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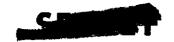
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long and 15 miles wide, in order to obtain coverage of the LOC in the Lam Son area. In addition, the whole DMZ and an area ten miles deep into North Vietnam was to be photographed to locate artillery pieces in the area.

Plans called for extensive tactical airlift support for the operation, including an initial surge effort during the Phase I build-up, and a sustained airlift to Khe Sanh to resupply Lam Son forces during Phases II through IV. Preparations were also made for fixed-wing resupply of RVNAF forces in Laos, though this capability was never utilized during the operation. Planners envisioned that this requirement might materialize during Phase III of the operation in conjunction with RVNAF occupation of, and activities in, the Tchepone area.

2) (S) Helicopter Support. The whole concept of Lam Son 719 was woven around extensive U.S. helicopter support. Helicopter assault, resupply, and extraction were essential to all phases of the operation. In addition, XXIV Corps placed heavy emphasis on the maximum exploitation of helicopter reconnaissance and fire power in support of the operation. Lam Son 719 plans were tailored to take advantage of the mobility, speed, and flexibility offered by airmobile operations.

(S) Helicopter vulnerability became a source of debate during the planning phase, particularly in view of the major role which they were programmed to take. Air Force planners, based on their experience



in the nonpermissive environment in Laos, cautioned that the threat against helicopters would be difficult to overcome, and that plans should be made for heavy tactical air support of helicopter operations, particularly in activities such as landing zone preparation. Based on their own experience in the lower AAA threat of South Vietnam, however, Army planners felt minimal tactical air support was needed, and that suppressive fire by helicopter gunships would prove adequate.

- f. (S) Estimates of Opposing Forces.
- It would become apparent that Lam Son 719 plans underestimated the strength and capabilities of enemy forces that would be encountered in the operation. The enemy had positioned an unexpectedly large force in the target area, and had deployed far more armor than anticipated. His rear service forces were surprisingly well prepared for battle and were well coordinated with his main force units. In addition, the enemy skillfully deployed a well-integrated and highly-mobile air defense system throughout the area, making use of tactics tailored to counter the airmobile techniques employed by RVNAF forces.

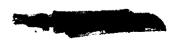
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The capabilities of the enemy's antiaircraft system were seriously underestimated by Army planners. As far as the number of enemy antiaircraft weapons was concerned, there was essentially no difference between Army and Air Force estimates. The Army XXIV Corps Operations Order for Lam Son 719 estimated 170-200 medium caliber (23mm, 37mm, 57mm, and 100mm) weapons in the area, while the Air Force estimated about 155 of these types of weapons. Subsequent





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experience in Lam Son 719 supported these Army/Air Force estimates. It was not possible, of course, to estimate the number of automatic weapons (12.7mm and 14.5mm) in the area. The Air Force regarded these weapons, however, as a serious threat to helicopter operations. It was this category of weapons which XXIV Corps planners seriously underestimated, and which accounted for most of the helicopter losses. Again, Army planners felt that the antiaircraft threat would not really be a serious problem, and that the helicopter could survive in the Lam Son 719 environment.

- g. (S) Enemy Awareness of the Operation.
- (S) Enemy awareness of the possibility of an RVNAF incursion into Laos was in evidence as early as the autumn of 1970. In October 1970, NVN agents in the Da Nang area were seeking details of the invasion plans, and during the same month an NVA headquarters was established in Laos to defend the Tchepone LOC area against an RVNAF incursion. Throughout the last quarter of 1970, aerial observers and friendly agents reported enemy troop build-ups in the Tchepone area and throughout Base Area 604.
- (S) As the date for the operation drew near, the friendly troop build-up in western Military Region I (in SVN) was countered by enemy reinforcement of rear service units in Base Area 604. During this period, rear service unit defenses were strengthened and coordinated with main force infantry units. By the time the incursion was launched, the enemy had deployed ground forces, a sizeable





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tank force, heavy artillery, and formidable air defenses throughout the area.

- 2. (S) (U) Operations
 - a. (S) Conduct of the Operation.
- Phase I, the Build-up in Northern SVN. On 30 January 1971, U.S. Army mechanized and engineer units moved out from Dong Ha to secure Route 9 to Khe Sanh, the forward operating base for the operation, and then on to the Laos/SVN border. Simultaneously, diversionary movements were made toward A Shau, supported by heavy artillery fire and tactical air strikes. By the next day, 31 January, Route 9 was open to Khe Sanh, and Army engineers began restoring the Khe Sanh air strip and emplacing heavy artillery in the area. By 3 February, Army ground forces clearing Route 9 had reached the border. Subsequently, U.S. and RVNAF units initiated sweeping operations north of Route 9 and south of Khe Sanh to the border, and established blocking positions below the DMZ.
- (S) This initial phase of the operation was supported by an around-the-clock airlift of RVNAF and U.S. forces from the Saigon area to Dong Ha and Quang Tri. By 6 February, over 2,000 U.S. and 9,000 RVNAF troops, together with more than 4,200 tons of cargo, had been airlifted by C-130 to the Dong Ha/Quang Tri area. Following completion of this initial airlift of forces, plans placed heavy reliance on C-130 support in supplying Khe Sanh, and therefore hinged on the restoration of that airfield. When Army engineers



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arrived at Khe Sanh, however, they decided that the old airstrip was too badly damaged and that a new airstrip would have to be constructed. They finished the new strip on schedule, on 4 February, but it was too soft to support C-130 operations. A usable airstrip was not completed until the middle of February, and up to that time resupply of Khe Sanh was accomplished primarily by Army truck convoys.

Victor was organized to control tactical air support for Lam Son 719.

BARKY FACs (I DASC) controlled in-country strikes in support of the operation throughout the build-up phase. During this period, HAMMER FACs (V DASC) were organized to control out-country air support of the operation. Near the end of Phase I, artillery and a limited number of air strikes were directed against suspected antiaircraft positions in the region. Additionally, some air strikes were placed on prime interdiction points in the Tchepone/Route 9 area.

Assault to Ban Dong. The RVNAF incursion into Laos began on 8 February with helicopter assaults coordinated with a ground invasion along Route 9. Movement of the armored task force along Route 9 was slower than expected. Enemy harassment, compounded by dense underbrush along the road, slowed ARVN infantry screening for the column. Poor road conditions, heavy rain, and enemy interference hindered road improvements by ARVN engineers and further delayed progress of the column.



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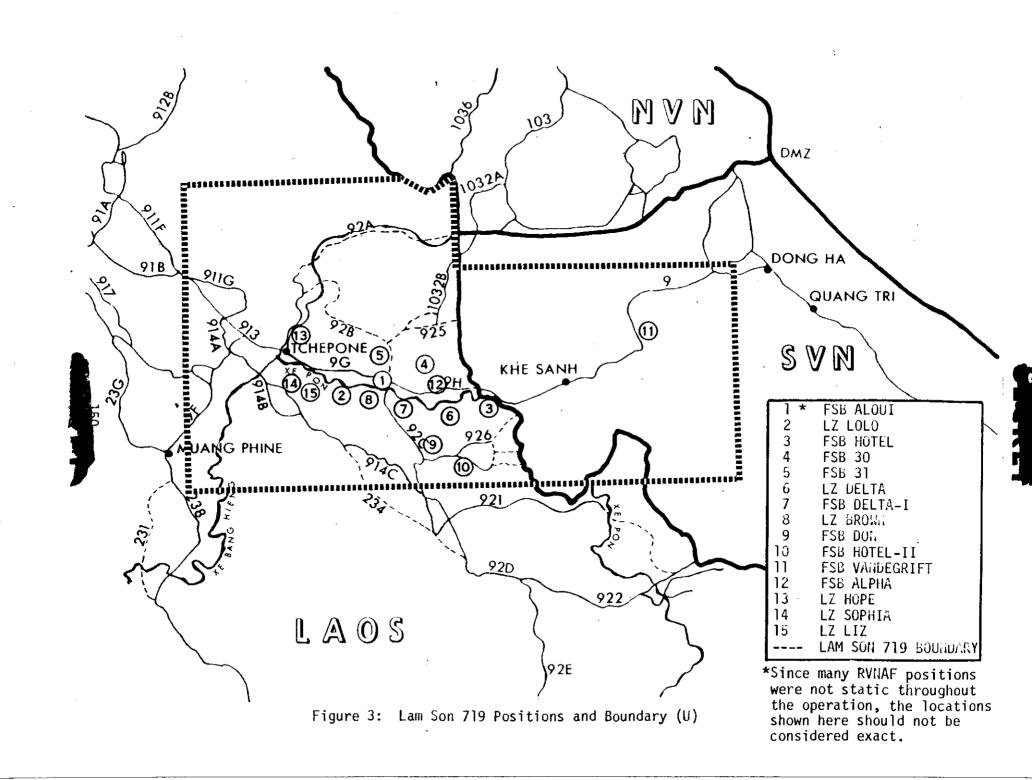
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while the armored task force was slowly progressing along the 20 kilometers to Ban Dong, helicopter assaults were being made into key areas. On the first day, heliborne forces seized high ground positions north and south of Route 9. Poor weather cancelled insertions scheduled on the second day and hampered tactical air strikes. On the third day, the insertion of troops into Landing Zone Aloui (near Ban Dong at the intersection of Routes 9 and 92) was delayed by anti-aircraft (AA) weapons fire. The insertion was carried out during the afternoon, after TAC AIR and helicopter gunships suppressed the AA fire. Lead units of the armored task force reached the intersection on the same afternoon and linked up with the airborne units.

