THE FALL OF SITE 85

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HQ PACAF
Directorate, Tactical Evaluation
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vii
FOREWORD

Site 85 was an important friendly guerrilla base in Northeast Laos. In mid-1967, steps were begun to establish a TSQ-81 facility near Site 85 atop a steep 5500-foot ridge called Phou Pha Thi, located only 25 kilometers from the North Vietnamese/Laotian border and 45 kilometers west of Sam Neua, Laos. A TACAN facility had already been established atop Phou Pha Thi and was operational in August 1966. This base and its facilities were commonly called Site 85.

In essence, the TSQ-81 was a modified version of the Strategic Air Command's (SAC) Radar Bomb Scoring (RBS) system. While the SAC system was designed to predict bomb impact points for simulated drops, the TSQ system was used to direct and control attacking jet fighters and bombers to their targets and also provide them with precise bomb release points, under radar control.

Similar systems had been established earlier in South Vietnam and one existed in Thailand. (These systems were grouped under a common nickname, Combat Skyspot.) The TSQ facility at Site 85 differed primarily in that the equipment was specially designed in small packages to be helilifted to remote locations. The nickname for operations under Site 85 direction was Commando Club.

However, Site 85 was much more unique than a specially designed
radar bombing facility. Site 85 was the only facility of its kind in Laos. It was the only facility which could provide ground vectored radar bombing in the northern target areas of both North Vietnam and Laos, thereby enhancing USAF all-weather strike capabilities in these two areas. Finally, the site was established and operated by American technicians in a manner designed not to violate the 1962 Geneva Agreements and to "guarantee" the "neutrality" of Laos. However, the location of a site at Phou Pha Thi to direct bomb strikes against North Vietnam was ultra sensitive from both the political and military standpoint.

Meo guerrillas trained by CAS personnel provided the primary force for defense of the site on Phou Pha Thi. In the event these defenders came under heavy enemy attack and loss of the site appeared imminent, plans called for evacuating the American personnel manning the TSQ/TACAN facility and destroying the equipment to keep it from falling into enemy hands. However, early on the morning of 11 March, a force of twenty heavily armed infiltrators launched a surprise attack on the facilities atop Phou Pha Thi before the evacuation plan could be implemented. Of the 16 American personnel manning the site, only six were successfully evacuated, with one being killed by enemy forces firing on the rescue helicopters. Four of the five remaining personnel had been wounded during the enemy attack on the site. This report relates the story of the fall of Site 85 and attempts to place events surrounding its loss in proper perspective.
THE FALL OF SITE 85

Introduction

The war in Northeast Laos has been characterized by conditions which are generally the reverse of those existing in South Vietnam. The enemy, Pathet Lao (PL), with considerable North Vietnamese Army (NVA) support and participation, has usually operated as a more conventional military force. Here he controls many of the larger population centers and is bound for sustenance to the transportation system.

Friendly forces in Northeast Laos, on the other hand, operate more as guerrillas with the restrictions in supply and manpower that are usually associated with that status. From a few "secure" islands within this sea of enemy control, the guerrillas, the Auto-Defense de Choc (ADC) forces of Meo General Vang Pao, conduct harassing activities against the enemy and gather important intelligence data. These data are needed to provide targeting information for friendly strike and interdiction programs against the enemy and his supply lines to Laos and South Vietnam.

Therefore, bound to a more passive role by both necessity and capabilities, these guerrilla forces have not generally had the reason to "stand and fight" except at a few vital locations. Site 85 was listed as one of these vital locations.
Site 85 Operations Nov 67 - Mar 68

This study does not propose to offer a definitive inquiry into the tactics, use, or problems in operations of the TSQ and TACAN facilities at Site 85 during the period November 1967 to 11 March 1968 - the day it was captured by the enemy. However, some data on TSQ operations are offered to convey the value of this installation to the USAF mission against the enemy.

The TSQ-81 facility at Site 85 was established to help enhance USAF all weather strike capabilities against the northern route packages in North Vietnam and targets in Northeastern Laos. Since the weather over North Vietnam generally turns unfavorable for air operations in mid-October and does not begin to improve until April, it was imperative that the site be operational when the weather deteriorated. It became operational at the end of October.

Excluding Route Package I, the following data indicate the use of the TSQ-81 facility in directing actual strikes against North Vietnam.

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<th>Nov</th>
<th>Dec</th>
<th>Jan</th>
<th>Feb</th>
<th>Mar 1-10</th>
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<tbody>
<tr>
<td>Total Missions</td>
<td>153</td>
<td>94</td>
<td>125</td>
<td>49</td>
<td>6</td>
</tr>
<tr>
<td>Missions Under Commando Club (TSQ-81)</td>
<td>20</td>
<td>20</td>
<td>29</td>
<td>27</td>
<td>3</td>
</tr>
<tr>
<td>Percent under Commando Club</td>
<td>13.0</td>
<td>21.3</td>
<td>23.2</td>
<td>55.1</td>
<td>50.0</td>
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Throughout this period, 427 strike missions were flown over the northern portions of North Vietnam. The facility at Site 85 directed 99, slightly over 23% of the total.
Similar data for actual strikes in the Barrel Roll area of Northeast Laos disclosed the following:

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<th>Dec</th>
<th>Jan</th>
<th>Feb</th>
<th>Mar 1-10</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Missions</td>
<td>268</td>
<td>327</td>
<td>320</td>
<td>375</td>
<td>182</td>
</tr>
<tr>
<td>Missions Under Commando Club (TSQ-81)</td>
<td>1</td>
<td>67</td>
<td>33</td>
<td>142</td>
<td>165</td>
</tr>
<tr>
<td>Percent under Commando Club</td>
<td>0.4</td>
<td>20.4</td>
<td>10.3</td>
<td>37.8</td>
<td>90.6</td>
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The reason for the major differences in data for the month of February and the first 10 days of March as contrasted to earlier figures was that USAF sortie allocations shifted sharply to Barrel Roll to help disrupt the enemy buildup against Site 85. Site 85 was located just West of the B Sector of Barrel Roll. Throughout this period, 1,472 strike missions were flown into Barrel Roll; 408 or 27.7% were directed by Site 85.

