

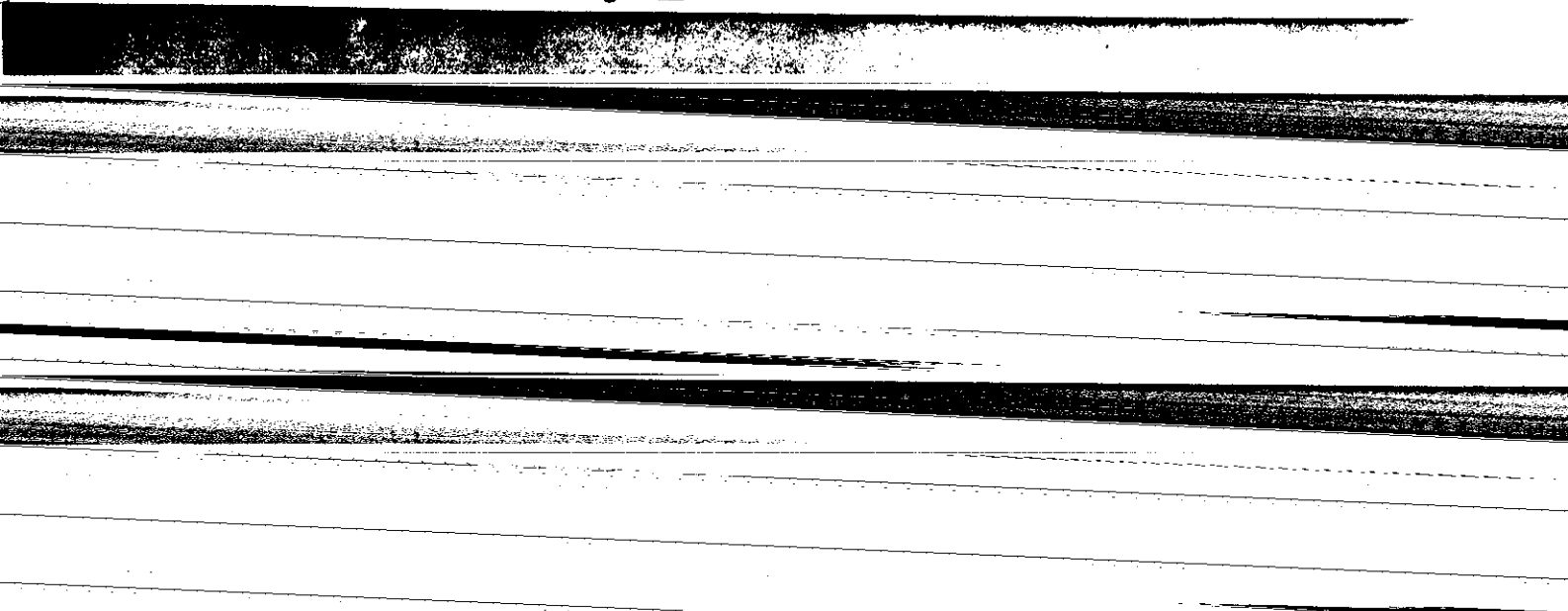
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On 14 March, two Marine A-4E aircraft, Ring Neck 203-1 and 203-2 from the 1st MAW dropped Mark 82, 500 pound high-drag bombs on a friendly position of the First ARVN Infantry Division resulting in nine killed, 13 wounded seriously and three with minor injuries. Poor communications between the FAC and the ground commander, uncertainty of the exact location of the friendly forces and weather conditions were primary factors contributing to the incident. Due to an uncooperative attitude by the FAC's Vietnamese interpreter, the FAC had to use an Army helicopter as relay in communicating with the ground commander. The exact friendly position was impossible to establish during the investigation. The friendly commander did acknowledge, however, that the FAC's smoke was on the enemy position. The FAC was IFR during the final run in of Ring Neck 203-2 and unable to observe the strike. During the last portion of his final, Ring Neck 203-2 was hit by enemy ground fire which could have affected his accuracy of release. <sup>227/</sup>

AIRCRAFT LOSSES

Seven U.S. tactical aircraft were lost to enemy fire during Lam Son 719. The pertinent data are depicted on the following table and map. Five of the losses were strike aircraft. This loss rate was considered low in view of the more than 8000 strike sorties flown and, perhaps more significant, the more than 24,000 passes made by fighters against targets that were well defended by antiaircraft weapons. (See Figures 17 and 18.)

