PROJECT Contemporary Historical Examination of Current Operations REPORT

LAM SON 719 30 JANUARY - 24 MARCH 1971

24 MARCH 1971

HQ PACAF
Directorate of Operations Analysis
CHECO/CORONA HARVEST DIVISION

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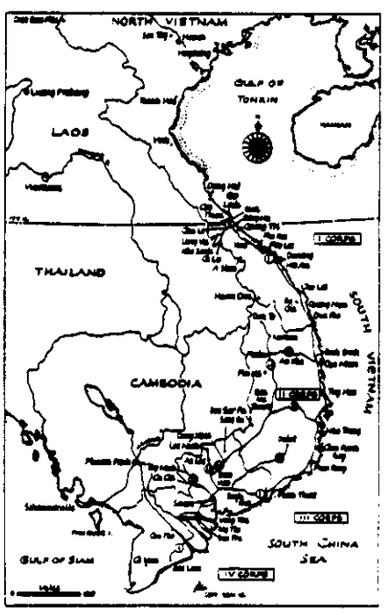

Southeast Asia, showing Tactical Zones for I, II, III, and IV Corps

Reprinted by
Dalley Book Service
90 Kimball Lane
Christiansburg, VA 24073
U.S.A.
(703) 382-8949

DEPARTMENT OF THE AIR FORCE
HEADQUARTERS PACIFIC AIR FORCES
APO SAN FRANCISCO 96553

PROJECT CHECO REPORTS

The counterinsurgency and unconventional warfare environment of Southeast Asia has resulted in the employment of USAF airpower to meet a multitude of requirements. The varied applications of airpower have involved the full spectrum of USAF aerospace vehicles, support equipment, and manpower. As a result, there has been an accumulation of operational data and experiences that, as a priority, must be collected, documented, and analyzed as to current and future impact upon USAF policies, concepts, and doctrine.

Fortunately, the value of collecting and documenting our SEA experiences was recognized at an early date. In 1962, Hq USAF directed CINCPACAF to establish an activity that would be primarily responsive to Air Staff requirements and direction, and would provide timely and analytical studies of USAF combat operations in SEA.

Project CHECO, an acronym for Contemporary Historical Examination of Current Operations, was established to meet this Air Staff requirement. Managed by Hq PACAF, with elements at Hq 7AF and 7AF/13AF, Project CHECO provides a scholarly, "on-going" historical examination, documentation, and reporting on USAF policies, concepts, and doctrine in PACOM. This CHECO report is part of the overall documentation and examination which is being accomplished. Along with the other CHECO publications, this is an authentic source for an assessment of the effectiveness of USAF airpower in PACOM.

ROLAND H. CAMPBELL, Major General, USAF
Chief of Staff

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FOREWORD

This CHECO report on Lam Son 719, the South Vietnamese incursion into Laos in February and March 1971, is an interim narrative of what was one of the most significant military actions in Southeast Asia since the enemy's 1968 Tet Offensive. It also is a report on one of the most fundamental problems faced by Americans in the Vietnam conflict--the proper employment of American technological superiority, mainly air power, against an enemy highly skilled in the elusive art of jungle warfare and equipped with modern sophisticated weaponry with the exception of aircraft. Lam Son 719 was the first major operation of its kind - a cross-border activity in which large South Vietnamese ground forces operated independently without U.S. Army ground advisors but with almost complete dependence upon U.S. air support. Yet in Lam Son 719, some of the problems associated with the U.S. effort since 1962 reappeared and had to be resolved to meet the particular situation. Primary among these was the before-the-fact coordination of air support for ground or airmobile operations to fit the needs of a fluid ground situation. Also of significance was the problem of locating the enemy and bringing the maximum firepower to bear on him. Despite these problems, Lam Son 719 showed that a large Vietnamese ground force, which had remained on the sidelines for years, could move into the enemy stronghold given U.S. air support. This was a critical test of its capability, a test which would have a great impact upon plans for American withdrawal from Vietnam.

The history of air power in Vietnam is replete with examples of problems concerning the proper application of air technology, problems which reappeared in Lam Son 719. A brief review of some of these experiences may be valuable in putting the Lam Son 719 report in perspective. As early as December 1964 at Binh Gia, 40 miles east of Saigon, the first enemy-division-sized attack of the war took place, launching what General Giap considered the beginning of the final phase of the war.[1/] In this battle, where a Vietnamese Marine Battalion and Ranger Battalion were practically wiped out, tactical air was not called in during the critical phase of the fighting and the heliborne firepower which was used was ineffective against an enemy operating under heavy foliage. As a result of this action, General Westmoreland had his staff reappraise the role of tactical air in the fighting.[2/] In October 1965, the 1st Air Cavalry Division in its first major engagement in Vietnam in the battle of the Ia Drang Valley, suffered some 250 men killed, most during a single ambush in which tactical air was not used to full effect. The 1st Air Cavalry Division, in this battle, was determined to use its organic helicopters for supply and suppressive fire and called on the U.S. Air Force only after its helicopter in-commission rate dropped to an intolerable low.[3/] The question of the number of tactical air sorties required in support of ground operations became a major issue during Operation Birmingham in early 1966. For this one ground operation, the U.S. Army commander requested on one day 284 sorties, which was then 63% of the total available throughout Vietnam. In this case, the USAF protested the inordinate

[redacted]

call upon air resources and COMUSMACV directed a more realistic tasking of tactical air.[4/] A major breakthrough in proper coordination and control of the theater air capability came in early 1968 when the Deputy COMUSMACV for Air was made single manager for all USAF and U.S. Marine air resources in Vietnam but only after serious air coordination problems were experienced in major campaigns in the DMZ area of Vietnam.[5/]

These were only a few examples of many battles and campaigns fought over six years which guided to a large extent the evolution of air tactics, command and control, and general strategy concerning the use of air power. At Lam Son 719, this past experience was put to a major test.

Not since the Ia Drang Valley battle of November 1965 when the Army's new 1st Air Cavalry Division was engaged in its first battle has hard information on an operation in Southeast Asia been so difficult for the AF to obtain, as it was in Lam Son 719 in February-March 1971. In both battles, there was reason to question the accuracy of some statistics concerning losses of personnel and equipment, particularly helicopters. But in Lam Son 719, the problem was compounded by the fact that the Vietnamese were fighting in Laos without their U.S. advisors and there was no way to confirm their reports. There were highly conflicting statistics generated by Lam Son 719, some due to duplication of BDA reports and some to reporting problems. For this reason and because this report was completed shortly after the end of the operation, the account of the operation given here can be considered only as an interim report.

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To assist researchers for a later report on this highly significant operation, every available document on the subject has been placed on microfilm, including daily reports by the FACs, Hq MACV, the ABCCC and DASC Victor.

In considering air support for Lam Son 719 (tac air, helicopters, airlift and B-52s) there are several areas which are significant. First, although it has never appeared in an official report on the operation, without the air superiority provided by the U.S. Air Force over the battlefield, there could have been no Lam Son 719. Second, the tactical airlift support during the deployment, employment and subsequent resupply phases of the operation provided the critical margin of rapid troop and supply transport essential to the sustained ground combat. Third, the helilifting of friendly troops to landing zones near Tchepone would have been virtually impossible without intensive prepping by tac air and B-52s. Nor could the friendly forces, outnumbered and on unfamiliar terrain, have survived without support by tac air, gunships and B-52s. Another key fact was the effective employment of air in disrupting the enemy's plans and hindering him from massing, a particularly important issue when it is considered that the enemy had at least two months forewarning of the operation.[6/]

When he did mass his forces to strike exposed and vulnerable positions, the enemy suffered heavy casualties from tac air and B-52s. Tac air was also invaluable in suppressing the fire of enemy antiaircraft (AA) weapons

which included antiaircraft artillery, machine guns, small arms, mortars, rockets and grenades. While the Army did lose an estimated 200-plus helicopters destroyed plus several hundred damaged, it is awesome to imagine what the losses would have been without AA suppression. Finally, and what may historically prove to be the most important contribution of tac air to the campaign was the battle against enemy armor. The North Vietnamese had committed an estimated 120 tanks to the battle, many of them T-54s with 100mm cannons and 12.7mm machine guns and the evidence indicates that this force was ready to spring a trap on the withdrawing ARVN forces in the critical last days of the battle. That they did not is unquestionable because tac air knocked out or forced into hiding practically every tank that exposed itself in the critical 19-24 March period.