three days was relatively light. Intelligence indicated that the enemy was moving out of the area, and resistance encountered during most of the heliborne combat assaults was not particularly heavy.

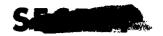
The relatively light enemy antiaircraft reaction to insertions during the initial days of Lam Son 719 reinforced Army beliefs that helicopter gunships and artillery could provide most of the suppressive fire needed for heliborne combat assaults. Thus, minimum emphasis was placed on TAC AIR preparation of landing zones. To complicate matters, General Lam often ordered the insertions at the last minute, without prior coordination of the U.S. units involved. Further, the ARVN preferred that heliborne assaults be conducted as early in the morning as possible, to allow the inserted troops enough time to set up defensive positions.





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This permitted little or no time for TAC AIR preparation. TAC AIR was consistently placed in the position of reacting to enemy resistance encountered during the assault, rather than being given time to prepare the landing zone and the surrounding area prior to the insertion $\frac{214}{4}$ attempt.

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A Change in Plans. On 12 February, President Thieu made a decision which changed the entire character of the South Vietnamese incursion into Laos. General Lam, having experienced difficulties in securing Route 9 for logistics support, and concerned about protecting his flank, gave his assessment of the situation to President Thieu. The President decided that, at least for the time being, emphasis would be shifted from Tchepone to the Ban Dong area. Effort was to be concentrated on cleaning out the caches in the Ban Dong vicinity with only a limited force planned for entry into the Tchepone area. With RVNAF forward momentum stalled, the enemy seized the initiative.

As the RVNAF stopped and consolidated, expanding their defensive positions and searching for caches, the enemy began to surround their encampments. Typically, three or four days after the establishment of a fixed FSB, the enemy had already organized and reinforced. Attacks by fire increased, followed by nighttime ground attacks. Positions on the northern flank were the $\frac{216}{}$ first to feel the increasing pressure.





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By 14 February, the northernmost positions were subjected to heavy ground assaults, but air support helped repel the attacks. Continuous gunship coverage was provided at night, and fighters struck enemy positions throughout the day. B-52 strikes were used in support of troops in contact for the first time on 14 February, and this tactic was used increasingly throughout the campaign. In order to reduce the effectiveness of the air strikes and RVNAF artillery, the NVA used the tactic of "hugging"* the friendly positions. Friendly units were reluctant to patrol aggressively from their positions, preferring to stay close to their bases, and the NVA took advantage of \$\frac{217}{217/}\$ the situation.

4) (S) Enemy Attacks. Mounting enemy resistance to the RVNAF incursion exploded into an enemy offensive which began on 18 February and lasted about two weeks. On the 18th, the 39th ARVN Ranger Battalion, positioned well to the north of FSBs 30 and 31 on the northern flank, was subjected to intense shelling followed by coordinated tank and infantry attacks by multi-battalion forces. Intense automatic weapons and small arms fire made helicopter resupply of the Ranger camp increasingly difficult, until finally it could no longer $\frac{218}{}$ be sustained.

(S) During the next two days, the outnumbered Ranger battalion continued to fight, supported continuously by fighters,

^{*}Moving in and staying close to RVNAF positions.



B-52s, helicopter gunships, and artillery. During the critical night-time hours, continous flareship/gunship support was provided. On numerous occasions the gunships struck the enemy in the outer trenches, within the camp's perimeter. Though subjected to continuous, air strikes, the enemy attacks proceeded with increasing intensity. Helicopter resupply and medical evacuation were attempted without success. The remains of the badly mauled Ranger battalion exfiltrated to a nearby Ranger (21st Battalion) position, having suffered 178 killed or missing and 145 wounded, with only 108 remaining combat effective—a casualty rate of 75 percent. The price to the enemy was even higher, \$\frac{219}{219/}\$ estimated at over 600 dead.

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(S) While these attacks were occurring on the northern flank, elements of the ARVN 1st Infantry Division ranged deep into enemy territory. These infantry units patrolled from their fire support bases more aggressively than their compatriots to the north.

They moved southeasterly to Routes 92D and 914, uncovering and destroying enemy pipelines and supplies, in spite of mounting enemy resistance.

By 25 February, a widespread enemy counter offensive was underway. Supported by tanks and heavy artillery, the NVA placed heavy pressure on the northernmost RVNAF positions, forcing evacuation of remaining forward Ranger positions and removal of the survivors from the operation. Key airborne infantry positions north of Route 9, FSBs 30 and 31, were subjected to severe assaults. FSB 31 was hardest hit and was overrun on the night of the

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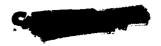
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25th by coordinated tank and infantry attacks while a thunderstorm prevented air support of the position. The defenders of the FSB, the 3rd Airborne Brigade, were so badly battered that they were withdrawn from the operation, and were still refitting and replacing losses in early April. Enemy losses were also high. TAC AIR, B-52s, artillery, and helicopter gunships had attacked the enemy continuously until the deteriorating weather prevented further air strikes. The weather cleared again the following day, and more strikes were put in on enemy armor and positions. An estimated 250 enemy were killed, and 15 tanks $\frac{221}{}$ the RVNAF reinforced, and on 28 February airborne and armored units reported that they had retaken FSB 31. Enemy tank and infantry attacks continued against FSBs 30 and 31 but, with heavy $\frac{222}{}$ air support, were driven back.

The northern positions, though hardest hit, were not the only targets of the enemy offensive. Enemy attacks were directed against units throughout the combat area, with the fiercest attacks directed against forward RVNAF forces along the entire periphery of the operation. Units of the ARVN 1st Division had progressed as far as Routes 92D and 914, but were bogged down by stiff enemy resistance and heavy attacks by fire. For some of these units, resupply by helicopter was precluded by the intense standoff attacks. Units positioned south of Route 926, at Fire Support Base Hotel-II, could not be resupplied for four consecutive days, and attempts to evacuate the position were unsuccessful because of heavy enemy fire. The units abandoned the FSB





in search of a secure landing zone and were finally lifted out of the area on 28 February. All RVNAF positions were at times subjected to heavy attacks by fire, particularly during troop deployment or resupply operations. These attacks seemed designed to neutralize RVNAF mobility and impose a static posture on friendly forces while the enemy positioned for attack.

Around the 28th of February the intensity of the fighting throughout the Lam Son area began to slacken, although locally heavy fighting occurred at times, particularly in the FSB 30/31 area. Both friendly and enemy forces introduced reinforcements during this period, so that near the end of the first week of March friendly strength had reached nearly 17,000 men, while enemy strength, including 224/rear service personnel, was estimated at 35,000.