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IMPLICATIONS FOR FUTURE OPERATIONS

In Operation Lam Son 719 all of the complex facets of the Second Indochina War appear in kaleidoscopic patterns. But, of special interest to the U.S. Air Force, are the implications for future operations arising from the experiences of supporting a corps-size ground force of an allied nation given air mobility by the U.S. Army. These Air Force experiences need analysis and reflection beyond this contemporary report's limitations of time and scope. Nonetheless, certain implications seem apparent.

1. To conduct a corps-size operation there must be detailed planning at all levels of command. It is especially important that there be thorough planning for contingencies. Major campaigns rarely develop according to the planning scenario. The enemy may appear on the battlefield in greater numbers than anticipated; he may have unexpected fire power in armor and artillery; his antiaircraft defenses may have sufficient depth and integration to disrupt air operations; terrain and weather may both prove treacherous. Careful planning is critical when there will be no one commander-in-chief with a combined staff. The coordination that will be required to integrate the forces in the operation's execution should be anticipated and the coordination agencies established before the campaign begins.
2. Helicopter delivery of troops in a combat assault in a permissive environment is an effective tactic that capitalizes on the advantages of initiative, flexibility and mobility. If possible, the tactical scheme

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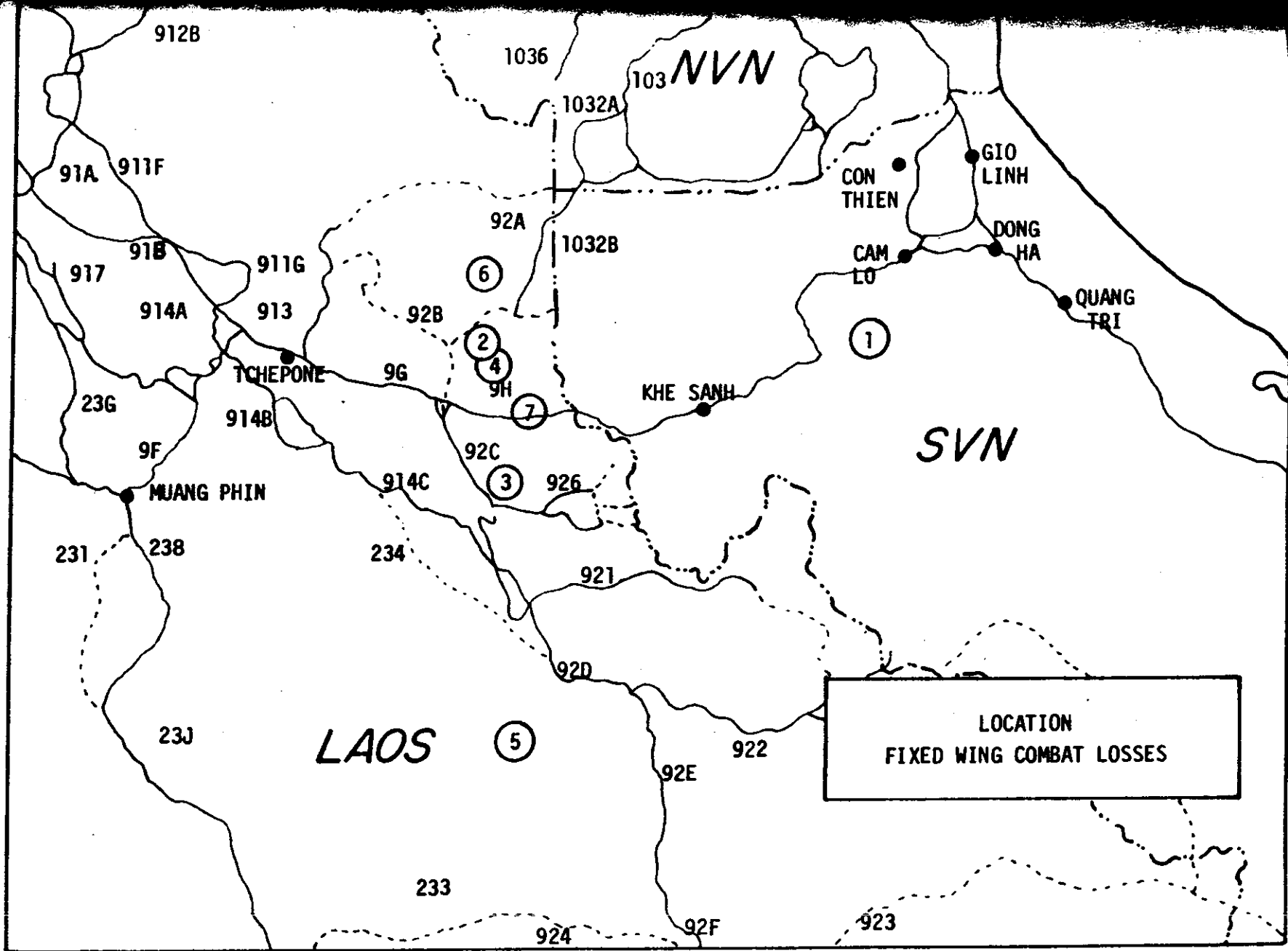
AIRCRAFT COMBAT LOSSES IN LAM SON 719