Combining the sorties into North Vietnam and Barrel Roll, it can be seen that the site at Phou Pha Thi directed nearly 27% of all strike missions flown in the two areas from 1 November 1967 until the site fell on 11 March 1968.

The Physical Site and Defensive Concepts

In addition to housing the TSQ-81 and TACAN (Channel 97), Site 85 was a major supply point for guerrilla operations in Northeastern Laos. The older site consisted of a closed 600-foot runway with associated buildings near coordinates UH6860. The TSQ and TACAN locations were...
northwest of this point on higher ground at coordinates UH66276106 (20° 26'42" N 103° 43' 05" E).

The TACAN and TSQ facilities were situated on the western rim of a steep ridge that looked down on a nearby heliport, only 300 yards away and on the same ridge. The ridge ran in a north-northwesterly direction, fitfully rising to the highest point, Phou Pha Thi, at an elevation of 1786 meters, about 2 1/2 kilometers (km) from the TSQ location. The TSQ/TACAN elevation was about 1700 meters, or about 5580 feet; the heliport elevation was about 5300 feet. This ridge, generally called Phou Pha Thi in its entirety, dominated the local area.

For the defense of Site 85, Meo guerrillas were to provide the primary force. Although greatly outnumbered by the potential forces which the enemy could draw upon, the concept for the defense of Site 85 depended on exploiting the unique geography of the area, an intelligence net to warn of approaching enemy forces, and the impact of properly placed airstrikes. At worst, it was envisioned that the necessary technical personnel could be evacuated and the equipment destroyed if the site was in danger of being overrun.

Due to the sensitivity of the site, evacuation could be required for either political or military reasons. The fact remained that, although Site 85 was deemed to be defensively strong, if the enemy was
"judged" to be fully intent on capturing it and withstanding the accompanying losses, the political rules necessitated that the TSQ and TACAN be destroyed and American technicians be evacuated, so that neither these personnel nor the equipment would fall into enemy hands. Sensibly, there could be no pre-established "time" at which to relinquish this increasingly valuable asset; that decision rested on judgment and circumstances. Also, if the enemy posed such a threat to the site that the site was to be destroyed and the personnel evacuated, then there was little sense in "fighting to the last man" to defend what had become only "real estate", bereft of its primary importance. These factors made up the dilemma of the defense of Site 85.

One of the advantages of the TSQ installation at Site 85 was that the system possessed the capability to provide direction of airstrikes in its own defense. Although the U.S. Ambassador in Vientiane had withdrawn blanket approval on 8 December 1967 for Commando Club directed strikes in the Barrel Roll area, he continued to give approval for strikes on an individual basis. In line with this policy, on 23 December he authorized strikes against six enemy "strong points" approximately 20 kilometers east and southeast of Site 85. These targets were only the first to be stipulated as "part of the planned defense of Site 85."

Four days later a formal plan, in coordination some weeks, was distributed which defined procedures for the self-defense of Site 85.
The key role in the plan was played by the Local Area Defense Commander (LADC), the local Meo commander. In essence, the plan rested on three assumptions:

1. The LADC would have from 1-24 hours notice of enemy concentration or buildup which would indicate an imminent attack.

2. The LADC would know the local terrain and potential locations where an enemy buildup might be expected.

3. The LADC would have communications contact with the U.S. Embassy at Vientiane as well as the TSQ-81 facility at the site.

The concept was that if the enemy threatened the site, the LADC would coordinate with the Embassy in Vientiane and get authorization to call for airstrikes. With authority given, the Embassy would then notify 7AF that execution authority had been given to the LADC. When the enemy attack was imminent, the LADC would contact the Embassy and receive final execution authority. Thereupon, the LADC was authorized to notify the TSQ-81 commander of the requirement for the strike and supply him with the target coordinates (hopefully pre-computed, otherwise a 10-minute delay ensued).

At this point, the TSQ commander was to contact 7AF via secure voice and request the strike force. Seventh Air Force was then to provide the strike forces as circumstances and time allowed, even calling upon the Airborne Command and Control Center (ABCCC) to divert airborne missions if necessary.
Aircraft were to be vectored to TSQ control and the strikes would be carried out. Strikes conducted under emergency conditions were authorized within a 600-foot proximity to friendly forces; otherwise 1000 meters was the limit. Authority for requesting additional strikes rested with LADC who would coordinate the need with available air or ground observers. 17

Estimated Enemy Objectives

In a December 1967 briefing for CINCPACAF, a CAS representative discussed estimates of upcoming enemy objectives in Northeastern Laos: 18

"Because of his complete dependence on surface transportation, the enemy must mount all his major offensive actions during the dry season. The dry season generally starts in mid-October and continues until June. The major advantage which the enemy has is the stiffening of the PL force by first class NVA military personnel and the fact that the enemy can reinforce at will by bringing in additional NVA units from North Vietnam at any time during the dry season.

"All available intelligence which we believe to be reliable and relatively complete indicate that the enemy plans to capture the following objectives during the coming dry season: Site 220, Site 203, Site 36, Site 85, and Site 201. . . . during November the enemy trucks and troops entering Laos have increased at an alarming rate."

It was further estimated that the enemy would apply pressure to General Vang Pao's southern defensive line which protected Vientiane and the Mekong River valley. Apparently the enemy hoped that pressure on General Vang Pao would prevent him from sending reinforcements to frustrate enemy plans in Sam Neua province near the Vietnamese-Laotian border. 19
Enemy Clearing Operations

With the addition of 3 NVA battalions in November, the enemy began a concentrated effort to clear friendly forces away from their vital Routes 6, 68, 611 which ran from near the North Vietnamese-Laotian border northeast of Sam Neua towards the Plaine des Jarres. All of the sites mentioned earlier as estimated enemy objectives were located within approximately 15-25 kilometers (km) of these routes.

One of the first clearing operations occurred on 19 November 1967, when an enemy force of 150 men attacked Site 179 (Ban Nhot Phat, 20 km west of Route 68 and 17 km south of Site 85, Phou Pha Thi). After a short, spirited defense, friendly troops withdrew to the north and by 24 November they were able to reoccupy Site 179 virtually unopposed.