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The Assault to Tchepone. The severity of enemy attacks, particularly on the northern flank, prompted further adjustment of RVNAF plans. The airborne forces north of Route 9 had originally been assigned the task of capturing Tchepone, while the Rangers were to stay behind to screen the northern flank. With the Rangers removed from the fray, and the Airborne troops tied down north of Route 9, the 1st ARVN Infantry Division was assigned the task of capturing Tchepone. Vietnamese Marines were to move into 1st Infantry positions on the southern flank as the 1st Division evacuated these positions and leap-frogged to Tchepone. On three consecutive days, the ARVN 1st Infantry Division was to conduct battalion-sized heliborne assaults into



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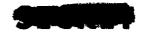
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three landing zones on the ridgelines south of Route 9 leading to Tchepone. On the fourth day, a two-battalion assault was planned into a site northeast of Tchepone, to be followed by the capture of the abandoned town. The first heliborne assault on the way to Tchepone was to be conducted on 3 March at Landing Zone Lolo.

By this time, the enemy build-up throughout the Lam Son area was tremendous. Enemy forces outnumbered friendly forces two to one. Enemy automatic weapons and mortar teams were well deployed throughout the area, and helicopter insertion, resupply, and evacuation operations became more and more difficult and, at times, impossible. Helicopter hits and losses were mounting, yet U.S. Army officers continued to ignore General Abrams directions to emphasize TAC AIR support of helicopter operations. The apparent belief that helicopters could survive in the Lam Son area without heavy tactical air support prepared the way for staggering losses at Landing Zone $\frac{226}{1000}$

Landing Zone Lolo was situated on a high ridgeline to the south of and overlooking Route 9, somewhat less than half way to Tchepone from Ban Dong. During the night of 2-3 March, eight B-52 sorties struck positions south of the site, and on the morning of the 3rd, six TAC AIR sorties cleared the primary and alternate landing zones. Subsequently, three more sorties delivered anti-personnel ordnance on the primary landing zone, and artillery support began. Up to the time



was interrupted after four of the first 19 helicopters arriving at the site were shot down, and many others hit. By 1300 hours 18 more TAC AIR sorties had been directed against suspected enemy positions and another insertion was attempted and repulsed. Fourteen more sorties were expended, and the assault was resumed at 1600, and finally completed at 1830. Of the 40-odd helicopters involved, almost all took hits, 20 were shot down, and seven more were totally destroyed.

Throughout the hectic day, the FACs supporting the insertion were unable to pinpoint enemy positions under the heavy foliage in the area. The FACs relied on Army helicopters and the ARVN ground commander to provide the locations $\frac{228}{}$ from which fire was being taken.

General Abrams called together a group of Army and Air Force officers and directed General Sutherland and his staff to follow the Air Force plan for landing zone preparation. That plan had originally been presented to Army planners in January but they rejected it as unnecessary. Only a week before the Lolo assault, General Abrams had directed 7AF and XXIV Corps to coordinate landing zone preparation between themselves and ARVN representatives, and the Air Force again outlined the plan in detail and urged that it be followed—it was not followed at Landing Zone Lolo. General Abrams relieved a high-ranking U.S. Army officer of his duties, and formed a Coordination Board composed of

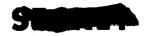
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an Army artillery, an Army helicopter, and an Air Force TAC AIR representative. The General directed these three officers to control U.S. resources for General Lam, and to respond to his requests in a well-coordinated, professional manner. He then told the U.S. Army representatives present that they had ignored the Air Force's plan for landing zone preparation from the beginning of the operation, that this had cost them terribly, and that the Air Force's plan would now be followed.

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Landing Zone Liz was located on the ridgeline south of Route 9 several miles to the west of Landing Zone Lolo. The site had been cleared by a 1 March COMMANDO VAULT* drop, and the assault was scheduled for 4 March. Fourteen ARC LIGHT sorties struck the area surrounding the primary and alternate landing zones during the pre-dawn hours before the assault. At first light, TAC AIR cleared the primary and alternate landing zones with heavy ordnance, and then began to lay down anti-personnel ordnance. By 1000, the scheduled time of the assault, 25 sorties had prepped the area, which was, in the opinion of the on-scene FAC, ready for the insertion. Unfortunately, weather at Khe Sanh had temporarily grounded the helicopters. TAC AIR continued to strike the area while waiting

^{*}A COMMANDO VAULT drop employed the BLU-82 (15,000 pound) bomb delivered by a C-130 aircraft to create helicopter landing zones in densely foliated areas. (Prior to Aug 1970, the M-121 (10,000 pound) bomb was also employed in COMMANDO VAULT drops.)



for the arrival of the helicopters. Once the helicopters arrived, the assault was delayed by enemy fire until 1715, by which time a total of 61 TAC AIR sorties had prepped the area. During the insertion, nine more sorties struck the area. Despite the extensive preparation, losses were still heavy, though much reduced in comparison to the Landing Zone Lolo insertion the day before. Of 65 troop lift helicopters involved, $\frac{230}{18}$ were shot down, two of which were destroyed.

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(S) Landing Zones Sophia and Hope. On the remaining two heliborne assaults in the Tchepone area, surprisingly little enemy resistance was encountered. On 5 March Landing Zone Sophia, southeast of Tchepone, was assaulted by a two-battalion force after weather had temporarily delayed the insertion. Employment of tactical air support was extensive, with 16 B-52 strikes and 41 TAC AIR sorties supporting the operation. Only three helicopters were shot down. On the next day, a two-battalion force was lifted into Landing Zone Hope, northeast of Tchepone. Twenty-five ARC LIGHT sorties struck the area the night and morning before the insertion, two COMMANDO VAULT drops were executed during the morning, and 74 TAC AIR sorties prepped the primary and alternate landing zone areas and supported the insertion. The assault of the two-battalion force began about noon in two successive waves of 60 helicopters each and was completed in about an hour and a half. No enemy ground fire was reported from the vicinity of the landing zone; however, one helicopter was shot down near Sophia enroute to Hope.



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(S) Reduced Contact, Search and Destroy Operations. There were indications that the NVA were either outflanked by the ARVN assault to Tchepone, or that they were gathering their strength and waiting for an opportune moment to unleash a crushing blow against overextended or withdrawing RVNAF units. Enemy resistance to the ARVN heliborne assaults in the Tchepone area had been surprisingly light. After fierce resistance at Landing Zone Lolo, enemy reaction lessened at Landing Zone Liz, and was almost nonexistent at Landing Zones Sophia and Hope, which were both in close proximity to Tchepone. It is probable that most enemy units in the Tchepone area withdrew to the west to guard their vital LOC. That route structure continued to support an unobstructed flow of supplies to the south, but was threatened by the presence of ARVN forces in the Tchepone area. As the ARVN swept out from their newly established landing zones in the Tchepone area, finding and destroying sizable caches, they were met by little enemy resistance. Intelligence reports indicated that the enemy was reinforcing and positioning himself to exploit weaknesses that developed as the RVNAF extended or began to withdraw. Nevertheless, guarded optimism began to mount as the light enemy resistance to ARVN forces in the west continued.

ARVN 1st Division searched for enemy supply caches in the Tchepone area. They reported locating numerous caches and finding hundreds of enemy bodies which were attributed to air strikes. On 10 March,





only four days after their arrival, ARVN units inserted at Landing Zone Hope began withdrawing from the Tchepone vicinity to the escarpment south of Route 9. From there some friendly units began to redeploy east along the ridgeline, while others probed to the south, conducting operations aimed at interdicting Route 914. By 14 March, elements of an ARVN battalion had reached the high ground overlooking a portion of Route 914 and conducted some limited probes down $\frac{233}{4}$ to the road.