There were some weaknesses in tac air support of Lam Son 719 and these are depicted throughout this report. They include such problems as having the right ordnance at the right time and adverse weather. And there is no question that the Army aviators in their helicopters performed with the utmost courage and dedication in what was unquestionably the most difficult mission ever assigned to helicopters. That tactical air and helicopter operations each had a role to play in an operation such as Lam Son 719 was proven time and time again. FACs for example, sometimes had the choppers mark their targets so fighters could be brought in. On balance, however, the Lam Son 719 operation showed that in a "midintensity" environment, the professionalism and experience of USAF pilots, FACs and

their commanders, were crucial to survival of a ground force. Perhaps the best evidence of this is the fact that only five fixed wing strike aircraft were lost in some 24,000 attacks on the enemy.

It is not the purpose of this report to emphasize the polemics of operation. This is, however, an area which must be closely examined by analysts and historians if the true impact of the role of air power in Lam Son 719 is to be determined.

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CHAPTER I

OVERVIEW

Operation Lam Son 719 was a South Vietnamese three-division-sized thrust into Laos along Route 9 between Khe Sanh and Tchepone conducted between 30 January and 24 March and supported by U.S. ground and air forces. Fighting during this incursion was the heaviest of the war since the 1968 Tet Offensive. The enemy was forewarned and had positioned tanks, artillery, antiaircraft weapons and ground units in preparation for the ARVN assault, using ten to twelve regiments from five of his best divisions and an armored regiment of some 120 tanks for a total personnel force of some 35,000 combat and support troops. Unlike the fighting in Tet 1968, the Lam Son 719 campaign involved conventional warfare maneuvers by both sides using tanks and artillery against each other. The ARVN had the advantage of air support and air mobility, while the enemy had greater knowledge of the terrain, was fighting from defensive positions near his logistics base and had advance warning of the operation. There were strong indications that the enemy had made a major commitment to deal a heavy blow to ARVN forces and win a psychological victory, if not a military one.

When the Lam Son fighting ended, the South Vietnamese claimed over 13,000 enemy killed and more than 20,000 tons of weapons and ammunition captures or destroyed, much of it by air strikes. Temporary interdiction of the enemy supply routes was also claimed. Friendly casualties were

[redacted]

high, too. Officially, ARVN casualties were listed at some 5000 killed and wounded. The U.S. lost 137 killed and had 818 wounded. Helicopter losses were officially placed at 105 destroyed and some 600 damaged, of which 20% of the latter (using the Army's yardstick) were not expected to fly again. Seven fixed wing aircraft (five strike aircraft and two others) were lost to hostile ground fire in the operation.

It is too early to determine the success or failure of Lam Son 719 or to measure its results in terms of cost effectiveness. Unquestionably, the enemy suffered heavily in men and materiel, mainly because he massed his forces to strike at the ARVN, thus creating lucrative targets for artillery and air delivered fire power. The ARVN had three of its finest divisions, the 1st Infantry, 1st Airborne and Marine Division, heavily battered before reaching its initially planned objectives. The operation should be evaluated eventually in terms of both the enemy initiative in South Vietnam and Cambodia and in terms of ARVN morale and efficiency in reaching Vietnamization goals. It is not too early as of this writing, however, to examine some of the specific problems faced in this operation, particularly those related to air support, and to evaluate them in terms of future operations.

The original Lam Son 719 plan would have placed the three-division RVNAF force along Route 9 into the Tchepone area, the supply hub of the Ho Chi Minh Trail. From positions along key enemy infiltration routes and supported by air power, it was hoped that this force would reduce

the enemy logistics flow until the rains came in early May, making the roads unusable. The friendly force was also expected to sweep southwest of Tchepone down Route 914 through a major enemy storage area called Base Area 611 and back into South Vietnam through the A Shau Valley. If these goals could have been reached, enemy plans for offensive action in the northernmost Military Region I area would have been severely crimped. 7/

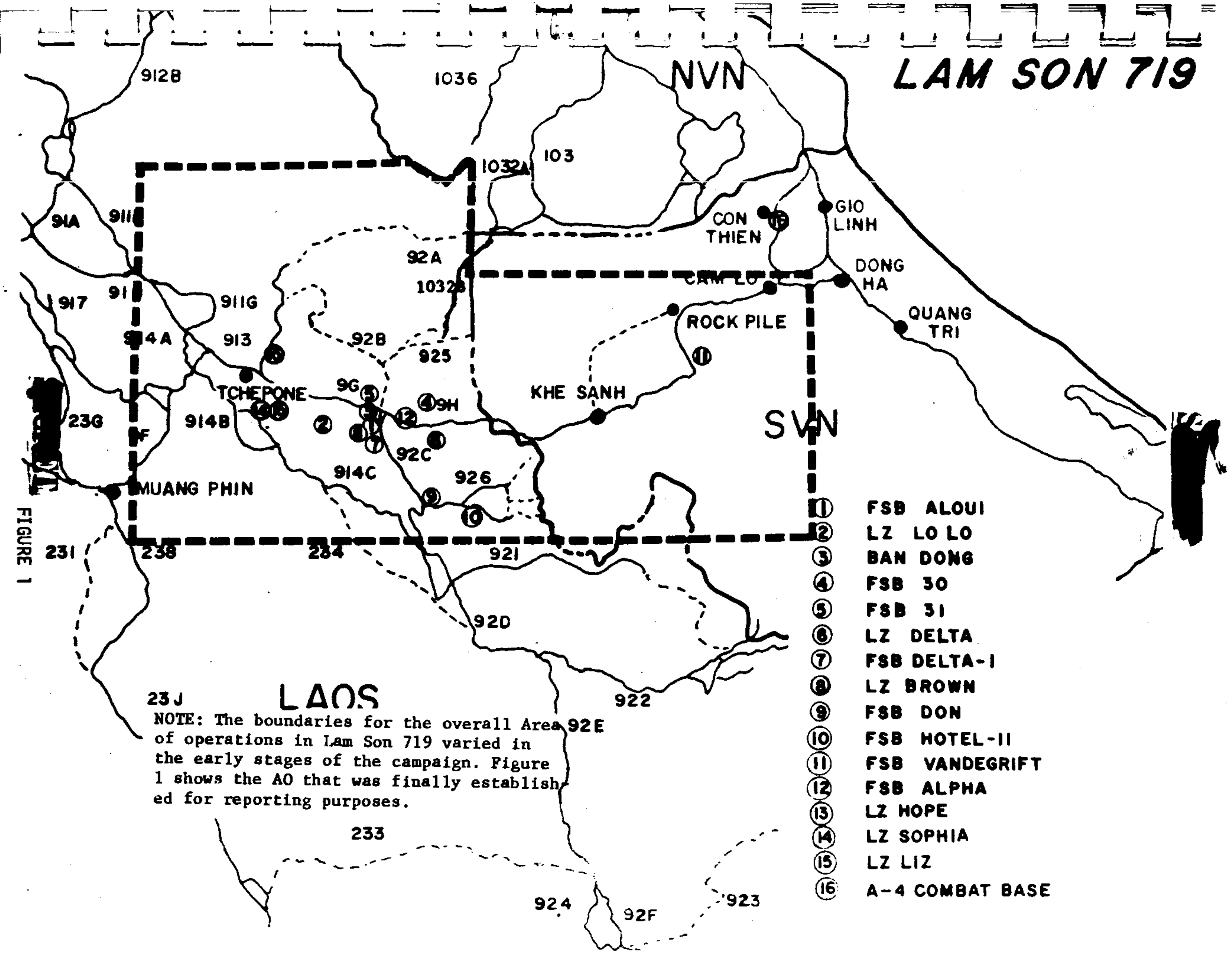
The plan, however, was not carried out as originally envisioned. Although the ARVN force did claim destruction of large enemy caches and the killing of more than 13,000 enemy troops, the incursion fell short of original goals. There were several reasons why. The primary one was that the enemy had positioned an unexpectedly large force along Route 9 and the key objective of Tchepone. Another reason was that enemy anti-aircraft defenses disrupted aerial mobility operations which relied heavily on vulnerable helicopters for resupply, troop movement and fire suppression. Other factors which disrupted original plans were weather, command and control problems, logistical difficulties and the serviceability of Route 9, the main incursion route. These problems are covered later in this report. Although 7th Air Force, with its seven year experience in flying the Lao Panhandle, had advised the Army of the AA threat there, the Army did not consider it a real deterrent.

There were three major decisions made during Lam Son 719 which influenced its course and chances of success. The first was on 12 February after the initial ARVN force found difficulty in reaching A Loui, the first

objective, due to poor road conditions and enemy harassment. President Thieu, after getting an assessment from General Lam at Quang Tri, directed that the ARVN emphasis be shifted from Tchepone to the A Loui area near the junction of Route 92 and 9 and that only a limited force go into the key enemy logistics base.[8] Thus, instead of moving units frequently throughout the operational area and reducing their vulnerability, the main force and its flanking units in many cases assumed static positions. This was to play into the enemy's hands at a later critical stage of the operation. (See Figure 1).