For the succeeding weeks, PL/NVA activity was concentrated mainly in areas east and southeast of Highway Routes 6, 68, 611, and many of the friendly outposts in this area were captured by the enemy. Along with the outposts, Site 220 fell on 6 December 1967. In addition, the enemy continued to build up supplies and manpower.

Informants in the Sam Neua area had given information to friendly sources that enemy activity was not to be limited to areas east of the highway routes. Troops of two enemy battalions who had moved southwest from Sam Neua, on 5 December 1967, had boasted that Houei Kha Moun (Site 111, only 10km north of Site 85) and Phou Pha Thi (Site 85) were also to be captured in December.
The First Attempt

On the evening of 15 December 1967, an estimated two enemy companies probed ADC defenses near Phou Den Din (UH7660) only 12 km east of Site 85. After dark, contact with the enemy was broken. Early the next morning, 30 enemy troops attacked and captured these same ADC positions, but ADC forces recaptured them later in the day. Repulsed, the enemy returned with mortars and by 1700L on 16 December began shelling Phou Den Din. The defenders held out and this initial move toward Phou Pha Thi degenerated into mere harassment.

Two companies of PL were sighted two days later moving toward Phou Den Din. Although it was not established whether these were the same two companies which had attacked previously or were reinforcements, this force was struck hard by pro-government aircraft and, by 26 December, were reported returning to Sam Neua. The enemy had been discouraged for the time being; subsequently, he would resume his efforts toward Site 85 with a new twist.

The security of the facilities at Site 85 was an issue of constant attention. As early as 20 October 1967, before the site was judged operational, two so-called "agents" with a camera had been apprehended upon reaching the summit of Phou Pha Thi. However, CAS interrogation, film evaluation, and investigation revealed that the suspects were in fact bona fide Buddhist monks. The CAS final report stated that no pictures of the site or approaches thereto had been
taken and the interrogation had gained negative results. The monks were released to Laotian government and military authorities for further disposition at their discretion.

The increased enemy activity in December continued to prompt responsive concern for Site 85's safety, but the situation in the immediate vicinity remained unchanged. The overrun of Site 61, a TACAN station in Southern Laos, called attention in late December to the security of all TACAN sites in Laos. The American Embassy in Vientiane reported:

"Lima Site 85, Channel 97. CAS had done an analysis of this site... Briefly stated there are 200 troops in immediate vicinity of site; and additional 800 troops in the lower portion of the mountain... believe reasonable security exists and feel that adequate warning will be provided in case evacuation is determined necessary. An emergency plan for evacuation... exists."

This same report described the situation at each of three TACAN sites in Laos, and remarked on the potential danger of these sites if the enemy decided on a major commitment of troops. The report concluded:

"Also there is always the possibility that a small skilled commando/sabotage team could penetrate and damage/destroy any of the three. The enemy also has the capability of moving artillery or mortars within range of any of the sites. It is the consensus here that..... all reasonable precautions are being taken to safeguard the sites."
Enemy Activity in January

Site 111 (UH 6868), some 8 km north of Site 85, received minor shelling on the last day of 1967. There followed 10 days of relative inactivity in the close proximity of Phou Pha Thi (Site 85), although scattered sightings were reported 15 km to the east.

The enemy continued to clear out friendly pockets east of the highway routes and a CAS report of 8 January commented on the enemy's effectiveness in this endeavor:

"The enemy has succeeded in driving most of the pro-government forces from the area east of Route 6. This will affect the road-watch coverage of this key enemy supply line into the area east of Kakhong and into Xiang Khouang Province. General Vang Pao will probably soon attempt to replace units again."

A minor jolt to the security of Site 85 was received on 10 January, when a five-man PL patrol was discovered only two km north of Site 85 and at the base of the ridge. They were dispersed, withdrawing to the north. A major jolt came two days later.

Enemy Air Attack

The enemy's second attempt against Site 85 came in the form of a surprise attack. CAS reported 13 January 1968:

"Four dark green aircraft flying in a northwest direction passed the vicinity of Muong Sang (UH 8350) at 1300 hours on 12 January. When the four reached Ban Houei Soui (UH 7852), two of the aircraft broke from formation and orbited in..."
the Houei Souk area, while the second two aircraft, which were AN-2 Colts, continued to Phou Pha Thi (UH 6860) and commenced bombing runs while flying on an approximate heading of 304 degrees."

In three passes, the two Russian-built Colts rocketed, strafed, and bombed the summit of the mountain. Two women civilians and two guerrillas were killed, and two guerrillas were wounded. One of the attacking Colts was shot down and crashed and burned near UH 606865. Apparently two crew members escaped and an ADC team reported nothing was salvageable at the crash site. The other attacking aircraft was also hit and crashed some 25 km to the northwest while trying to clear a ridge at UH 570895. A ground team recovered numerous pieces of equipment from this second wreckage and found three dead crew members. The bodies were identified as Vietnamese. The site suffered negligible damage; no ground attack materialized.

Initial reports stated that the enemy had used 250-pound bombs. However, subsequent investigations at the site and of the aircraft wreckage by a 7AF Intelligence team revealed that 120 mm mortar rounds had been converted to "bombs". Dropped through tubes in the floor of the AN-2, the "bombs" became armed in the slip stream and detonated on impact. The rockets were 57 mm, and were carried in rocket pods under the wing of the AN-2.

The succeeding day, the Embassy at Vientiane commented on this attempt:
"We can conclude that aerial attack represented enemy effort to get at navigation facility which could be reached on ground only at heavy cost. Theoretically, enemy could resort to this technique again, either at Site 85 or elsewhere. However, it should be noted that this attack was largely unsuccessful and two aircraft were lost.

"On basis of available information we regard aerial raid as highly unusual variation in normal pattern of enemy tactics and do not believe this one incident necessarily introduces new dimension to war in Laos .... we are presently reviewing questions of air defense at Site 85 ...."