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- borne assaults to Tchepone, and subsequent search and destroy operations, enemy resistance throughout the area slackened. During the first few days of March, stiff enemy ground attacks were still occurring, particularly on the northern flank; but by the end of the first week the size and frequency of main force ground attacks had noticeably diminished. Attacks by fire were still extensive, however, and at times precluded adequate helicopter resupply.
- 7) (S) Enemy Attacks, RVNAF Withdrawal. During the first two weeks of March, enemy forces were preparing a major counterattack as RVNAF forces began their withdrawal from Laos. The enemy positioned his units at critical points throughout the area, and ringed FSBs and expected pick-up zones with automatic weapons, mortars, rockets and infantry. On 14 March the enemy began his counteroffensive with intense attacks by fire and locally heavy ground attacks, particularly

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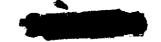
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in the vicinity of FSB Lolo. Because of enemy fire and poor weather, FSB Lolo could not be resupplied or evacuated and was abandoned the night of 15-16 March in the face of continuous enemy assaults. Enemy tanks began to appear throughout the combat zone, as the temporand: $\frac{235}{\text{Severity of attacks mounted.}}$

By 19 March all friendly units in Laos were under attack. Intense antiaircraft, mortar, rocket, and small arms fire precluded resupply and evacuation of many key sites, including FSB 30 on the northern flank, FSB Brown on the western flank, FSB Hotel on the southern flank, and FSB Delta south of Route 9 near the Laos/SVN border. Heavy ground assaults, coupled with unsuccessful resupply, forced many RVNAF units from their positions. Artillery was abandoned, and friendly units were forced to fight their way to alternate pick-up zones, exposing themselves to direct confrontation with main force maneuver elements. During these days of intense fighting, it was difficult to provide TAC AIR support because friendly ground commanders were sometimes unaware of the location of their own troops. Both friendly and enemy casualties during these last days of the campaign were extremely heavy.

(S) Army helicopters braved the enemy fire and by repeated attempts, with tactical air support, managed to evacuate most of these forces, although in so doing they suffered severe losses. As a case in point, the 2nd Regiment (1st ARVN Infantry Division) which had conducted operations down to Route 914 after the Tchepone raid, was working its way east to FSB Delta I for extraction. By 18 March the





2nd Regiment was under continuous attack by main force enemy units supported by heavy artillery. At the same time, intense attacks at FSB Delta I prevented helicopter support of that site. On 20 March, extraction of the 2nd Regiment was attempted four kilometers west of FSB Delta I. Planning of the extraction was inadequate, and failure to coordinate the "when and where" of the operation with the Air Force prevented proper tactical air support. Enemy fire inflicted heavy losses on the helicopters with 28 of the 40 participating shot down (rendered unflyable), of which seven were reported as totally destroyed. Only one of three battalions was extracted before the operation had to be cancelled. The survivors were extracted the next day after they had made their way to a nearby location.

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On 19 March, while RVNAF units on the northern, western and southern flanks were locked in combat with the enemy, a large ARVN convoy composed of armored and airborne units headed east from the Ban Dong crossroads (FSB Aloui), along Route 9 towards the Laos/SVN border. Throughout the campaign, the armored task force and airborne units were unable to secure Route 9 adequately for truck resupply convoys, forcing helicopters to bear the entire load. Now as the large ARVN convoy headed down that road, it was subjected to frequent ambushes and attacks by fire. During the first day, numerous vehicles, including tanks, howitzers, and armored personnel carriers (APCs), were destroyed or abandoned in confusion. A score of these abandoned vehicles were destroyed by tactical air 238/strikes to prevent them from falling into enemy hands.

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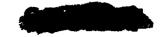
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By 21 March, the task force had fought to within five kilometers of the border but was stalled by enemy ambushes. Fighting raged around the task force throughout the day, and by nightfall 20 more tanks and APCs had been destroyed. It was evident that the enemy had set a trap for the several thousand RVNAF troops retreating along Route 9. He had worsened already bad road conditions by blowing up road culverts and had lined the route with numerous ambushes. Complicating matters, the RVNAF column was suffering from fuel shortages. Faced with the prospects of disaster on the road ahead, the task force commander took a gamble and left the road. He headed his convoy of more than 100 vehicles away from the road, toward the Xepon River and the border. Throughout the night, continuous gunship coverage defended the task force, but no major enemy attack materialized.

The task force reached the Xepon River on the next morning, 22 March, but was unable to ford. During the day, Army helicopters lifted in POL and the equipment needed to construct a ford across the river. While the armor was stalled at the river, ground forces were sent across to secure the opposite bank, and other units deployed to protect the column from attacks from the north. During the afternoon, in broad daylight, FACs sighted approximately 20 tanks racing down Route 9 towards the stranded ARVN task force. A few minutes later, only five kilometers from their goal, the lead tanks were struck by F-100s. Antiaircraft barrages from the tanks shot down one aircraft, but another F-100 destroyed the lead tank. Within minutes, further strikes by F-100s and F-4s accounted for four





more tanks destroyed, one of which had been disabled by an ARVN land mine. The remaining tanks fled into the jungle. During the last critical days of the campaign, between 19 and 23 March, TAC AIR neutralized the enemy's tank advantage by destroying or immobilizing an estimated 30 tanks in the combat area.

The task force spent another night at the river, but by leaving the road the convoy had apparently surprised and confused the enemy. His tanks scattered by air strikes, and his forces deployed along Route 9 waiting to ambush the column, the enemy was unable to react and no attacks were made against the task force that night. The remains of the battered column crossed the river on the morning of the 23rd, and headed towards the border. The ARVN had entered Laos with 71 tanks and 127 APCs; they left with 22 tanks and 54 APCs.

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(S) On the nights of 22 and 23 March, while the ARVN task force waited to cross the Xepon, Marine positions to the south, in the FSB Delta vicinity, came under heavy attack. They had been in continuous contact with the enemy for two full days, and ground fire was too intense to effect resupply or evacuation. During the night, USAF gunships were available, but could not fire because enemy and friendly positions could not be distinguished with certainty. The Marines abandoned the position during the night, and TAC AIR was called in to destroy more than a dozen abandoned artillery pieces and ammunition supplies. Four hundred Marines, half of them wounded, were extracted on the 23rd, before concentrated enemy fire cancelled further evacuation. The remaining Marines fought their way to the FSB Hotel vicinity where they were extracted on the 24th. With the

removal of these last Marines, all RVNAF units were out of Laos, although numerous stragglers continued to find their way across the border in subsequent days.

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Summary. The NVA had met the RVNAF incur-8) (S) sion with unanticipated swiftness and strength. Effectiveness of RVNAF units varied. Some units patrolled aggressively and fought well. Too often, however, they were reluctant to range out from their positions, thus allowing the enemy to encircle them. ARVN units were unable to secure Route 9 to permit resupply by truck, and thus were forced to rely on helicopter resupply. The NVA ringed the RVNAF FSBs, and subjected the bases and incoming helicopters to intense fire, in many instances precluding resupply or evacuation. The heavy attacks by fire were often followed by full-scale infantry charges supported by NVA tanks and heavy artillery. These attacks sometimes dislodged RVNAF defenders, but by employing these tactics the enemy exposed himself to air strikes and suffered many casualties. Nevertheless, he chose to ignore the heavy losses, for he apparently recognized the seriousness of his position if the RVNAF incursion succeeded. Well prepared with supplies and reinforcements, he launched an allout effort to defeat the RVNAF in Laos regardless of cost. RVNAF units reached Tchepone and scored some gains by destroying enemy pipelines and supplies throughout the Lam Son area, the enemy unleashed an offensive which drove the RVNAF from Laos.

(S) The enemy had wanted to do more. He wanted to inflict an overwhelming defeat on the South Vietnamese forces, a defeat of such magnitude as would shafter the Vietnamization program.

This he failed to do. The RVNAF had also wanted to do more. They

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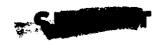
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planned on sweeping to Tchepone in only a matter of a few days. They wanted to range north, west, and east of Tchepone, blocking the LOC in the area, and destroying enemy caches throughout Base Area 604. They intended to remain until the end of the dry season, and to withdraw through Base Area 611, destroying the enemy's stockpiles as they withdrew. They, too, fell far short of their goals.