The second major decision was made on 3 March after a disastrous helicopter assault into Landing Zone Lo Lo which cost the Army seven helicopters destroyed, and 42 hit and 20 declared nonflyable. Following this incident General Abrams directed that closer coordination be given to landing zone preparation. Following this direction, tactical air was brought into the Lam Son 719 operations on a much larger scale coincident with the move of additional ARVN infantry battalions into the Tchepone area landing zones. In the next three days, the three landing zones planned for the Tchepone operations - Liz, Sophia and Hope - were heavily prepped by USAF B-52s and tac air for over a period of several hours prior to the assault. The Army, after the LZ Lo Lo experience on 3 March, dropped its "go it alone" tendency.[9]

The third and probably most critical decision of the operation came on 18 March when General Lam, his forces widely scattered and practically all under attack, was faced with the choice of sending in reinforcements



NOTE: The boundaries for the overall Area of operations in Lam Son 719 varied in the early stages of the campaign. Figure 1 shows the AO that was finally established for reporting purposes.

FIGURE 1

or withdrawing. He chose to withdraw despite pressure from General Sutherland to send in reinforcements and hold in Laos. At that time, General Lam's forces were not in a solid tactical position, with several multibattalion units at different locations on hills south of Route 9 and on Route 9 itself.[10/] The enemy, either because of willful restraint or because his own plans were disrupted by air attacks, had not fully committed his forces, but beginning around 18 March practically every ARVN unit in Laos was in contact. The general tactics of the enemy were to hit an ARVN static location with rockets and artillery, then surround it and move in so close to the wire with a barrage fire capability that helicopters could not get in. Many ARVN commanders, with the enemy so close, were reluctant to call in helicopters or tac air and walked off the besieged sites with their casualties if possible, but too often leaving their artillery pieces behind. Once the withdrawal began, the enemy turned on the heat and several ARVN units were temporarily isolated. Their commanders were not always sure where their units were, making air support difficult. General Lam recognized that many of his positions were becoming untenable, causing the orderly withdrawal to become a hasty one. The ARVN forces left behind 125 tanks and armored vehicles in these last few days but managed to get out of Laos with most of their manpower intact.[11/]

Later chapters of this report will detail command and control aspects of the operation and a chronology of its high points with emphasis upon the air support provided the ARVN ground forces. However, a brief chronology

of the campaign, emphasizing the critical last days may be helpful to the reader.* Between D-Day, 30 January, and 8 February when the first ARVN units went into Laos, forces were being positioned near the Lao border and logistics routes were being opened, including the clearing of Route 9 from Dong Ha to the border and the preparation of an airstrip at Khe Sanh to receive C-130 troops and cargo flights. On 8 February, ARVN airborne battalions moved to strategic hill locations (30 and 31) some five kilometers north of the junction of Route 9 and 92 which were reached by the Armored Brigade Task Force on 10 February. Other battalions from the 1st Infantry were sent to positions south of Route 9 when the operation started. Up to this point, the operation was proceeding according to plan, but the armored column found the going slow. This, coupled with enemy resistance and the unfortunate loss of General Lam's G-3 and G-4 in a chopper crash on 9 February, prompted the change of plans by President Thieu. With the ARVN units holding fixed positions, rather than maneuvering throughout the area as originally planned, the first sign of serious trouble came on 18-20 February when the enemy struck hard at the 39th Ranger Battalion's position using artillery, mortar and human wave attacks. The Rangers were driven off the hill and suffered such heavy losses that they

*Data used in this chronology were extracted from a variety of sources, including COMUSMACV messages, Lam Son Daily Intelligence briefs and XXIV Corps files. Detailed references are provided in the expanded chronology of Chapter III.

were withdrawn from the campaign. But in assaulting the Rangers the enemy had massed his troops, exposing himself to the killing firepower of B-52 strikes, tactical air and gunships. The enemy dead numbered more tnan 600, most of them killed by air. Later, on 25-27 February, the enemy attacked airborne units on Objectives 30 and 31 using coordinated artillery, armor and massed infantry assaults.

Up to this time, U.S. Army helicopter support of the ARVN had assumed a set pattern and Army officers were confident they could provide the necessary preparation of landing zones for aerial mobility of ground forces. Light enemy opposition to early heliborne assaults added to Army confidence. For example, on 24 February, only ten tactical air strikes were used to suppress enemy antiaircraft fire around LZ Brick. The major disaster at LZ Lo Lo on 3 March changed the Army's attitude. Not only was more air used in LZ preps thereafter but the average daily USAF sortie rate for direct support of ground forces in Lam Son 719 more than double from 104 sorties per day prior to 3 March to 211 sorties in the latter part of the operation.

With the move out of Tchepone, the operation moved into a withdrawal phase which was greatly hastened by heavy enemy attacks beginning on 13 March when Lo Lo was attacked by a multiregiment enemy force, ultimately forcing its evacuation and the abandonment of eight howitzers. The enemy took the offensive, committing tanks and artillery and manpower in large numbers, and engaging every ARVN unit in Laos by the 20th of

[redacted]

March.

The most critical phase of the operation came between 18-24 March when the last ARVN units were extracted. A study of the daily intelligence summaries prepared by the Hammer FACs, the COMUSMACV messages to CINCPAC and other sources reveals a picture of enemy tanks emerging from positions throughout the Lam Son 719 area in Laos and moving in the direction of the main ARVN force which began withdrawing from A Loui on 19 March heading east for the RVN border along Route 9. On these last three critical days, enemy tanks were appearing in daylight moving along Routes 92 and 9. The enemy was apparently aiming at cutting off the retreating ARVN Armored Brigade and Airborne units moving overland on Route 9 and the Marine Brigade on LZ Delta, the last South Vietnamese unit to leave Laos.

The chronology of these last critical days is covered in detail in Chapter III of this report. Briefly, the ARVN armored column of 100 vehicles with its covering airborne units abandoned its base at A Loui on 19 March reaching a point on 21 March some five miles from the border. Throughout the morning and afternoon of the 21st, the column was attacked by enemy forces on both sides of the road, losing six tanks. The road was blocked and the Armored Task Force (TF) commander decided to leave Route 9 and move south to a fork in the Xe Pon River.

There were 31 separate visual sightings of enemy tanks reported between 19 and 22 March, including a report of "many enemy tanks" headed south toward A Loui on the morning of 19 March. The most significant sighting, however, came on the afternoon of 22 March when 20 enemy tanks,

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including T-54s, with 100mm cannons and 12.7mm machine guns in the turrets, were sighted moving at 35 miles an hour west on Route 9 just four miles behind the stalled armored task force at the Xe Pon River, obviously in an effort to catch up with the ARVN force. Other tanks were reported coming from the southwest. In what could well have been the most significant air strikes of the whole campaign, F-100s attacked part of this enemy column at 1445 on the 22d, destroying the three lead tanks. One F-100 was shot down by a tank in this attack, but the attack definitely stopped the enemy's advance and the remaining tanks dispersed. This air attack, plus other attacks elsewhere, allowed the ARVN column to cross the river to safety on 23 March, although 39 of its tanks were left behind, to be destroyed the next day by tac air after the enemy was seen manning the guns of the friendly tanks. In the next two days, enemy tanks were being reported and struck in several places throughout the Lam Son 719 area, indicating that he may have committed his armor too late. Previously the enemy's tanks were reported at various phases of the operation in caves or camouflaged off main roads, apparently to be ready for use at the right time. That these formidable weapon systems were not able to close a trap on the withdrawing forces was primarily the result of tactical air strikes, which accounted for 74 tanks destroyed and 24 damaged.[12/] Army helicopters destroyed six. If the tanks were the enemy's trump card, as events would indicate, they were overtrumped by air power. On the 22d when the enemy tanks appeared in larger strength than ever before, the enemy was in contact with every RVN unit in Laos. Simultaneously and undoubtedly in coordination with an overall plan, artillery

and mortar attacks on Khe Sanh reached a peak for the operation on this day. There were four separate attacks by fire on Khe Sanh on the 22d, and 204 rounds impacted on the airfield.