Apparently the enemy was also aware that the air attack had been "largely unsuccessful", for within a few days he began further troop movements toward what became the third and final attempt to take Phou Pha Thi (Site 85).

Preparation for the Final Attempt

Discounting the exception of a few probes, the flushing of the PL five man patrol, and the repulsed attempt at Phou Den Din (12 km east of Phou Pha Thi) in mid-December, the enemy had made no determined ground moves against Site 85 prior to mid-January.

Almost at once, following the unsuccessful Colt attack of 12 January, this trend was reversed. On 14 January, a force of about 300 PL and NVA troops equipped with mortars and one recoilless rifle (RR) were located only 15 km north-northeast of Site 85. By 17 January, 100 enemy troops had shifted to positions only 13 km north of Phou Pha Thi (Site 85) and enough concern was generated by these moves to induce Lao refugees to begin fleeing the Site 111 area (8 km north of Phou Pha Thi).
CAS commented on the 20th:

"If the enemy could move in large numbers of troops into an area north of Phou Pha Thi, he would have the second jaw for a pincer movement. Probably the first indication of a serious enemy intent to take Phou Pha Thi would be the capture of Phou Den Din (UB 7661)...."

That indication was not long in coming. An informant had reported that on 19 January a five battalion group of PL and NVA had moved west from Sam Neua (VH 0158). These units separated into two task forces, one force of three battalions with one 105 mm howitzer moved allegedly to attack Phou Den Din, 12 km east of Site 85 (UB 7661); the other two battalions, also possessing a 105 mm howitzer, were to capture a location about 19 km southeast of Phou Pha Thi.

Three days later these positions, as well as Site 179 (17 km south of Site 85), fell to the enemy. A pattern of encirclement of Phou Pha Thi from the north clockwise to the south was beginning to take shape.

This pattern was not ignored by friendly forces at Phou Pha Thi. They fully realized that the enemy could mount a heavy assault against Site 85 if he was willing to accept the losses. They were also aware that a combined attack of artillery and mortar fire and a ground assault, with a repeat AN-2 Colt attack, was a possibility. But as January drew to a close, the primary concern of the defenders of Site 85 was the threat of the enemy moving near enough to direct artillery, mortar,
and rocket fire against Phou Pha Thi.

**Defensive Reactions in January**

Subsequent to the AN-2 Colt attack, the air defense of the site had been bolstered by the addition of two captured 12.7 mm antiaircraft guns, and later a captured Russian 85 mm antiaircraft gun. Reinforcement of the garrison at that time was not deemed necessary. However, to counter the threat of enemy artillery firing from long ranges and the enemy concentrating supplies and men against the site, four measures were taken. First, the guerrillas planned to maintain a 12 km defensive perimeter around Phou Pha Thi. Second, a 105 mm howitzer was transported by helicopter from Site 98 to Site 85. Third, the guerrilla defenders in the area stepped up their small patrol activity to identify and locate enemy positions for subsequent airstrikes. Finally, on 2 February General Vang Pao placed one of his two top field commanders in charge of the Phou Pha Thi area and gave him the mission of recapturing certain positions, among them Phou Den Din and Site 179. However, these two positions were never retaken.

**Airstrike Support for Site 85**

The following information, for the period 1 December 1967 - 31 January 1968, indicates the total USAF air commitment in actual strike sorties in Barrel Roll and the generally increased attention devoted to the Site 85 area (primarily east of Site 85, from which direction the threat was developing):
The general, though certainly not exclusive, modus operandi was to launch A-1 aircraft to strike targets in the morning; these aircraft would then perform as FACs for later fragged and diverted jets. Similar strike activities were conducted in the afternoon, although by no means were all strikes FAC-directed. During hours of darkness A-26s were used to patrol the area on armed recce missions. In addition, beginning the end of November, the Site 85 facility began directing strikes in the Barrel Roll area.

Procedures had already been established for Site 85 to direct air-strikes in its own defense. Although by the end of January, 92 strike missions in the Barrel Roll area had been directed by the site, no test of self defense strike procedures had been conducted. On 25 January, such a "test exercise" was initiated by the site. However, the test was not pre-announced and was not coordinated with higher headquarters beforehand. Furthermore, the proper procedures were not followed. Under such circumstances, and where there had been no prior indication of actual danger to the site, difficulties developed in trying to provide the requested support for a "test" when resources were vitally needed elsewhere for combat operations.

At the site, this test was judged a failure, but even with the unfavorable conditions under which the test was held, the exercise was
anything but a total loss. Subsequently, additional procedures for conducting tests were worked out. Other changes in actual procedures, described later in this study, greatly simplified operations as more experience was disseminated and the enemy threat mounted. When circumstances called for actual implementation, there was no repeat of the difficulties experienced in the test.

It has already been pointed out that during the month of January, 165 actual strike sorties were flown within 30 km of Site 85, mostly to the east where the threat was building. Over 64% of these were launched after 22 January, and followed the enemy successes at Phou Den Din and to the south. The number of strikes rose to a peak on 30 January when 45 sorties, over one-quarter of the monthly total, hit within the 30 km area of Site 85. This increased effort was permitted by the fact that no ROLLING THUNDER missions flew on that day due to the Tet truce.

On the 31st, the same day as the outbreak of the Tet Offensive in South Vietnam, no strikes hit within 30 km of Phou Pha Thi. On 1 February, thirty strike sorties hit around Site 85. This was followed by twelve days of reduced air activity in close proximity to the site. Of the 473 strike sorties which USAF flew within 30 km of Site 85 in February, only 52 were flown from 1-13 February.

Midway in this period of relative inactivity, on 7 February, 7AF at Tan Son Nhut queried the office of the Air Attache in Vientiane about the dangers to Site 85. The message ended:
"Do you have targets in the area on which you desire strikes? The Air Force will attempt to provide whatever assistance deemed necessary to insure safety of LS-85."

The Attache Office responded the next day, 8 February, summarizing the defensive situation:

"[The approaches to the top of Phou Pha Thi are]... virtually a vertical climb and those avenues which can be traversed are heavily mined. The enemy is presently maneuvering up to, and occasionally inside a 12 km radius of Phou Pha Thi. He is probably trying to get into position to mount a combined 105 mm plus mortar assault to be followed by ground probes. CAS ADC troops are maintaining a 12 km perimeter around the site and as long as they are able to do this, do not believe Site 85 can be taken."