- b. (S) (U) Employment of Air Support.
- Tactical Air Control. During Lam Son 719, tactical air support of forces in northern SVN continued to be controlled by the I Corps Direct Air Support Center (I DASC), located at Danang and under the control of the Tactical Air Control Center at 7AF. To provide control for tactical air support of RVNAF forces in Laos, however. the Deputy Director I DASC was appointed as the Director of a special DASC established at Quang Tri and known as Victor DASC (V DASC). Thus. during the first week of February, V DASC was reactivated and placed under the control of the 7AF Command Post which was the agency responsible for controlling out-country air strikes. Victor DASC was to coordinate, and forward to 7AF, requests for preplanned air support (excluding, of course, air mobile operations). Such requests for preplanned TAC AIR came through the RVNAF chain of command up to the Division Tactical Operations Center (DTOCs), located in SVN, to I DASC, and from there to V DASC. Seventh AF then fragged the requested preplanned sorties.







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Immediate air requests were handled differently. Immediate requests were often passed directly from the ground unit to the airborne FAC. Alternately, immediate requests were passed up through the RVNAF chain of command to one of the three RVNAF DTOCs. At each DTOC there was a USAF Tactical Air Control Party (TACP), which relayed the request either directly to the FAC, or to V DASC which in turn relayed it to the FAC. If the FAC did not have TAC AIR available, he could request it from the ABCCC, which would either divert it from other lower priority missions, or, if necessary, request a $\frac{244}{}$ scramble of alert aircraft.

units in Thailand, and were given the call sign HAMMER. Most of the FACs had been supporting out-country operations and were thus familiar with the Laotian terrain and environment, though many of them were less familiar with providing close air support to ground units. It was felt that it would be quicker and easier to train these FACs to provide close air support than to acquaint in-country FACs with the Laotian terrain and AAA environment. Because of the unusually restricted access to planning information and the short lead time provided for forming the V DASC, the FAC aircrews had only two days prior to initiation of operations to organize, study Rules of Engagement and operational procedures, establish a working relationship with their 245/Vietnamese observers, and review close air support procedures.

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Initially, plans called for two HAMMER FACs on station in Laos at all times, one north and one south of Route 9. Throughout the daytime hours each FAC was to receive a set of fighters every 30 minutes, for a total of 96 sorties per day, with the understanding that more sorties would be provided if needed. As the operation unfolded, the number of FACs on station at any given time during the day increased from two to seven, six for directing strikes, and one for spotting hostile artillery. Strike sorties also increased. and fighters arrived every 15 minutes. Three FACs were on station at night. Army commanders requested even more FACs, apparently assuming that an increase in the number of FACs would result in a direct increase in the number of strike sorties. Seventh Air Force, however, felt very strongly that the addition of more FACs, considering the small, congested air space, would be counterproductive. On several days late in the operation, the number of strike sorties flown daily in the area of operation exceeded 300. In addition, throughout the month of March, there was an average of 30 to 40 ARC LIGHT sorties per day. With all the FACs, fighters, and B-52s operating in such a small area, there were serious air traffic control problems and hazards. The FACs were hard pressed to handle all the airspace control problems and language difficulties, as well as find the best targets for continuously arriving aircraft with minimum on-station times. The situation was complicated by friendly artillery and enemy AAA fire, and was particularly aggravated by the presence of helicopters at altitudes and locations unknown to the FACs.

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As pointed out earlier, Army air mobile assets employed in Lam Son 719 were not under the control of a single manager for air resources. Army helicopters operated throughout the Lam Son area without prior coordination with V DASC or the HAMMER FACs. Air support routes were established for helicopter support of FSBs, but they were not followed. On numerous occasions, helicopters suddenly appeared in an area without advance warning, and, more often than not, the FAC was unable to establish radio contact with them. In an attempt to alleviate the communication problem, the FACs and helicopter pilots exchanged operating frequencies, but on many occasions the helicopters worked on alternate frequencies. Communication remained a problem throughout the operation.

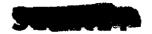
FACs characterized airspace control problems as "gigantic," one FAC stating that a fighter he was controlling experienced three near misses with helicopters on a single pass. No mid-air collisions occurred between fighters and helicopters during the operation. However, some fighter and B-52 strikes were called off due to the unexpected presence of helicopters and the potential $\frac{248}{}$

(S) Another problem in providing proper tactical air control was the language barrier. No American advisors were allowed on the ground, so a Vietnamese interpreter was assigned to each FAC to provide the necessary communication link with the ground.





170



Unfortunately, most of these interpreters had no experience in aircraft of the OV-10 type, and in the first days of the campaign air-sickness was a problem. Because of the restricted lead time, most of the interpreters arrived at V DASC only two days before the Laos incursion, which allowed for only one ride in the aircraft before entering combat. Though some of these interpreters were proficient in English and devoted themselves to their work, others spoke poor English and were unmotivated. As Lam Son developed, the FACs placed increasing reliance on English-speaking commanders on the ground rather than on interpreters in the $\frac{249}{4}$

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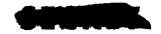
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- 2) (S) TAC AIR Roles. Tactical air power played a vital role in Lam Son 719. Without it, such an operation could not have been seriously considered by the South Vietnamese. Review of the events during the operation clearly demonstrates that the RVNAF incursion, if attempted without the advantages of air support, would have ended in a catastrophe.
- a) (S) Close Air Support. About 42 percent of the total tactical air sorties flown in support of Lam Son 719 were directed against enemy personnel. Of these sorties, only about 18 percent (or 8 percent of the total) were in support of troops in contact. This relatively small percentage of the total sorties nevertheless accounted for some of the most dramatic and vital strikes of the campaign. Time after time, TAC AIR was the factor which provided the edge needed to turn back enemy assaults. Very often, the critical





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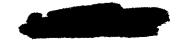
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strikes were provided at night by AC-119 or AC-130 gunships. On other occasions, daytime fighter strikes against enemy tanks or waves of attacking infantry provided the essential advantage.

Value of the AC-119 and AC-130 gunship support provided to friendly forces. Nighttime gunship defense of besieged RVNAF positions was frequently so critical that the absence of gunship support, even for only a few minutes, turned the tide of battle. When gunship support appeared, almost without exception, enemy contact was broken. (It is significant to note that this continuous effective coverage was accomplished with only eight gunship/flareship sorties per night. This was possible because of the long on-station time and the large ordnance-carrying capacity of the gunships.) Daytime fighter strikes in support of surrounded defenders were also crucial, at times providing the only breaks in continuous enemy attacks. Fighter and fixed-wing gunship strikes against enemy armor were especially critical. In a large measure, these strikes denied the enemy the advantage he had expected \frac{252}{from his surprising deployment of large numbers of tanks.

(S) Effective as these air strikes were, however, they could not always prevent the enemy from overrunning the forces being supported. On occasion, enemy strength and resolve were too much for air strikes to overcome, and the enemy was able to overwhelm the friendly position. In some such cases, a temporary deterioration in the weather prevented air strikes and provided the



enemy enough time to overpower weakened RVNAF defenses. In other instances, the enemy fire was too heavy to permit resupply of RVNAF positions. In these cases, the poorly supplied defenders were unable to resist continuing enemy attacks and were forced from their positions. But whatever the circumstances, it was again clearly demonstrated that air support is indeed a valuable asset, but one which cannot always provide the advantage needed for victory. A successful application of air support presupposes a well-equipped, motivated, and effective ground force.

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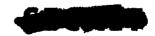
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(S) Interdiction Near the Battle Area. ь) An extensive air effort was mounted against the enemy logistics system supporting NVA troops in the area. The effort already underway in southern STEEL TIGER, as a part of the COMMANDO HUNT V campaign. was intensified in an attempt to block enemy resupply and reinforcement of his forces and to deal a severe blow to enemy attempt to transit or bypass the area with supplies destined for SVN and Cambodia. Thirty percent of the Lam Son strike sorties were devoted to this category. In addition to these strikes against the LOC and vehicles, another 6 percent of the total sorties were devoted to striking storage area targets as they were discovered within the area. These latter strikes, though small in number when compared to other categories, accounted for a large percentage of the secondary explosions and fires reported throughout the operation. The extensive effort devoted to interdiction resulted in considerable reported





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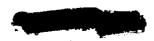
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bomb damage. Nevertheless, considering the swiftness of enemy reinforcement and the severity of his reaction to the incursion, there is little evidence that the enemy suffered from serious supply or reinforcement shortages during Lam Son 719.