While the armored column was moving for safety across the border, the 147th Marine Brigade was surrounded by enemy troops and armor on LZ Delta south of Route 9 about 15 kilometers from the border. Repeated efforts to extricate this force by helicopter failed. When the first exfiltration attempt was made on 20 March, 7th Air Force was not told about it. This lapse to the "go it alone" procedures used early in the operation proved expensive. The Army initially reported that 13 helicopters were destroyed, 50 hit and 28 rendered nonflyable, but these figures were later revised to seven destroyed and 50 hit. The fighting around Delta involved tanks as well as enemy troops and artillery. There was continuous contact, and some of the heaviest casualties of the operation resulted. In the next few days, with the 1st Infantry and most of the Airborne/Armored Task Force out of Laos, the peak number of tactical air sorties in direct support of Lam Son 719 was reached, rising to 330 on the 25th of March.

When ARVN forces crossed back into RVN, the enemy had eleven regiments and an armored regiment strung along Route 9 and north and south of the ARVN retreat route from Tchepone to the South Vietnam border. They were all on the offensive. Most of the 125 abandoned ARVN tanks and armored vehicles were left behind in these last few days. There were

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also reports that, in at least one extraction, ARVN troops were so desperate they clung to the skids of helicopters taking off from the pick up zone. The ARVN escaped what appeared to be a Giap-style trap carefully prepared to spring at the critical moment.

COMMAND AND CONTROL

In Lam Son 719, the ARVN ground forces under General Lam went into Laos without U.S. advisors. U.S. Army forces under the CG, XXIV Corps provided artillery, air mobility and logistical support from bases on the RVN side of the border. The tactical air, B-52 and airlift support provided from USAF, USN and USMC resources were under the direction of the Commander, 7AF. The system in Lam Son 719 was further complicated by the fact that General Lam responded to orders received directly from RVN President Nguyen Van Thieu and the two were in frequent communication making decisions on the battle plan. The significance of this relationship cannot be overemphasized, for it governed the complete course of the operation reducing U.S. control, but at the same time providing a better insight into the "Vietnamization" process. There were some problems of coordination and language which arose at times during the operation but generally, considering the situation, the command and control arrangement functioned satisfactorily.[13/]

The air control system was adapted for Lam Son 719 by forming a new direct air support center next to the XXIV Corps Forward Headquarters in Quang Tri to handle air support. DASC Victor, as the control agency was called, had tactical air control parties (TACPs) at each of the three

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ARVN division tactical operations centers (DTOCs). DASC Victor was practically an extension of "Blue Chip", the 7th AF Command Post at Tan Son Nhut, which also controlled the Airborne Battlefield Command and Control Centers (ABCCC) over Steel Tiger - Hillsboro or Moonbeam (effectively dedicated to Lam Son 719 during the campaign). These arrangements gave 7th AF Headquarters a direct control of tactical air support.

During the initial phase of Lam Son 719, tactical airlift support was conducted in the regular pattern, with control exercised through the 834th Air Division Airlift Control Center (ALCC) at Tan Son Nhut to the Airlift Control Elements (ALCEs) at Dong Ha, Quang Tri and Da Nang. The 834th Air Division established a forward airlift task force element at Da Nang to perform the required planning and liaison functions with the XXIV Corps staff. As the Lam Son 719 operation progressed, this task force element was expanded to include a detachment of C-130 aircraft, aircrews, operations and maintenance personnel. Subsequent to 15 February with the opening of the assault strip at Khe Sanh, the bulk of the airlift support to Lam Son 719 was provided by this Da Nang element. Based on the necessity to closely control the flow of airlift traffic into Khe Sanh, which was severely limited initially in aircraft parking capability, an artillery free air corridor was established from Hue into Khe Sanh. The Da Nang airlift element was then able to regulate the flow of aircraft into the corridor based on the ground capacity of Khe Sanh to park, offload and relaunch the aircraft.

AIR SUPPORT OF LAM SON 719

During the period of this report, U.S. tactical air flew more than 8000 attack sorties for Lam Son 719 dropping some 20,000 tons of ordnance. These tactical air strikes were controlled by as many as six FACs operating in an area of only 550 square miles.* In addition, periodic Arc Light strikes and literally hundreds of helicopters flying from deck level to 4000 feet were also in the area. A "No Bomb Line" (NBL) was set up five miles beyond the fire support control line so that there would be a buffer zone between Lam Son 719 and air operations in the rest of Steel Tiger (Laos Panhandle).[14/] The "No Bomb Line" moved as the area of ground operations expanded and contracted.

Various types of ordnance were used to handle a variety of ground situations, but the majority of fighters carried high-drag bombs and napalm, a mix proven very effective for close support. At least one flight an hour carried CBU or some special-purpose ordnance such as Rockeye for use against armor. For LZ preps, C-130s dropped "Commando Vault" 15,000 pound BLU-82 bombs with extended fuses.[15/]

Targeting for tactical air had to be flexible in that only half the RVNAF requests were for hard targets. The DASC Victor director arranged

*There was also an additional roaming FAC who flew on the northern and western perimeters of the AO to serve as an artillery spotter and to reconnoiter enemy troop movements in the area.

with the Army to provide him with a "bank" of targets that the FAC could keep in his "hip pocket" and use when air could not go elsewhere. Troops in contact (TIC) had the highest priority for sorties with other immediates such as attacks on enemy armor also getting top attention. There were times, particularly during the withdrawal period, when there were several TICs at one time, making it difficult to respond immediately to all of them.[16/]

From 8 February to 24 March, B-52s flew 1358 sorties and dropped more than 32,000 tons of bombs. These strikes were made around the clock. The drops in some cases were made closer to friendly troops than ever before (some within 300 yards). The B-52s were capable of a faster response to hot targets than ever before, reacting within three hours. Targeting was done at I Corps and XXIV Corps. Since there was little ground follow-up to B-52 strikes, it was impossible to place a quantitative value on these missions, but ARVN ground officers were high in their praise of this powerful weapon, believing that it could wipe out everything in front of them and using it as a close support weapon. Prisoner reports and reports of ground commanders indicated that the B-52s caused heavy casualties and disrupted the enemy's capacity to strike at ARVN forces. When the enemy massed for the attack on Hill 31 on 21 February, an Arc Light strike was later credited by the FAC with having killed 698 enemy. Throughout the fighting in Lam Son 719, the B-52s were used to support air assaults on enemy objectives, prepare landing zones and clear a path for friendly advancing forces.[17/]

Lam Son 719 proved conclusively that there was no substitute for a tactical fighter in knocking out a moving tank. The destruction of 74 tanks and the damaging of 24 more by tac air practically wiped out the enemy's armored regiment.[18/] More important, as will be pointed out in Chapter III, it may have prevented a major disaster.

Night support to friendly forces was provided by AC-130 and AC-119 gunships and proved invaluable on numerous occasions. When Objective 31 was under attack in February, AC-130s and AC-119s were on continuous duty over the ARVN positions for three consecutive nights, taking a heavy toll of enemy attackers. During Lam Son 719, the USAF gunships flew 239 sorties, with more than one fourth of them flown during the last five days of the operation when the situation was critical.[19/]

The role of the U.S. Army helicopters is discussed briefly later in this report. The performance of the helicopter crews in the midintensity environment of Lam Son 719 was truly exceptional, and they sustained the heaviest U.S. casualties of the operation in Laos. The Army had overestimated the capability of the helicopter to perform against the numerous enemy automatic weapons and the "barrage fire" technique used by enemy troops. This latter tactic made it extremely difficult for choppers to land on many bases. The enemy troops would deploy in rows, each firing continuously into the air, usually when the "slicks" came in to land. Early in the operation, the Army was convinced that they could fly at treetop level and sweep in unexpected at this low level on enemy fixed positions, but after the heavy losses of the first weeks, they soberly

reappraised the helicopter role. The Army flew nearly 90,000 helicopter sorties in Lam Son 719, most of these troop lift and gunship sorties.*

About 2000 C-130 resupply sorties were flown, delivering personnel and cargo to Dong Ha, Quang Tri and the reconstructed base at Khe Sanh, which opened for sustained C-130 operations on 15 February after an abortive attempt to open a dirt assault strip on 4 February. There were major problems with construction of a satisfactory strip at Khe Sanh and building of a second strip with aluminum matting, reducing the C-130 traffic into the base and forcing greater Army use of Highway 9, running from Dong Ha on the coast to the inland base. Nevertheless, between 4 February and 23 March, C-130s hauled some 20,000 tons of cargo to support U.S. and ARVN units involved in the operation.

INTERIM ASSESSMENT OF AIR SUPPORT FOR LAM SON 719

The assessment of the role of air power in Lam Son 719 would require extensive analysis covering interdiction, suppression of AA fire, destruction of tanks, close air support to troops in contact and preparation of landing zones. These will be dealt with briefly here and in more detail in later chapters of this report.