The message from the Attache Office went on to state that if the enemy concentrated a large enough force (four battalions) and was willing to accept the losses, Phou Pha Thi could be taken. This course was expected to be preceded by sufficient warning to permit site destruction and evacuation. Regarding airstrike requirements, the message concluded:

"In order to prevent the enemy from concentrating the necessary force to assault this position, responsive air strikes are a vital ingredient. We now have in place on Phou Pha Thi a forward air guide capable of directing such strikes. In addition we have validated nine targets outside of the 12 km perimeter to the east for Commando Club strikes if enemy activity is noted... Appreciate your offer of assistance. We feel that daily and nightly strike sorties on a regular daily basis will do much to discourage troops and/or artillery from concentrating in the area and at the present we have no special target requiring special assistance."
Enemy Activity 22 Jan-16 Feb

After capturing Phou Den Din on the early morning of 22 January, the enemy lapsed into relative quiescence until the evening of 30 January. It should be remembered that during this period, USAF strikes near Phou Pha Thi were reaching the peak for the month of January. Intelligence estimates remarked that the enemy was probably waiting until he could move 105 mm howitzers into positions from which to bomb the site.

About 1930L, on 30 January, enemy troops exploded defensive mines off the southern end of Phou Pha Thi. This was followed by a thirty-minute enemy mortar attack around the southern outpost high on the ridge. After this, contact with the enemy was broken. The TSQ commander quickly reported that while there had been an attack near the site, it amounted to no more than a probe. Furthermore, there had been no injuries to personnel at the site nor damage to the equipment. To be safe however, flare ships and A-26s were directed to the area but nothing more developed. Later assessments confirmed that no enemy troops had reached the top of the ridge; only the bottom defenses had been tested.

That same evening enemy pressure had caused AEC troops to pull out of a village, Muong Yut, only nine km southeast of Phou Pha Thi. Evidently, this enemy pressure had been exerted by only a small force and the position was later recaptured.

From the period 31 January - 16 February, enemy contacts were few; however, enemy units encountered were generally of near company or
even battalion size. Perhaps significantly, one near battalion-sized force was contacted no more than six km west of Phou Pha Thi; another company-sized unit was discovered only 11 km to the southwest. Both of these encounters were the initial contacts to the west of Site 85. The threat remained primarily to the east. On 14 February, Muong Yut, nine km southeast of Phou Pha Thi, changed hands twice again, with the position finally remaining under ADC control.

In general, it appeared that the enemy force, while increasing, was respecting an approximate twelve km circle around Phou Pha Thi. The only exceptions were the contacts west and southwest of Site 85 and the exchanges of the village, Muong Yut.

It was during this period that there existed a definite lull in air attacks against enemy units in the Site 85 area. Apparently, there was no expressed urgent demand for strikes in support of Site 85. Although the Attache Office in Vientiane had informed 7AF on 8 February that "no special target requiring special assistance" existed and only regular daily support was needed, a CAS report of 6 February had described a road under construction from UH 853564 to UH 835572. This construction had been noted since 1 February. On 9 February, CAS reported again concerning this road construction, which was an extension of Route 602 (Fig. 5):

"If trafficable, Route 602 would provide the enemy with much easier access from Sam Neua to staging areas in the vicinity of Ban Hon Non (UH 812553) and Phou Chik Nou (UH 8157). It would afford the
enemy the opportunity to roll in weapons for an attack on Phou Pha Thi. Interpretation of photog-raphy dated 31 January reveals intermittent road construction on Route 602 from UB 853563 northwest along the south slope of the ridgeline ... The construction ends approximately one kilometer northeast of the enemy strong point at Phou Chik Nou (UB 817579)."

Trucks were reported rolling on Route 602 on 11 February. Unsuccessful strikes had been conducted against enemy positions at Phou Chik Nou by 13 February. Apparently the enemy was well dug in. Although four F-105s, returning with ordnance unexpended against North Vietnam, were directed against Route 602 on 2 February, no other strikes have been identified as having been directed at Route 602 until 14 February. By 16 February, Route 602 had been extended to approximately one km east of Phou Den Din; this was only 13 km from Phou Pha Thi.

During this period, the enemy did not attempt to hide his intentions in the area. CAS reports abounded with references to Communist sponsored propaganda meetings in which spokesmen predicted the coming attack on Phou Pha Thi, cautioned villagers to stay clear of the objective, conscripted men to serve as soldiers and coolies, confiscated food supplies, and offered distorted promises of what was to come (a twenty aircraft MIG attack and even Communist Chinese participation if the PL/NVA attempt failed).

Activity in Late February

Although airstrikes began increasing in the Phou Pha Thi area in mid-February, so too, did enemy activity. To the east of Site 85, the twelve km perimeter was penetrated on 20 February. Muong Yut, that
often exchanged village nine km southeast of Site 85, fell again to the enemy. Within four days, the ADC was seeking to recapture it.

On 21 February, four additional PL/NVA battalions arrived in Phou Den Din and moved out to positions just inside the twelve km perimeter. However, the attackers of Phou Pha Thi were not able to proceed so easily with their moves against Site 85. Fortune had momentarily favored the defenders.

An ADC ambush some eight km southeast of Phou Pha Thi had killed a small party of North Vietnamese on 18 February. Apparently, one of the victims had been an NVA officer, and recovered from his body was a small notebook which contained detailed information concerning enemy plans and strong points for the coming attack on Phou Pha Thi.

