supported by artillery, rockets, mortars, and a few armored vehicles. Interrogation of returnees indicates attacks throughout the DMZ will be supported by tanks and aircraft. The recent use of tanks at Lang Vei indicates the enemy may introduce new equipment and tactics to support offensive activity in I Corps." 88/

A 7AF Intelligence Report advised: "It appeared at first as if the attack on Lang Vei might be the first of a series of assaults along Route 9. Now the situation is unclear. The enemy has delayed considerably in following up his success at Lang Vei with an attack on Khe Sanh. There have been several vigorous attacks against the high ground to the north of Khe Sanh, particularly Hill 861. It is possible that the enemy is reluctant to undertake to overrun Khe Sanh without first securing the high ground around it." 89/

Attack Against Hill 861

Marine outposts around Khe Sanh were subjected to continuous harassment from enemy mortar fire and ground probes. One of the more significant ground attacks was made on 8 February against an outpost on Hill 861 immediately north of Khe Sanh. Just prior to this attack, Covey 251 and Covey 252 had arrived in the area at approximately 0745 hours, had checked in with the ABCCC, and were reconnoitering refugee movements on Route 9. 90/
the attack would resume. We then requested Spooky and some A-10s. We wanted napalm, CBU, and rockets.

"We wanted any propeller driven aircraft available, to remain close to the target at low altitudes. In our opinion the outpost was in the process of being overrun, and if we didn't get air, it would be."

As reported by Hillsboro, the weather was unworkable for jets, and the proximity of friendly troops prevented Sky Spot directed strikes. Task Force Alpha at Nakhon Phanom AB, Thailand immediately scrambled a flight of three A-26s, call signs Nimrod 32A, 34A, and 35A, to aid the outpost. Three T-28 "Zorros" from Nakhon Phanom were already airborne on armed reconnaissance in the STEEL TIGER area, and these were immediately diverted into NIAGARA by the ABCCC. Both the Zorros and the Nimrods arrived in time to repulse the attack. The Zorros were credited with 5 KBA confirmed, and the Nimrods with 45 KBA confirmed. The FAC reported on their effectiveness:

"Both flights were extremely effective. The A-26s just about saved the situation immediately with their area coverage, their strafing passes, their napalm, etc. When the Nimrods completed their passes, the attack was suppressed--enough so that the men in the outpost could stand up and walk off the hill without receiving fire. Apparently, they were in the process of evacuating the outpost at the time. APCs from Khe Sanh had arrived, and they were actually leaving the outpost. However, when the firing ceased, they decided to return to the hill. They went over the hill, captured several crew served weapons and small arms, and counted over 50 enemy KBA."

Targeting and Tactical Response

When the 8 February attack against Hill 861 was repulsed, the
enemy buildup in the Khe Sanh area had already reached its peak; however, no major ground engagement followed. Ground contact beyond the covering fires of the camp perimeter did continue, and attacks by fire against Khe Sanh became continuous. That enemy forces in the area still represented a major threat was made clear on 23 February when the Khe Sanh area reportedly received 1,000 rounds of artillery, mortar, and rocket fire in one five hour period. Concomitantly, the sustained air effort continued at a high level.

Equally as unprecedented as the sustained strike effort in the NIAGARA area was the intensive and carefully managed reconnaissance targeting cycle that made an effective round-the-clock air offensive possible. Within 40 hours after the 7AF Commander was tasked by COMUSMACV to initiate NIAGARA II SLAM operations on 31 January, a NIAGARA Intelligence Control Center was activated by the 7AF DCS/Intelligence and began generating sufficient tactical targets from an all source data base to assign specific objectives for the entire force. All out-country intelligence programs, except essential ones, were halted to maintain this special capability.

The primary objective of this task force was defined as follows:

"... to locate, identify, confirm and nominate for attack tactical targets in the NIAGARA area, assess the effects of attacks against these targets and determine reattack requirements."

Many targets were visually acquired and struck. Reports of these strikes, added to other FAC sightings, provided a valuable input to the

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