*On a given mission, one helicopter might log five or more sorties, a sortie being defined as a take off from point A to a landing or a hovering attitude at point B.

INTERDICTION

Tactical and strategic air participation in Lam Son 719 was a continuation of an interdiction program, Commando Hunt V, focused on the Steel Tiger area of Laos which included the Lam Son 719 combat area. The difference was that a large ground force was to move into a key interdiction area, thus increasing interdiction effectiveness. At the focal point of the ARVN operation, the junction of Routes 9 and 92, there was effective ground interdiction for a short period. On Routes 92B and 92C, running north and south from Route 9 respectively, traffic came almost to a complete halt for two weeks after the ARVN force reached A Loui at the junction. Sensor-detected truck movements on Routes 92B and 92C showed over 200 and 300 movements, respectively, going north and south weekly in the three weeks prior to Lam Son 719. (See Figure 2.) This rate dropped to practically no detection on 92B and to only a handful of detections on 92C starting around the middle of February. However, traffic on Route 914, leading from just west of Tchepone south of the main ARVN force to Base Area 611, rose sharply in conjunction with the drop in 92 traffic. In January 1971, traffic on 914B averaged around 445 sensor-detected movements a week, rising sharply at the height of Lam Son 719 operations to 1226 movers in the week of 3-10 March, nearly a threefold increase. Enemy truck traffic on Route 1032B from the DMZ area to just north of the Lam Son 719 area (a main reinforcement route) continued high throughout the campaign, rising from only 16 sensor-detected truck movements in the first week of January to 646 movements in the week of 3-10 March, a week before

[redacted]

the enemy's counterattack.[20] Seventh Air Force senior officers were anxious for the RVNAF to carry out its original plan of interdicting 914B and 914C as this obviously emerged as the main enemy alternate route.[21] A full report on the Commando Hunt V interdiction effort which includes the Lam Son 719 operation is being published separately and will shed additional light on overall interdiction effectiveness. Another CHECO report to be published on air operations in the Steel Tiger area of Laos will cover the interdiction efforts of a Lao irregular force to the south and west of Tchepone in an operation called DESERT RAT. This four battalion force, between 16 February and 23 March, sought to interdict Route 23 and 233 if Lam Son 719 pressure forced the enemy to use more westerly routes. The enemy was never forced to use these routes, but the DESERT RAT irregulars, supported by 58 USAF and 350 RLAF sorties, destroyed 39 trucks, damaged 11 more, created 221 secondary explosions and fires, cut 104 meters of road, and came within 18 miles of Tchepone from the west before withdrawing to the southwest.[22]

SUPPRESSION OF AA FIRE

The enemy had deployed throughout the Steel Tiger area an integrated mobile antiaircraft defense system including some 525-575 guns, mainly 37mm and 23mm with some 57mm weapons. In addition, he used artillery, tank and infantry weapons against low flying aircraft, mainly helicopters. SA-2 missiles were also deployed to attack aircraft, including B-52s flying over the area. A particularly effective antiaircraft tactic against helicopters was the use of barrage fire by deployed infantrymen around an

[redacted]

SENSOR DETECTED TRUCK MOVEMENTS IN LAM SON AREA*

	16-23 Dec	23-30 Dec	30 Dec 6 Jan	6-13 Jan	13-20 Jan	20-26 Jan	27Jan-3Feb	3-10 Feb	10-17 Feb	17-24 Feb	24Feb 3Mar	3-10 Mar	10-17 Mar	17-24 Mar	24-31 Mar	31Mar-7Apr
Rtes 1032B	423	137	16	35	347	170	257	238	242	385	302	646	167	355	464	388
914B	390	190	198	585	428	372	397	593	1202	1357	602	1226	926	739	550	466
914C	186	178	137	296	264	166	177	302	430	525	311	435	276	137	255	126
92A	15	30	43	15	38	32	27	127	168	247	103	249	221	177	226	103
92B	123	108	57	80	228	218	261	253	43	0	0	3	2	5	4	28
92C	285	342	223	290	349	308	312	241	49	16	0	36	131	91	43	72
913	66	122	113	169	120	175	126	281	132	43	74	34	22	35	68	80

FIGURE 2

* For a more detailed analysis of sensor detections, see Logistics Movement Appendix.

ARVN base firing RPG, small arms, and 12.7mm machine guns simultaneously against helicopters coming in and out of a besieged area.[23/]

The USAF, with previous experience against enemy AAA in this area, used a variety of ordnance to suppress the enemy fire. The CBU 24 was found not to be effective, because while it could knock out the enemy gunners, too often it would leave the gun there to be remanned by others. It was also difficult to knock out an AAA position with hard bombs, not only because of the need for a direct hit, but because of skillful enemy camouflage of bunkers. The laser-guided Paveway was the most effective weapon against antiaircraft artillery, providing almost 100 percent accuracy with a circular error average of five meters. During the period of this report, tac air destroyed 109 and damaged 18 AA sites.[24/]

USE OF TAC AIR AGAINST ENEMY ARMOR

During Lam Son 719, the enemy was reported to have had between 120 and 200 tanks; there were 241 tac air attacks against this armor, resulting in 74 destroyed and 24 damaged. As indicated earlier in this chapter, this spectacular success may well have deprived the enemy of the one weapon which would have allowed him to inflict a disaster upon withdrawing ARVN forces in the latter stage of the operation. The three enemy tanks used in the operation were the PT-76, a light, thin-skinned amphibious tank, the T-34 medium tank, and the T-54 medium tank equipped with a 12.7mm machine gun and a 100mm cannon in its turret. Fighters used almost their complete range of weapons against enemy armor. A most effective weapon was the laser-guided bomb (MK84 LGB and M118 LGB) which destroyed seven

[redacted]

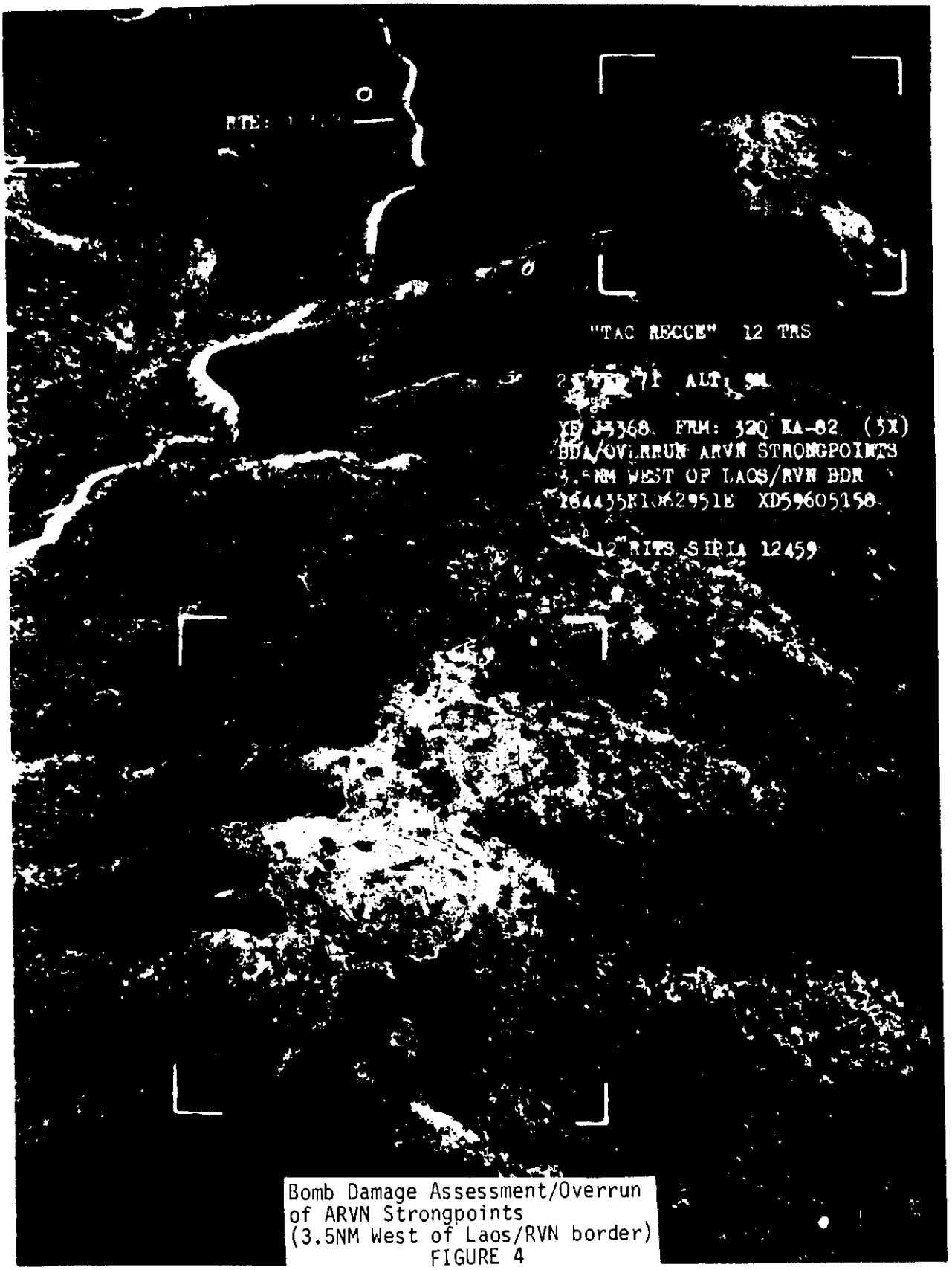
tanks in eight deliveries. The Rockeye MK 20 destroyed and damaged 7 tanks in 22 drops. AC-119 and AC-130 gunships with 20mm and 40mm guns destroyed 24 tanks in 39 attacks. The remainder of the tanks were knocked out with napalm, CBU, hard bombs and tac air 20mm fire. Army helicopters were credited with knocking out six enemy tanks during the operation.[25/] (See Figure 3.)