Information from the notebook yielded the following data in addition to enemy positions:

- Three NVA and one PL battalions were to make-up the attacking force.
- Final battlefield reconnaissance was to be conducted on 22 February. (CAS estimated the attack would commence 23 February).
- The enemy used the word "TACAN" as it appears in English and was aware of its exact location.
- The main assault force was to be one NVA battalion attacking from the northeast: the other battalions were to attack the main trails to Phou Pha Thi.
- Stocks of ammunition for all heavy weapons were low and re-supply was needed.
Friendly response to enemy activity and the new information was rapid and effective. Already on 17 February the Ambassador at Vientiane had authorized visual and armed reconnaissance missions along Route 602 eastward from Phou Den Din and more targets were authorized around Site 85. Small patrols were dispatched by the ADC defenders to select targets in the local area for artillery fire and airstrikes. Special reconnaissance teams of General Vang Pao’s irregulars were even ranging east of Sam Neua trying to identify depots supplying the enemy forces in the Phou Pha Thi region. In addition, two 4.2 inch mortars and another 105 mm howitzer were sent to Phou Pha Thi and the garrison was increased by fifty men.

Effective at 1800 on 21 February, the U.S. Ambassador to Laos authorized the LADC at Site 85 to task the TSQ facility to strike any target within a twelve km radius of the peak at Phou Pha Thi. This authorization was limited in that strikes could be placed no closer than 500 meters from known villages and that Commando Club strikes were still to be conducted via secure voice channels through the Radio Relay Aircraft (RRA). A list of nineteen still active villages accompanied the authorization.

Starting 20 February and extending to the fall of Site 85, early on the morning of 11 March, a determined air effort of constantly increasing intensity was directed in its defense. On 23 February, a message from the JCS to CINCPAC denoted that increased air support was "urgently" needed. From 20-29 February, 342 strike sorties
hit within 30 km of Site 85, most much closer than 30 km. In addition, other sorties struck east of Sam Neua against depots and supply concentrations. The latter attacks hit outside of the 30 km area and were not included in totals listed above.

Route 602 was among the targets attacked, but the enemy had already assigned over 400 road workers the task of keeping this vital line open. Later, bulldozers were also brought in. Except for intermittent closures due to road cuts, the enemy continued to use this artery. There was no doubt that airstrikes and artillery fire were retarding enemy activities, but they were not eliminating his presence or pressure 85/ within the twelve km defensive perimeter around Site 85.

An unofficial estimate by an unnamed staff officer in one CAS report dated 25 February 1968 summed up the status as of that day and was extremely prophetic of coming events:

"As a result of the enemy's penetrating the 12 kilometer radius around Phou Pha Thi in force and occupying key positions within the lower right hand quadrant of this perimeter as well as positions just outside the perimeter at Phou Den Din, he represents an imminent threat to the security of the TACAN site and other installations at Phou Pha Thi. It is clear that the enemy will continue to attempt to consolidate his gains in the Phou Pha Thi area during the next two weeks while making arrangements for his final assault by three or four battalions. If, however, ADC units continue to harass successfully the enemy on the ground and if aircraft continue to strike enemy concentrations in and around Phou Pha Thi and in the area east of Sam Neua, the TACAN and other sites at Phou Pha Thi will continue to be viable for the next two weeks. It is not possible to predict, however, the state of security at Phou Pha Thi beyond 10 March."
because of the enemy's willingness to continue
to escalate his commitment in this area."

The American Ambassador in Laos was impressed with this estimate
and commented on his feelings concerning Site 85 in a 26 February
87/ teleogram to the Chief of Staff, USAF:

"...Enemy forward movement (toward Site 85)
has been inexorable over the past months and
neither air or ground resources which are available
to us appear adequate to deter his intentions.

"...Although we are not...throwing in the
towel, we believe you should be aware of our
current estimate that we may be able to assure
security of this site for no more than the next
two weeks.

"You will recall that, when we arranged this
installation, I made clear that our principle
defense effort would rest upon guerrilla units
who operated with mobile tactics and that we
could not...guarantee a static defense. Our
irregular units in this area are already
stretched thin and have many other significant
obligations related to the defense of population
centers which make it impossible for us to look
with any great hope upon the chances for effec-
tive reinforcement. Therefore, the moment of
truth may be approaching for this site.

"The TSQ is using its own inherent capabilities
in the defense effort. Airstrike sorties are
being provided in respectable numbers. But, in
the final analysis, it seems doubtful that the
site can be held in the face of consistent enemy
determination.

"Therefore, we are in touch with USAF authorities
on evacuation and destruction plans. We are fairly
confident both should be able to be carried out in
orderly fashion. Moreover, we are examining pos-
sibilities of finding another useful site in the
same general area which will provide roughly the
same coverage."
As conceived in evacuation plans, the decision to evacuate was reserved for the Ambassador, Vientiane. First priority of evacuees was allocated to the 13 TSQ/TACAN personnel; however, enough helicopters were to be provided to permit a total of 155 to be lifted out. The others, guerrillas, were to be extracted when the Local Area Defense Commander deemed appropriate. Five helicopters, three USAF and two Air America, were designated as the force required to accomplish the evacuation.

To provide an immediate capability, the two Air America helicopters were to remain overnight (RON) each night at nearby Lima Site 98; USAF helicopters were to come from Thailand-based resources. Subsequently, some USAF messages expressed the desire for Air America helicopters to RON at Site 85, not 98. However, this was not changed; it was feared helicopter presence at Site 85 would have provoked an enemy attempt to destroy these lucrative targets. If they had been destroyed, the planned emergency lift capability would have vanished. But the point was well taken, for weather also might have disrupted the rescue flight from Site 98 to Site 85.

Following a decision to evacuate, the Ambassador was to notify 7/13 AF TACC at Udorn AB, Thailand who could in turn notify 7AF at Tan Son Nhut AB, Vietnam. Weather permitting, 7AF was to scramble or divert four A-1 aircraft to provide cover for the evacuation, suppress enemy fire, and FAC for subsequent jet strikes. The LADC and an attaché-provided FAC were to help direct the strikes. The plan
allowed a limited night evacuation capability (the RON helicopters
at Site 98), but pre-supposed a daylight effort.

Final Enemy Moves

Enemy movements from 1-9 March are depicted in Fig. 6. Throughout
the early days of March, enemy forces continued their advance,
eliminating friendly pockets of resistance en route, until by 9 March,
when the enemy deployed into what might be termed "jump off points",
Phou Pha Thi was virtually surrounded, except for the northwest
quadrant. The enemy positions also threatened Site 111, only eight
km north of Site 85. Approximately four enemy battalions stood poised
for the attack.