Support of Helicopter Assaults.

Tactical air support of U.S. Army helicopter operations in Laos represented a sizable and influential aspect of tactical air operations during Lam Son 719. Large numbers of air strikes were used in preparing helicopter landing zones and the surrounding area for airmobile assaults, and for supporting helicopter resupply and evacuation missions throughout the operation. Unfortunately, the exploitation of tactical air in support of these operations was less than the potential available. For the first four weeks of the operation, TAC AIR was consistently put in a position of reacting to enemy resistance encountered after an assault had begun.

(S) An Air Force plan for support of airmobile assaults had been proposed during January 1971, and again in
February, but it was not implemented. The Air Force plan called for
ARC LIGHT strikes in the early morning hours, followed by a COMMANDO
VAULT drop. Fighters were then to employ heavy ordnance with fuze
extenders to clear away remaining obstructions in the landing zone
itself. Next, to suppress enemy fire, TAC AIR was to systematically
deliver antipersonnel and general purpose bombs on key points throughout the area. Finally, a smoke screen would be set up, followed





immediately by the insertion. Throughout the preparation phase, full use would be made of other sources of firepower including artillery and helicopter gunships.

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On 3 March, Army planners requested only enough sorties to clear the landing zone and provide a minimum effort to suppress enemy fire. Following Lolo, however, the total Air Force plan was accepted and Army planners began to take greater advantage of tactical air support of their assault operations. Furthermore, the planners began to treat any insertion, resupply, or extraction missions into high enemy density areas as combat assaults, and began coordinating more of these missions with the Air Force. Although a few isolated, but costly, instances of the Army's "go it alone" attitude continued to surface as the operation progressed, in general, coordination of critical helicopter insertion, resupply, and 257/evacuation missions improved.

Army helicopter operations helped ease the problem of helicopter losses, but by no means solved it. Although tactical air preparation of landing zones significantly reduced the volume of enemy fire, during some insertions helicopters continued to experience serious losses. Similarly, many attempts to resupply or extract encircled RVNAF forces were unsuccessful in spite of TAC AIR attempts to suppress enemy fire. In many instances, the RVNAF ground troops were not aggressive enough in patrolling out from their positions, and thus allowed the enemy to come

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in too close. This increased the threat to the helicopters and reduced the effectiveness of air strikes. At other times, however, the enemy was too strong to hold back, and the volume of his fire was too great for the helicopter, even with TAC AIR support.

d) The Effort Against the Air Defense Air Force planners recognized from the very beginning of the campaign that the high AAA threat in the combat area would be a major factor in the operation, and that it would be difficult to counter by air strikes. Before the RVNAF forces entered Laos, an AAA suppression campaign was directed along Route 9 from the SVN border to the Tchepone area, and consisted primarily of mass drops of CBU along the edges of the highway. In the beginning of the operation, the FACs considered AAA positions to be targets of a high priority, and devoted a considerable amount of their time to locating and striking them. As activity on the ground increased, however, the FACs had less and less time to search for these targets. As a result, one FAC was assigned full time to spotting hostile AAA positions on the northern flank of the Lam Son area. STEEL TIGER FACs flying on the periphery of the area also devoted a great deal of effort to finding and destroying these positions. Fifteen percent of Lam Son tactical air strikes were delivered against the enemy air defenses.

(S) The primary antiaircraft artillery threat to fixed-wing aircraft consisted of 23, 37, and 57mm guns. It was automatic weapons fire, not AAA fire, however, which inflicted



the most hits and losses of fixed-wing aircraft, and it was also these weapons which were the most mobile and most difficult to locate. Similarly, but on even a more pronounced scale, small arms and automatic weapons (less than 23mm) were by far the most serious threat to helicopters, accounting for nearly 90 percent of the reported hits and losses. Mortar fire was the next most serious threat. Antiaircraft guns were reported to have caused less than 1 percent of helicopter hits and losses.

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(S) The whole family of enemy antiaircraft weapons was well-camouflaged, well-positioned, and mobile, but the small arms and automatic weapons threat was the most elusive. One $\frac{261}{4}$

The NVA has skillfully deployed through the operational area an extensive, sophisticated, well-integrated, highly mobile air defense system. Large numbers of antiaircraft weapons of several calibers are well-positioned, well-camouflaged, well-dug-in, and well-employed.

An effective technique used by the NVA is employment throughout the operational area of ten-twelve man combat teams armed with small arms, at least one 12.7mm machine gun, at least one 82mm mortar, and one or two RPG* rocket launchers. Positioned on or near critical terrain, located in bunkers and trenches, well-supplied with ammunition, these combat teams attack by fire aircraft and infantry operating within their weapons range. The teams are capable of placing 12.7mm machine gun and 82mm mortar fire on virtually every friendly position, landing zone, and pick-up zone in the Lam Son 719 operational area. . .

^{*}RPG--Rocket Propelled Grenade.



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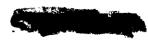
... every airmobile operation, even singleship resupply or medical evacuation operations, must be planned and conducted as a combat operation, complete with fire plan, escorting gunships, and plans for securing and recovering downed crews and aircraft.

(S) Tactical air was reasonably successful in destroying antiaircraft guns, claiming 147 AAA pieces destroyed, 20 damaged, and 61 silenced. The estimated gun count showed a modest decrease by the end of the operation, from 155 guns at the beginning to 135 at the end. However, these weapons were not the primary threat to U.S. air support of the operation; small arms and automatic weapons fire were by far the more serious factor. These automatic weapons were much more numerous, mobile, and difficult to spot. TAC AIR was credited with only 65 automatic weapons destroyed, \frac{262}{262/}

important element in U.S. air support of Lam Son 719. During the early days of the operation, they were used to impede the flow of enemy reinforcements and logistics support to the battle area, and to "soften up" areas along the avenues of approach for RVNAF ground advances.

Later, they also came to be a standard part of helicopter landing zone preparations, complementing tactical air strikes, artillery fire, and helicopter gunship fire. Throughout the operation, they were successfully employed against storage areas and troop concentrations.





178



ARC LIGHT strikes were also employed in close support of ground forces. They were used not only to soften areas in advance of ground movements, but also to strike massed enemy forces in close proximity to friendly units. On occasion the RVNAF used tactics especially devised to exploit 8-52 strikes and counter the enemy's "hugging" tactics. They set up forward positions, inviting the enemy to move in close to them, and then withdrew to their rear positions a short time before the ARC LIGHT strike, which frequently caught the enemy still massed in the target area. ARC LIGHT strikes in close proximity to besieged friendly units were especially crucial in the final days of the operation, inflicting heavy casualties on the enemy, and at times providing friendly units with the only lulls in enemy attacks.

LIGHT operations and those during Lam Son 719 was that General Lam, the South Vietnamese commander of the operation, personally selected the ARC LIGHT targets on a daily basis. MACV, which previously allocated the targeted B-52 strikes, provided General Lam with available ARC LIGHT targeting information and allowed him to select the targets. As General Lam also had access to the intelligence information of his field commanders, this procedure seemed to work well, and probably accounted for the increased use of B-52 in direct support of ground $\frac{265}{1}$ forces.

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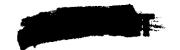
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Early in the operation it became apparent that a major battle was shaping up in Lam Son 719. After initially light enemy resistance, the RVNAF began to encounter increasingly stiff opposition. In order to provide as much support for the RVNAF as possible, a three-month surge in SEA ARC LIGHT sorties was authorized (from 33 to 40 sorties per day). Within two days, the necessary B-52s, men, and equipment had been transferred from Anderson AFB, Guam, to \(\frac{266}{266}\)

Not only was the number of sorties increased, but also, later, the aircraft were again fitted with the larger-capacity bomb racks to carry more bombs per sortie. On 6 March, three B-52Ds carried 108 bombs instead of the normal 66 bombs per sortie. Thereafter, one additional "D" aircraft per day was refitted to carry the larger $\frac{267}{2}$ bomb load.

support for Lam Son 719, actions were taken to improve the responsiveness of these strikes to the ground commander's needs. During the initial planning for Lam Son 719, MACV requested that SAC develop the capability to change targets at the latest possible time prior to the Time on Target (TOT). Such a capability would give the field commander the greatest amount of flexibility in the application of ARC LIGHT



strikes in a fluid ground tactical situation. On 1 March new delivery procedures were implemented, allowing ARC LIGHT targets to be changed within three hours of their TOT. This new tactic gave the field commander a timely, massive firepower response which heretofore had not been available in close support situations, and although the new procedures had been designed specifically for Lam Son 719, they could be utilized in other areas or operations.