AIR SUPPORT IN LANDING ZONE PREPARATION

Preparation of landing zones in the Lam Son 719 area by tac air and B-52s was extremely important to the aerial mobility of ARVN forces. As mentioned earlier, in the early phase of the campaign, prior to the Lo Lo landing of 3 March, the Army did not recognize the requirement for intensive prep by tactical air prior to ARVN landings. However, following Lo Lo, tactical air was given more emphasis. A 7th AF concept for LZ prep called for Arc Light strikes during the night, C-130 Commando Vault drops at first light if required, followed by tactical air sorties using a variety of weapons, including smoke if necessary. This procedure meant that RVNAF units could not move into their objectives early in the day, whereas General Lam preferred to give his men as much daylight as possible to prepare night defenses. The increased emphasis on tactical air following Lo Lo reduced helicopter and troop losses although practically every landing zone and pickup zone in the Lam Son 719 area was subject to enemy fire from a force dispersed and prepared for such landings.[26/] (See Figure 4.)

[redacted]

Three Destroyed Tanks
(600 ft Southeast of Hill 31)
FIGURE 3



Bomb Damage Assessment/Overrun
of ARVN Strongpoints
(3.5NM West of Laos/RVN border)
FIGURE 4

[redacted]

Certainly in Lam Son 719, tactical air support linked with the massive firepower of the B-52 formed an essential and vital cover for the ARVN incursion and its withdrawal. Without the assurance that the friendly aircraft would be overhead and that the skies above Lam Son 719 would be free of enemy air, the operation would probably not even have been contemplated.

This chapter has reviewed the overall operation. The following chapter reviews some of the initial planning that went into the operation.

[redacted]

[redacted]

CHAPTER II

PLANNING FOR LAM SON 719

CONCEPT OF OPERATIONS

As originally conceived, Lam Son 719 was an operation designed to counter the achievement of North Vietnam's primary goal for 1971: to expand its lines of communication (LOC) to Cambodia and the Republic of Vietnam.[27] This goal was not new, as the enemy had consistently striven to improve his Laos LOCs during the dry season each year. However, with the loss of his sea supply route to Cambodia via Kompong Som in 1970, his trail activity in Laos became more important to him in sustaining his operations. Therefore, the enemy reconstituted his traditional trail system in the eastern portion of the Laos panhandle. He also undertook some expansion of the system to the west, but he never used this additional capability to any appreciable extent.[28]

The XXIV Corps Lam Son 719 Operation Order called for a coordinated air and ground attack along Route 9 into the enemy's Base Area 604 west and south of Tchepone. All enemy caches discovered were to be destroyed in place, not removed following their capture as in the Cambodian cross-border operation. To deny the enemy his sanctuaries in the area his LOCs were to be cut at Tchepone and the intersection of Routes 9 and 92.[29] While search and destroy operations were being conducted in Base Area 604, the enemy's major routes to the north and south of Tchepone would be blocked. The ground action in Laos was to be the sole responsibility of the RVN forces, who would be supported by U.S. tactical air, B-52s, gunships,

[redacted]

helicopters and artillery in this combined operation. The entire operation was originally planned to be conducted in four phases.

THE PLANNED PHASES

Phase I. This phase, commencing on D-Day, 30 January, called for the 1st Brigade (Bde) of the U.S. 5th Infantry Division supported by tac air to attack to the west so as to clear and secure Route 9 from Dong Ha to the western Quang Tri border and secure Vandegrift Fire Support Base (FSB) and Khe Sanh. At the same time the 1st Brigade was to cover and protect the deployment of two U.S. heavy artillery battalions to western Quang Tri Province and establish a screen southward to the Laotian salient.* Simultaneously, the U.S. 101st Airborne Division was to set up defensive positions to protect the central and eastern portions of the Demilitarized Zone (DMZ). An ARVN 1st Armored Bde Task Force was to follow the 1st Bde of the 5th Infantry Division and, after the capture of Khe Sanh, was to move to the northwest of Khe Sanh to screen the northern flank.[30/]

An integral part of Phase I was concerned with prepositioning 6500 troops of the ARVN 1st Airborne Division and 3000 troops of a Vietnamese Marine Brigade. The plan was for the U.S. 834th Air Division to airlift these troops from the Saigon Area through Tan Son Nhut and Bien Hoa to the off-load bases of Quang Tri and Dong Ha in MR 1 during the period D+1

*For security purposes, and to confuse the enemy in event of leaks, Lam Son 719 areas of interest were given the names of locations in the A Shau Valley and the entire operations was initially referred to as Dewey Canyon II. Dewey Canyon I had been an earlier operation in the A Shau Valley.

[redacted]

through D+4. In addition, it was expected that about 200 airlift sorties would be needed to support U.S. forces in Phase I. Airlift operations were to be on a 24-hour-per-day basis through D+4 when normal daylight operations were to be resumed.[31/]

All of Phase I was expected to require five to eight days for completion.

Phase II. Under this phase, the South Vietnamese I Corps, supported and assisted by the U.S. XXIV Corps and 7AF tac air, was to attack rapidly to the west using both ground and air mobile operations to seize Tchepone. The first objective on the way to Tchepone was A Loui, the intersection of Routes 9 and 92. The ARVN 1st Airborne Division, with the 1st Armored Brigade attached to it, was to conduct the main attack along Route 9 as far as A Loui. Once A Loui had been secured, an airborne brigade of the ARVN 1st Airborne Division was to conduct heliborne operations from Khe Sanh in order to capture Tchepone. At the same time, the ARVN 1st Infantry Division was to conduct a series of heliborne operations to seize the high ground to the south of Route 9G between A Loui and Tchepone. The ARVN 1st Ranger Group was tasked with establishing blocking positions to provide security for the northern flank. One Vietnamese Marine Corps Brigade, initially in reserve, was to later conduct operations south of Khe Sanh and against the Laotian salient. Two days prior to the start of Phase II, U.S. tac air was to begin a concentrated AAA suppression campaign, to last from three to seven days, along Route 9G and in the vicinity of Tchepone.[32/]

[redacted]

Phase III. According to the XXIV Corps Operation Order for Lam Son 719, this phase was to start after the capture of Tchepone. Having consolidated their positions along Route 9 in the Lam Son area of operations, I Corps was to conduct systematic search and destroy operations in the enemy's Base Area 604 west and south of Tchepone. The 1st Airborne Division was then to establish blocking positions northwest of Tchepone along Route 91 and southeast of Tchepone along Route 9G so as to isolate the area. At the same time the 1st Infantry Division was to conduct search and destroy operations in its assigned area just to the south of the Xe Pon River while the 1st Ranger Group would continue its blocking and screening operations on the north flank. Throughout this phase, which was to last until the beginning of the southwest monsoon season, tac air was to support the search and destroy operations in Base Area 604 and the blocking positions along the LOCs.[33/]

Phase IV. This phase, also supported by tac air, was to consist of the I Corps withdrawal from Base Area 604 under one of two options: either by (1) the Airborne Division withdrawing directly to the east along Route 9 to cover an attack to the Southeast in Base Area 611 by the 1st Infantry Division or (2) by both divisions attacking Base Area 611. Either option was to include the insertion of guerilla units and RVNAF elements to stay behind and harass the enemy in Base Areas 604 and 611. (See Figure 5.) Under Option I, the 1st Airborne Division would withdraw from its blocking positions to A Loui. It would then act as cover for the 1st Infantry Division south of the Xe Pon. The infantry would reorient to the southeast and attack through Base Area 611 on its way back to South Vietnam. Once

again the 1st Ranger Group would continue its protection of the north flank. The 1st Armored Brigade in the vicinity of A Loui would withdraw to Khe Sanh on order and revert to a reserve status. The 1st Ranger Group on the north flank would also withdraw to Khe Sanh and come under the operational control of the 1st Armored Bde which would prepare a task force for an attack to the south on order. The 1st Airborne Division would leave its blocking positions, and either follow the 1st Infantry Division and support it in its attack through Base Area 611 or else withdraw along Route 9 to Khe Sanh. Also, under this option, two Vietnamese Marine Corps Bdes would attack Base Area 611.