On 2 March, a review of the USAF rules of engagement for airstrikes
around Site 85 revealed the changes which had occurred as the enemy
threat mounted:

- Any target in the twelve km defensive perimeter
could be struck under FAC control.

- The restriction against strikes within 500 meters
of villages only applied to Commando Club (TSQ)
directed strikes, unless the target was validated
by the LADC.

- Any Commando Club strikes could be diverted by the
LADC to validated targets in the twelve km perimeter.

- For a distance of ten km along Route 602 east of Phou
Den Din, strikes were authorized under FAC or Com-
dando Club control (this included "Gravel" and
CBUs).
Use of CBU and "Gravel" was authorized anywhere in the twelve km perimeter if validated by the LADC and if targets were at least 500 meters from friendly troops.

The restriction of using only secure voice contact with supporting aircraft could be waived with Vientiane Embassy approval when under threat of imminent attack.

"Gravel seeding" was accomplished on some confirmed supply routes east of Site 85 on 5 March. CBUs were used in the area around Site 85 in February. The use of CBU under Commando Club control was an innovation. Bombing tables were not available to be used in conjunction with the TSQ, but experience and "know how" of the 7/13AF personnel at Udorn AF Base in Thailand allowed them to improvise effectively until precise tables became available.

To facilitate around the clock capability of the TSQ facility, five more technicians were sent to Site 85 (the total number of Americans was now 19). More targets and sorties were allocated for night operations. On 5 March a message from 7AF to DOCO PACAF indicated conditions for evacuation, relocation of the facility, and remarked on the value of the site:

"...due to the desirability of maintaining air presence over NVA during present inclement weather period, Site 85 probably would not be evacuated until capture appeared imminent. The fact that complete security could not be assured in the original plan is noted...."

In another message, later on 5 March, from PACAF to the Deputy Commander 7/13AF, with the commanders of 7AF and 13AF as informational
addressees, CINCPACAF commented:

"Receiving daily reports concerning growing threat to Site 85. Difficult to evaluate situation from here. Request you consult CAS sources and provide me your estimate of threat, including anticipated time of attack, and friendly capabilities to defend.

"You are authorized to direct evacuation of site and destruction of equipment when in your judgment such action is necessary. Your plan, OPlan 439-68, is approved for this purpose. Keep 7th and 13th Air Forces and this headquarters informed of your intentions in this regard. Insure that all preparations are made for emergency evacuation as required."

From 1-10 March, USAF carried out 314 strike sorties within 30 km of Site 85. Over 76% of these were directed by the TSQ facility at Site 85. Among the targets struck frequently was the vital Route 602.

On 29 February, airstrikes had destroyed two bulldozers and killed the operating crews used to supplement road clearing operations. Until serviceable bulldozers could be brought in, work was suspended. However, enemy resupply could not be halted; coolies, too, had been carrying supplies to enemy troops. One of their major routes, just north of Route 602, was subjected to a combined CBU/Gravel raid on 5 March.

Even though the weather in the vicinity of the site had deteriorated, the air attacks continued. But, it was becoming increasingly difficult to estimate enemy strengths and fix their locations because they had deployed into numerous small concentrations.
Evacuation Arrangements at the Site

On 9 March, at Site 85, the senior CAS adviser briefed the senior Air Force representative on the fact that an attack could come at any time. The evacuation plan was reviewed at that time and it was agreed that if evacuation was ordered, the TACAN/TSQ personnel would, if possible, proceed to the Command Post area near the helicopter pad (at lower elevation and 1/4 mile from the TSQ facility) where they would be picked up by helicopters. If this movement was not possible, the technicians were to wait for the pickup at the TSQ site. It must be noted that a few feet from the entrance of the supply van (Fig. 7), there were webbed belts or slings hooked up to allow the technicians to descend to a lower ledge a short distance down from the site level. Below this ledge, there existed a sheer drop of well over 1400 feet. The CAS adviser's comment was that:

"The technique of personnel hanging over the cliff by straps was not discussed as a serious escape or evasion plan."

About 2000L on the evening of 9 March, Site 85 reported enemy contacts around the site. Additional sorties were requested throughout the night and a number of flights were diverted to support the defenders. However, the enemy apparently had not mounted a serious attack. To lend support for the next day, 13 missions loaded with CBU and 750-pound bombs were fragged into the area.

On 10 March, friendly patrols continued to report enemy activities and the movements of villagers fleeing the general area. To help
View from the Northwest. Structures at center were TSQ, Supply and Comm Facilities. Crew quarters at left and TACAN Facility at rear. Escape slings dropped off slope at right.

FIGURE 7
restore guerrilla influence into certain areas west of Site 85, as well as to attempt to recapture some villages and outposts, General Vang Pao began making plans to introduce nearly two battalions of his Meos to the region west of Site 85. Unfortunately, these forces were to be of no help to Site 85.

Final Enemy Attack

Although weather in the Site 85 area had been generally poor in early March, good weather prevailed throughout most of 10 and 11 March. The afternoon forecast for BARREL ROLL on 10 March called for 2000 foot scattered with occasional rain showers. Attache reports at 0138L and 0247L on 11 March termed the weather "workable" and that it "permits air defense." A survivor reported the weather on the morning of the 11th was clear. Later, on the day of the 11th, the weather deteriorated again somewhat.

Shortly after 1800L on the evening of 10 March, mortar, artillery and rocket rounds from Phou Den Din began falling on the defenders of Phou Pha Thi. Early in the barrage, the 105mm Howitzer position near the summit of Phou Pha Thi sustained a direct hit. The living quarters immediately next to the TACAN/TSQ facility had suffered some damage, and by 1830L the technicians had sought shelter in a bunker just north of the living quarters. Prior to retiring to the bunker, site personnel notified 7/13 TACC at Udorn AB, Thailand of the attack and reported they were abandoning the radio. Contact via portable radio was maintained with the senior CAS representative in the command
bunker near the helipad.