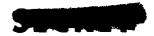
Son 719, however, was not without problems. One difficulty was in the area of air traffic control. As noted earlier in this study, air traffic control problems in the congested area were serious. ARC LIGHT operations were a complicating factor because they required clearing air traffic from the target area for a distance of several miles, and for a period up to 20 minutes, thus hindering the provision of continuous close air support within the area cleared.

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(S) Another problem related to ARC LIGHT strikes was revealed in interrogation of NVN soldiers captured during Lam Son 719. The prisoners reported that B-52 strikes had a serious impact on the enemy and that the concussion effects of the strikes were especially feared. However, they also indicated that the impact of the strikes was somewhat reduced by warning prior to the strikes. An

^{*}Killed By Air (BDA).



RVNAF agent also indicated that the enemy frequently had 15 minutes advanced warning of ARC LIGHT strikes, enough time for personnel to clear the area or to take shelter prior to the strikes.

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Overall, however, both U.S. and RVNAF personnel recognized that B-52 strikes were a valuable element of U.S. air support during Lam Son 719. The RVNAF were particularly enthusiastic over the results of B-52 strikes, and as previously mentioned, developed special tactics to take full advantage of B-52 strikes against massed enemy forces in close proximity to friendly positions. The RVNAF attributed half of the tonnage destroyed and nearly twothirds of the enemy killed in the operation to B-52s. They based these estimates on ground sweeps conducted for approximately 10 percent of the ARC LIGHT targets struck.

Although the RVNAF reported remarkable results for the target areas investigated, those reports were tempered somewhat by the fact that their BDA was considered inflated (see p. 197). Additionally, U.S. analysts pointed out that many of the areas swept had also been subject to heavy tactical air strikes and artillery fire. In such cases, RVNAF forces sweeping the area had attributed all the BDA to B-52 strikes, when in actuality it was not possible to determine what percentage of the BDA reported was attributable to ARC LIGHT strikes or to other causes.

(S) Even allowing for these shortcomings in RVNAF reporting, however, U.S. analysts were convinced that ARC LIGHT strikes had inflicted severe damage and casualties on the enemy.





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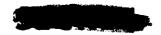
They were valuable in all the roles in which they were used during the operation, including interdiction, landing zone preparation, and close support. They were considered especially effective in the last role. Enemy forces concentrated around RVNAF positions, thereby forming particularly lucrative targets which ARC LIGHT strikes had been able to exploit. Clearly, the B-52 had made a major contribution to the results achieved by U.S. air support during Lam Son 719.

Targeting and Centralized Control Problems.

The difficulties experienced in coordinating tactical air support and helicopter assaults were not the only problems brought about by the combined nature of the operation. Two other major problem areas were evident: first, there was a need for a central agency to assimilate or analyze all the intelligence provided by the various Air Force, Army, and RVNAF sources. Targets were developed by USAF, U.S. Army and RVNAF analysts, but there was a lack of truly centralized targeting based on the detailed information available to all these agencies. Second, TAC AIR strikes, helicopter strikes, artillery fire, and ground force maneuvers were often planned in isolation from each other particularly during the first month of the operation. There was no central agency 274/which controlled all elements of Allied firepower in the Lam Son area.

(S) Concerning the need for centralized targeting, each agency assessed its own intelligence and passed on its targets to the Air Force intelligence personnel at the V DASC, who examined the inputs and passed them to the FACs for reconnaissance or strike.





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However, there was no central agency with access to all the detailed intelligence available to the various units involved. Summing up the problem, the V DASC Director commented:

Development of targets should be made so that the available air can be most effectively employed against the best targets. . . . I don't have any doubt that . . . we don't have a system of this type now. Much intelligence information is available from many sources and each of these sources develop into good targets. However, there is not an organization or system established, that can assimilate this tremendous amount of intelligence and targetry information; nor is there available a central channel that can most effectively and efficiently be used to strike the best targets that are available.

(S) With regard to the need for a centralized control agency, the commander of one Army unit involved in Lam Son concluded:

Whenever the U.S. is in a predominantly support role, a centralized control element must be established to coordinate all U.S. assets. In Lam Son 719, no such agency existed at Corps level; thus, U.S. assets were not managed to the best advantage. Such a control agency should include artillery, air, transportation, and supply representatives.

(S) One problem related to the lack of a central control agency was the difficulty in determining the relative priorities



184



for the allocation of air assets to the battlefield.* Since no U.S. advisors were allowed to be colocated with RVNAF units in Laos, reliance had to be placed on information relayed up through RVNAF channels. The RVNAF did not have an effective system by which ground priorities for air were established. Within each division, the flow of information to the DTOC was often inadequate to determine priorities for air support of division units. Further, since each division operated independently and was usually unaware of activities in adjacent areas, the DTOCs were unable to determine priorities relative to units in other divisions. When simultaneous requests for immediate support were forwarded to the FACs, someone had to determine which unit should receive the priority for air support. V DASC, which continually monitored air operations and had contact with its TACPs at each of the DTOCs, was sometimes able to inform the FAC which RVNAF unit needed air support most badly. In most cases, however, the many different operating frequencies involved in monitoring air operations prohibited V DASC from seeing the total picture, and the communications between V DASC and its TACPs at the DTOCs was inadequate for the close coordination required. Thus, more often than not it was up to the FACs to determine which ground unit should be given first priority for air support.

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^{*}Overall priorities for various categories of air support were established and followed. For example, a TIC situation was a higher priority than a preplanned strike. It was within each category, however, that the decision had to be made concerning which request for support would be honored. For example, if four TICs were underway, which one should have priority for air support.

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delivered to the Joint Chiefs of Staff, the problem was summarized:

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From the beginning of Phase II, control and coordination problems were apparent. The ARVN simply did not have a responsive central command and control system. As a result, each division operated individually, little aware of action in adjacent sectors and even more critically unable to establish priorities on battlefield situations. . . . In one area a base may have had only incoming mortar fire while another might well be on the verge of being overrun. The determination as to who needed air the fastest was usually left to the FAC who tried to ascertain the criticality of the situation through his VNAF interpreter in the back seat. Certainly, this was not desirable but to cope with on-scene critical situations, it was the only expediency available.

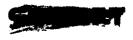
(S) Seventh Air Force conducted a thorough study of U.S. support of the Lam Son 719 operation. After having considered the air traffic control, coordination, and targeting problems encountered during the operation they concluded:

There should be a single control agency for all aircraft operating within each area. In addition, all aircraft should check in to a single agency, state their flight intention, and maintain a listening watch on the same frequency while in the area.

Provisions for control and coordination of all firepower, artillery, tac air, Arc Light and helicopters should be established, including the capability to clear aircraft into and out of control areas via corridors.

During an operation, a joint Intelligence and Targeting Center should be established.

(S) It should be noted that these findings were not particularly surprising. Air Force agencies involved in Lam Son 719 had recognized these problems at an early date and made every effort to





convince the other participants of the necessity of their solution. With regard to air traffic control problems, for example, the Air Force repeatedly urged Army personnel to coordinate helicopter operations, to include: reporting to the DASC or FACs when entering the operational area, following established flight corridors, exchanging and monitoring FAC/helicopter communications frequencies. In most cases, however, these efforts met with unenthusiastic reception by Army personnel.