Under Option 2 of the final phase, with both the Airborne and the Infantry Division attacking, the maneuver concept of the various elements would remain unchanged with one exception. The 1st Infantry Division and the 1st Airborne Division, after attacking through the western portion of Base Area 611, would turn north in an attack through the Laotian salient, rather than continue to the southeast.[34/]

A COMBINED OPERATION

Lam Son 719 was a combined operation, but it was combined in such a way as to have somewhat unique characteristics. Because the operation was conducted in Laos, the roles of the Republic of Vietnam and the United States were quite different from what had been the norm in the Republic. The United States operated under certain inviolable restrictions. U.S. personnel were not to operate on the ground in Laos, and therefore the RVN forces operated without U.S. advisors.

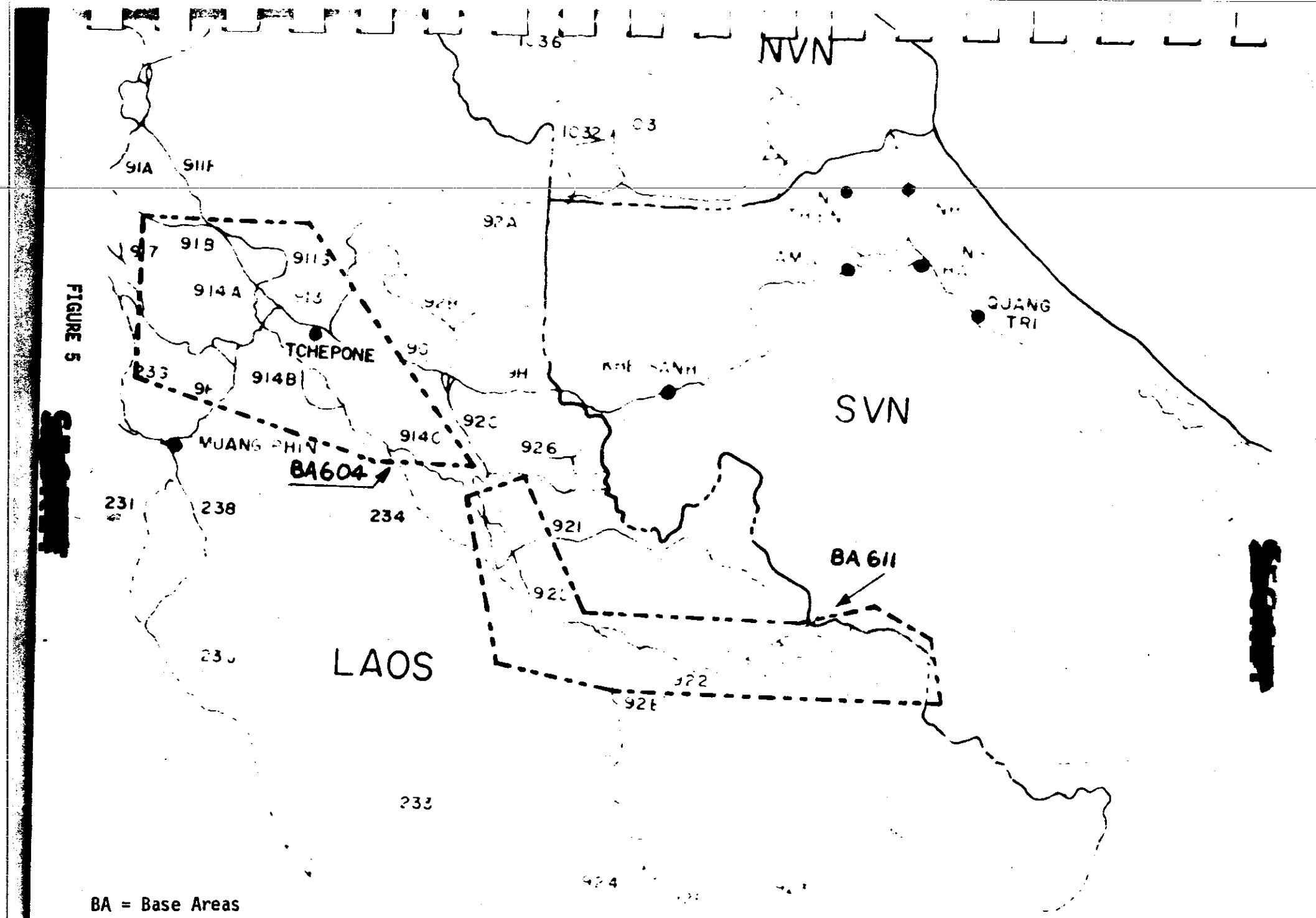


FIGURE 5

BA = Base Areas

The CG of ARVN I Corps, Lt General Hoang Xuan Lam, was in command of the ground campaign in Laos. COMUSMACV, General Creighton W. Abrams, of course, commanded all U.S. forces involved in the operation, and under him there were separate ground and air commanders. The CG of U.S. Army XXIV Corps, Lt General James W. Sutherland, commanded all U.S. Army forces in Military Region I of the RVN who were supporting Lam Son. The Commander of the 7AF, General Lucius D. Clay, Jr., commanded all supporting USAF resources. This command set up functioned effectively, but it was not without its problems in the areas of planning and appreciation for the use of tac air.[35/]

Evidence of a lack of appreciation for the use of tac air occurred early in Phase II when the RVNAF actually crossed into Laos. Often ground tactical decisions relative to combat assaults were not announced in sufficient time to permit proper coordination of tac air strikes in preparing landing zones. (The preparation of landing zones is discussed in detail in Chapter IV of this report.) Briefly, General Lam chose not to coordinate his moves with XXIV Corps and DASC Victor. Seventh Air Force wanted not less than three hours to properly prepare a landing zone and counter the AA threat. However, General Lam was in favor of early morning insertions of his troops before the weather was good enough for tac air to bring its full power to bear. He, therefore, undertook insertions without prior coordination with XXIV Corps and DASC Victor and as a result suffered some rather severe losses. As will be shown later, when subsequent insertions were coordinated with the Air Force and tac air was given sufficient time to prepare a landing zone, losses were reduced.[36/]

[redacted]

To improve planning and coordination, COMUSMACV on 3 March directed that a coordinating committee of general officers be established to act as a liaison and planning group between General Lam's I Corps Headquarters and XXIV Corps. The committee became operational on 6 March and consisted of a U.S. Army Brigadier General as an advisor for artillery, a U.S. Army Brigadier General as an advisor for Army aviation, a USAF Brigadier General as an advisor for tac air, and an ARVN Brigadier General as an advisor for ARVN artillery. Once established, that committee met with General Lam on a daily basis, and, in effect, served as additional staff for him to advise on all planned actions and to insure that coordination was effected with the various participating forces. The objective was to provide I Corps with the best possible support.[37/]

CONTROL OF TACTICAL AIR

Procedures for the control of tactical air in support of the South Vietnamese ground forces participating in operations in Lam Son 719 were established by I DASC Operations Order 1-71. Under this plan, I DASC at Da Nang directed the required air support for Phase I of the operation through the established Tactical Air Control Parties (TACPs) within the RVN. For Phases II, III and IV; a new DASC, designated DASC Victor, was established at Quang Tri on 31 January to control air support for the RVNAF operating in Laos. This DASC became operational on 7 February. Forward air controllers from the 23d Tactical Air Support Squadron at Nakhon Phanom, Thailand -- call sign Nail -- were deployed to Quang Tri to provide the necessary FAC resources dedicated to air support of the ground forces in

[redacted]

Laos. Upon arrival at Quang Tri, these FACs were given the call sign Hammer, and it was through Hammer operations that DASC Victor controlled out-country air support. I DASC had Barky FACs at Quang Tri to provide air support for U.S. ground forces in Vietnam in Lam Son East. I DASC, as had been the case prior to the operation, remained under the control of the Tactical Air Control Center at 7AF Hq, while DASC Victor was under the control of the 7AF Command Post, Blue Chip.[38] (See Figure 6.)