At Udorn plans were rapidly developing to divert sorties to Site 85. Flare ships had to be provided to allow visual strikes because with the TSQ personnel in their bunker, the site could not direct airstrikes. Airborne A-26s were already being diverted. Additional tanker support was required for eight flights of F-4s being sent from Ubon.

When the barrage ceased at 1945L, the technicians left the bunker and returned to operating the TSQ/TACAN equipment. Only minor shrapnel damage to the TACAN antenna was sustained and no American casualties had been suffered. By 1950L, many of the flights which had been in the process of being diverted were returned to their fragged missions, and until midnight, two A-26s and five F-4s hit targets in the Site 85 area. All of these were under TSQ direction. In addition, six A-1s were readied to support the site and the pilots were placed in crew rest. From 0000L to 0700L, 11 March, three A-26s and five F-4s supported Site 85; the last time on target was 0320L.

By 2020L the Ambassador at Vientiane had judged circumstances to be serious enough to authorize the site to conduct the direction of sorties via clear voice transmissions. However, the lull in activity at the site continued. At 2100L, heavy fighting was reported at Ban Pha Thi, a village at lower elevations on the Phou Pha Thi ridge, only 1 1/2 km south of Site 85. Allegedly, the enemy was using flashlights to facilitate his climb to the village. By 2117L, fighting was going on only 1/2-
An entry in the 7/13 AF TACC log noted that at 2105L the Ambassador in Vientiane was already considering evacuating the personnel from Site 85 at first light. However, this decision was not made at that time. At 2150L the Deputy Commander, 7/13 AF contacted the Attache's Office in Vientiane concerning the possible evacuation of the site. It was indicated that evacuation should only be effected as a last resort if the situation became untenable; furthermore, the situation should be followed on an hour to hour basis. These views were to be expressed to the Ambassador. Any decision to evacuate was to be relayed to the Deputy Commander at once.

At 2121L, intermittent mortaring and shelling of positions around Site 85 was begun again, but the TSQ facility continued to operate and direct missions. Shortly after this resumption of shelling, the Ambassador decided to conduct a partial evacuation of American personnel. Nine personnel were to be evacuated at 0815L on the 11th. The situation remained static at the site until about 0300L. On the lower slopes of the ridge, sporadic but violent firefights broke out; however, the enemy had not succeeded in overrunning any of the major outposts. As a matter of fact, the senior CAS representative later commented:

"Communications were maintained from the CP with all the defending outposts at Site 85 throughout the attack on Site 85 during the period 10 to 11"
March ... (the) ... defenders gave a good account of themselves and they held fast under heavy incoming fire.

At the TSQ/TACAN location, it has already been related that, with the lull in the barrage after 1945L, the technicians had left the bunker and returned to operating the facilities. While one crew operated the TSQ facility, some of the other men tried to get some sleep. Apparently, since the living quarters had been damaged, and sometime later the technicians' bunker was also hit, some of the American personnel took sleeping bags and descended the slings to seek rest and shelter among the rocks down the steep slope only a few feet from one of the entrances to the TSQ/Supply/Communications structure.

Shortly after 0300L, on 11 March, either automatic weapons fire, shelling, or both once more caused the crew to abandon the facility in haste. At this point all radio contact with the TSQ location and personnel was severed, even that via portable radio with the command bunker near the helipad.

As the technicians came running out of the operations structure, they were met with a hail of small arms automatic weapons fire from close range. These men scrambled for safety down the slings which were only a few feet away. But apparently three Americans were killed at once—among them the TSQ senior officer and commander.

The crucial fact concerning the equipment at the site was that it was not destroyed. The detonation devices had not been triggered and the TSQ personnel never again entered the command building. In
an interview with survivors, some questions concerning the detonation
devices were raised when it was revealed that explosives for demoli-
tion of the site had earlier been thrown over the side of the cliff to
prevent them from being hit by incoming shells. However, the charges
which were to destroy the classified equipment were pre-mounted and could
not have been easily or swiftly removed. Extra charges were available
to destroy other equipment and facilities at the site, and apparently
it had been these extra charges which were thrown away.

Evidently a small force of approximately twenty enemy troops (most
likely North Vietnamese as judged by the unfamiliar language) had some-
how infiltrated to the summit. No mine detonations, shouts, or other
warnings preceded the volley which hit the Americans exiting the opera-
tions structure. It has been only guessed that either the enemy in-
filtrated the more gradual but still treacherous northeastern side of
Phou Pha Thi or that this small force scaled the almost sheer north-
western face. None of the outposts was aware of this enemy force atop
the summit.

Seemingly familiar with the layout of the site, the camouflaged
fatigue-clad invaders methodically threw grenades into most of the
buildings, but it was not clear if the TSQ facility was also blown up.

At about 0315L, the senior CAS representative in the command bunker
near the helipad observed the TACAN beacon "go up in smoke", but it
was thought at the time that a mortar round had done the damage. Mean-
while the helipad area was under particularly heavy shelling and small
arms fire.

Subsequently, enemy troops at the site discovered the escape slings leading down the slope and directed automatic weapons fire in that direction. Some of the Americans down the slope returned the fire and it was estimated that five or six of the enemy were killed. After pulling back from the American line of fire from below, the attackers responded by lobbing some fifteen to twenty grenades onto the slope and then intermittently spraying the area with automatic weapons' fire. It was deduced that most of the American casualties were suffered at this time.

In Vientiane, meanwhile, the situation was being closely monitored. Plans for the partial evacuation had been finalized at 0015L for implementation at 0815L the next morning. Incoming reports indicated that air support was sufficient, weather was good, and the situation remained static. Although unaware of the fate of the TSQ facility, American officials at Vientiane were to become cognizant later that increased enemy fire was being directed at the site. Hence, at 0515L on 11 March, the Ambassador decided to evacuate all Americans from Site 85 at 0715L.

An attache report summed up the situation at Site 85 as it was known in Vientiane at 0540L:

"As of 10/2240Z: Heavy mortar and small arms fire on top of Phou Pha Thi (Site 85). Embassy ordered evacuation of all repeat all U.S. personnel."