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Again, in the area of control and coordination of firepower, USAF personnel made efforts to improve coordination and to project Air Force expertise into the management of the overall air effort. Air Force efforts were frustrated not only by a reluctance of Army personnel to coordinate their activities, but also by a tendency of General Lam to minimize staff coordination, and to release or change his plans at the last minute. The establishment of a Joint Planning Group, mid-way during the operation, represented only a partial solution to the problem.

3. (S) (U) Results

a. (S) Assessment of Overall Results.

(S) The results of Lam Son 719 were mixed--it was neither a complete success nor a total failure. The RVNAF failed to achieve their primary objectives in the operation, suffered heavy casualties, and were compelled to leave Laos long before they had intended. Conversely, the enemy sustained heavy casualties dislodging the RVNAF, suffered significant supply losses and damage to his logistics system, and, despite an all-out commitment of his forces, failed to inflict an unequivocal defeat on the outnumbered invasion force.



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It was difficult to determine with certainty whether the operation as a whole was more of a success or a failure, largely because its ultimate effect on the enemy and his plans remained unknown. In many respects, however, the negative aspects of the operation outweighed the gains scored. Unfortunately, the enemy may have achieved a psychological victory over the RVNAF in Laos. The lasting impression most will have of Lam Son 719 is likely to be the vision of terrified soldiers clinging to the skids of American helicopters returning to South Vietnam, rather than the reported number of enemy killed or tons of supplies destroyed. (See Table 12.)

Positive Aspects. There were a number of positive results of the South Vietnamese incursion into Laos. In the first place, the fact that the South Vietnamese could enter the Laotian sanctuary, an area of vital importance to the enemy, and at the same time conduct another major cross-border operation into Cambodia, is an indication of the progress made in the military strength of the South Vietnamese. Also, the fact that these major operations were confronting the enemy outside of Vietnam was significant in that the RVNAF had shifted the fighting away from major population areas in South Vietnam. By attacking the enemy's logistics system in the Laotian panhandle during the height of the dry season, the RVNAF forced the North Vietnamese to either protect their lifeline to their forces in the south or see those forces cut off from logistics support. The enemy chose to defend his vital logistics network, the only practical option available. He decided to go even further, reacting violently to the incursion and massing his troops in an all-out effort



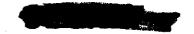
TABLE 12 TOTAL ENEMY LOSSES IN LAM SON 719* (U)

Killed in Action	13,642 (includes 4364 KBA)
Detained	54
Ammunition	
Small Arms (rounds)	480,566
Other (Tons)	20,000**
Food (Tons)	1,282
POL (Gallons)	217,710
Structures	1,270
Bunkers	1,328
Weapons	
Individual	5,066
Crew Served	1,936
Vehicles	528

^{*}As reported by ground units and compiled by MACV.

Source: Report, COMMANDO HUNT V Report, 7AF, May 71, p. 72. (S)

^{**}RVNAF units reported 170,000 tons. MACV reported 20,000 tons.



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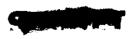
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to overwhelm the invasion force. By doing so, however, he exposed himself to damaging air strikes. The RVNAF estimated that the enemy suffered more than 13,600 deaths during the operation, over 4,300 of which were attributed to air strikes. Although RVNAF estimates of overall enemy deaths (13,600) were probably considerably inflated, U.S. intelligence agencies, as will be discussed later, did not consider the reported KBA figure (4,300) to be exorbitant. In addition to heavy losses, the enemy must have sustained a large number of wounded. Though overall enemy casualties are not known with certainty, he clearly suffered much greater losses than the RVNAF.

During the operation, the NVA was forced to bypass the routes blocked by the RVNAF by shifting his supply movements to Route 914 in the western portion of the central route structure. Concentrating his logistics flow to fewer routes increased his vulnerability to air strikes. Aircrews reported high levels of truck kills and secondary explosions/fires during the operation. Extensive damage was also done to the enemy's logistics system throughout Base Area 604. Thousands of tons of POL, ammunition, supplies, and equipment were reported destroyed by ground forces, tactical air and B-52 strikes, helicopters, and artillery. The enemy was forced to divert units and replacements heading south in order to resist the incursion. Furthermore, his forces must have consumed large amounts of supplies during the fighting. In addition to the damage done to the enemy's logistics system during the operation, RVNAF forces gained detailed knowledge





concerning the complex system of depot locations, POL pipelines, and road networks through Base Area 604. As a result of this new intelligence, numerous targets were developed and struck by TAC AIR and B-52s $\frac{281}{}$ following the withdrawal from Laos.

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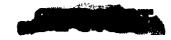
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(S) There were also positive long-term implications for Lam Son 719 operations. Some RVNAF units fought well, while the performance of others was erratic. The experience gained by RVNAF units during Lam Son 719, however, could be invaluable in identifying and overcoming the deficiencies encountered during the operation. There were significant lessons to be learned in the areas of command and control, coordination, and RVNAF capabilities and tactics for such an operation. If these are recognized and acted upon, RVNAF combat effectiveness could be significantly enhanced. Many of these lessons were recognized by high South Vietnamese officials. A report by the Joint General Staff (JGS) to the president of South Vietnam, after noting the serious impact of the operation on the enemy, summarized:

... certain armor squadrons should be converted into mixed units having organic and well-trained infantry. Our future force structure plans will capitalize on this point.

As regard to infantry training, our troops have never been accustomed to fight enemy armor. . . . Anti-tank training will be given in the near future.

The enemy is able to employ tactical air support in case of escalation of the war. The ARVN has no air-defense units and our troops have not been trained in anti-air defense. The JGS will pay close attention to all these shortcomings.



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On the tactical point of view, we have met with a lot of difficulties in staff technique, in the coordination between different arms and services because our units have never been operating in such a large-scale environment.

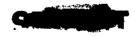
However, the overriding tactical consideration is the employment of the Fire Support Base (FSB).

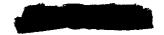
If the FSB tactic has paid off in in-country operations; on the contrary, it has proven ineffective in the lower-Laos battlefield.
... two reasons:

(1) Enemy artillery . . . is not deployed by units like ours. It is scattered around our FSB and thus, makes our counter-battery ineffective. As it is familiar with the terrain, it can pour its shellings on our FSB with speed and accuracy.

Tacair attacks are not very effective either: the enemy guns are well dug-in and protected.

- (2) FSBs are dependent on supply and medevac by air. The enemy air-defense net in Laos . . . neutralizes our supply and evacuation activities and affects adversely our troops' morale.
- . . . on a battlefield well organized and defended by the enemy, the appropriate tactic is that of hit and run. Supported by strategic and tactical air, our heliborne assault troops can hit anywhere . . . destroy his installations, weapons, ammunitions and storages then withdraw swiftly. Such an operation should not last more than 7 days. . . .
- (S) Long-term implications to the enemy were also clear. Laos was no longer a sanctuary from ground assaults, and thus the enemy could no longer discount the possibility of an attack anywhere within his Laotian logistics system. This was bound to restrict his planning options, and tie down a significant amount of





his resources in defense of areas previously considered secure. Viewed only in its positive results, Lam Son 719 was an extension of Allied efforts against the enemy's entire logistics system through which the RVN seized the initiative, carried the battle away from South Vietnamese population centers, restricted the enemy's planning options, and raised the cost of war to the enemy.

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Negative Aspects. The stated objective of the incursion was to interdict the enemy's logistics system in Laos. In particular, the RVNAF planned to block enemy LOC throughout Base Area 604, and destroy the enemy's logistics system throughout Base Areas 604 and 611. There was to be a rapid blitz to Tchepone, where friendly units were to block major LOC into and out of the area and conduct extensive search and destroy operations. Though not firmly committed on duration of the operation, the RVNAF intended to remain in the Tchepone vicinity until the end of the dry season. They were then to withdraw through Base Area 611, ravaging the enemy's logistics system, and possibly departing from Laos as far south as the A Shau Valley.

(S) The operation fell far short of these objectives, and did not go at all according to plan. Since the degree to which the enemy intended to increase his flow during February and March was not known, the overall impact of Lam Son on his throughput was unknown. However, truck activity and throughput did not decrease during the operation; in fact, they increased. The presence of RVN