Another integral part of the control net was the 7AF Airborne Battlefield Command and Control Center (ABCCC), call sign Hillsboro/Moonbeam, which controlled air space over Laos. In Lam Son 719, the priority task of the ABCCC was to serve as a coordinating facility which accepted supporting tac air and then handed it off to a FAC for use in the area of operations. DASC Victor had operational control over the Hammer FACs. The DASC assigned the FACs to their various sectors, briefed them as to the location of known or possible targets, and passed in-flight advisories to them. The DASC also established priority on air for a particular FAC, but the ground situation changed so frequently that the FACs often had to coordinate changes in priority through the ABCCC and on occasion amongst themselves. In practice the FACs decided where to put the air strikes depending on the tactical situation at any given time.[39]

Initial discussions between representatives of XXIV Corps, I Corps and 7AF were held in mid-January to develop the concept and procedures for air support in Lam Son 719. At that time I Corps indicated that they would employ two divisions plus two separate brigades. One force was to

[redacted]

be located north of Route 9, one astride Route 9, and the other to the south of Route 9. Division Tactical Operation Centers (DTOCs) were to be located in Laos. With the DTOCs so located this would have meant that Air Force TACPs (to transmit ground requests to the FACs) could not have been located with the DTOCs because of the prohibition against U.S. forces on the ground in Laos. Therefore, it was decided that English-speaking Vietnamese observers would be assigned to FAC aircraft to translate as required. On 23 January, I Corps announced that its DTOCs would be located in the RVN in the vicinity of Khe Sanh, and it was then possible to establish TACPs at the same locations, thus simplifying communication procedures. However, it was decided to retain the English-speaking Vietnamese observers to assist the FACs in communicating with the individual ground commanders that they would be supporting.[40/] To support I Corps, 7AF provided FACs for each main force operating area with a planned stream of tactical air for each area. A stream was to consist of a set (two) of fighters every fifteen minutes.

On 27 January, three days prior to D-Day, the I Corps Commander notified DASC Vicor that he would be employing three division-size forces--the 1st Airborne, the 1st Infantry and the Marine Division. At this point, another TACP was established, collocated with the additional DTOC in the vicinity of Khe Sanh. Throughout the operation there were three DTOCs, each with a TACP.

Requests for immediate air came up through RVNAF command channels to a DTOC where they were relayed to an Air Force liaison officer in a

[redacted]

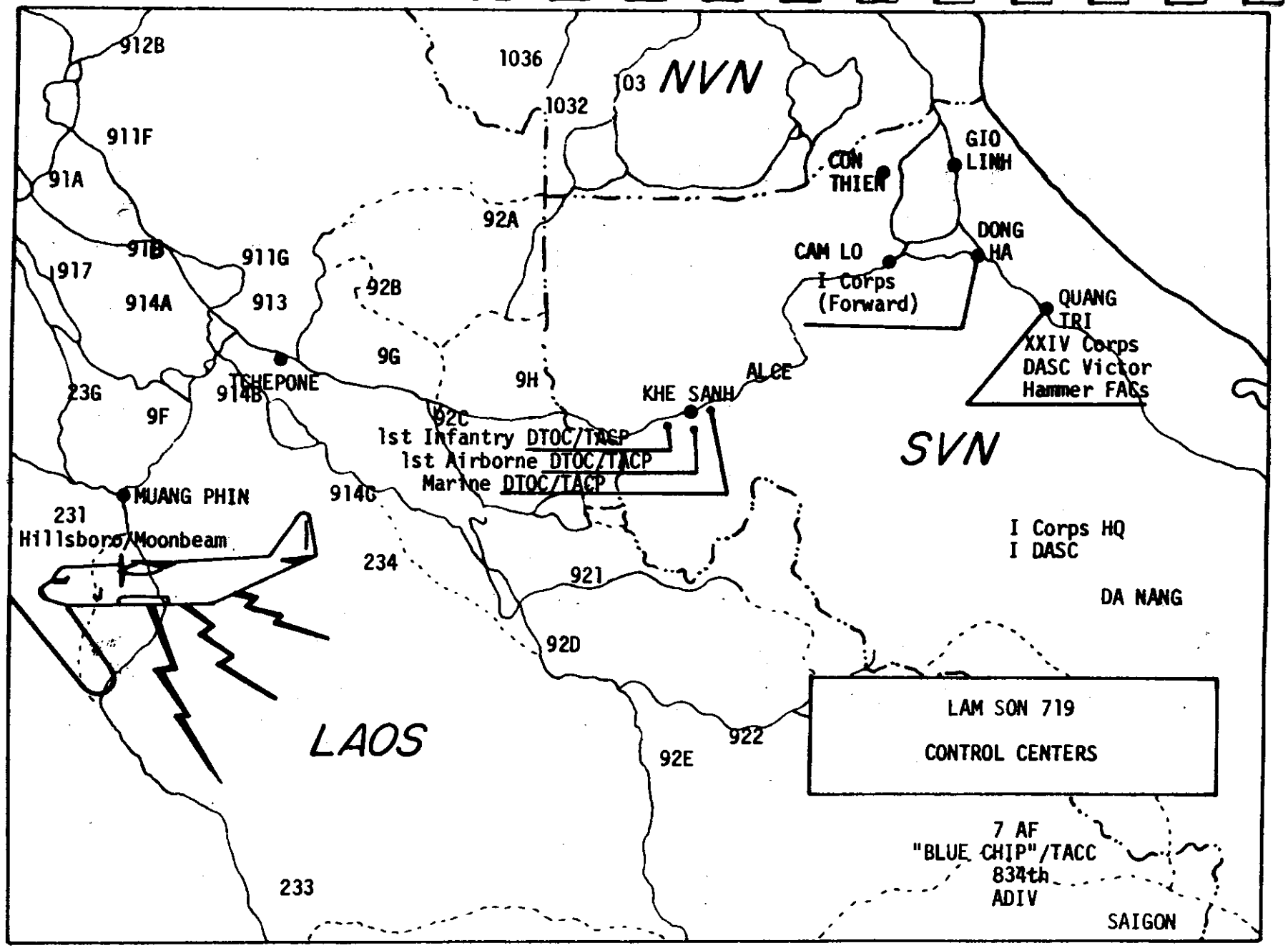

912B
1036
103
NVN
1032
911F
91A
CON THIEN
GIO LINH
92A
91B
911G
DONG HA
CAM LO
I Corps (Forward)
917
914A
913
92B
QUANG TRI
XXIV Corps
DASC Victor
Hammer FACs
9G
9H
ALCE
TCHEPONE
914B
KHE SANH
23G
9F
92C
1st Infantry DTOC/TACP
1st Airborne DTOC/TACP
Marine DTOC/TACP
SVN
MUANG PHIN
914C
231
Hillsboro/Moonbeam
I Corps HQ
I DASC
234
921
DA NANG
92D
LAM SON 719
CONTROL CENTERS
LAOS
922
92E
7 AF
"BLUE CHIP"/TACC
834th
ADIV
233
SAIGON

FIGURE 6

TACP, and from him directly to an airborne FAC or else through Victor DASC to a FAC, depending on the urgency of the ground situation. The FAC also received immediate requests directly from ground units in contact with the enemy. If the FAC had air available from the preplanned stream of air being fed to him by the ABCCC, he could use this resource to fill the request. If he needed additional air, he could coordinate with the ABCCC and obtain air in that way. In filling the request, the ABCCC could divert other preplanned air in the Steel Tiger interdiction area or air in the stream to the FAC, or request a scramble from Blue Chip depending on the urgency of the situation. Priorities to be used by the FACs in determining the urgency of requests were: (1) troops in contact (TIC), (2) search and rescue, (3) preplanned targets, (4) visual reconnaissance and (5) other missions requested by ground commanders.[41/]

Requests for preplanned air support flowed through the DTOCs to I DASC at Da Nang. I DASC then forwarded the preplanned requests to DASC Victor so as to arrive there no later than 1000 hours on any given day. From DASC Victor these requests were forwarded to 7AF where they were incorporated into the fragmentary orders for the next day's activity.[42/]

Lam Son 719 opened in Laos with Hammer FACs and streams of air assigned to each Division area, with a set of fighters every fifteen minutes in each stream. As the RVNAF area of operations enlarged, and the action became more intense, the number of FACs was raised to six, with each FAC being assigned his own sector to work. (As noted in Chapter I, there was an additional roaming FAC to act as an artillery spotter.) The increased demands for