<u>NR</u>	<u>AIR-CRAFT</u>	<u>CALL SIGN</u>	<u>DATE</u>	<u>UNIT</u>	<u>MISSION</u>	<u>CAUSE</u>	<u>COORDINATES</u>	<u>SPEED</u>	<u>ALT FT AGL</u>	<u>CREW STATUS</u>	<u>SAR</u>
1	F-4D	Cobra 04	11Feb71	12TFW Phu Cat AB	Strike	AW 12.7 mm	N 1641 E 10658		800	1 KIA 1 WIA	YES
2	F-4D	Cobra 33	25Feb71	12TFW Phu Cat AB	Strike	Unk attack- ing tank	N 1645 E 10628	450	1,500	Recov- ered	YES
3	F-4D	Gun- fighter 44	25Feb71	366TFW Da Nang Afld	Strike	.51 Cal	N 1632 E 10629	400- 450	1,000	Pilot- KIA 1 WIA	YES
4	A-1H	SANDY 04	6Mar71	1SOS NKP RTAFB	SAR	Small Arms	N 1640 E 10630	170	50	Recov- ered	YES
5	A-7	Battle- cry 15	13Mar71	Navy	Strike	23 mm	N 1606 E 10632			Missing	YES
6	G-2A	Hammer 244	16Mar71	20TASS Da Nang Afld	FAC	37 mm	N 1648 E 10626		Low Level	Missing	NO
7	F-100D	Blade 82	22Mar71	35TFW Phan Rang AB	Strike	Attack- ing tank 12.7 mm	N 1638 E 10632	450	Low Level	Missing	NO

FIGURE 17

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FIGURE 18



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of maneuver should be predicated on the exercise of several options in landing sites to permit the assault to be made where enemy resistance is least. For an assault into an area of formidable enemy resistance, it is the task of the Air Force to deliver heavy firepower, integrated with other fires, to suppress the enemy defensive fire so that the assault can be made with minimal risk to the helicopters and troops. Close timing of the landing zone preparation and the combat assault is essential so that the enemy is denied the opportunity to react. To provide a reasonable degree of safety all helicopter operations in a well defended area should be conducted only after tactical air has delivered the necessary suppressive ordnance. Heliborne assaults like airborne assaults are most successful when made into very low threat areas.

3. The selection and preparation of landing zones requires a close, formalized relationship among the on-scene Air Cavalry Commander, the Army Air Mission Commander and the Air Force Forward Air Controller which welds them into a team.
4. The establishment of fixed fire support bases in hostile territory which are dependent upon helicopter resupply and troop extraction without an alternative ground line of communication is not desirable. This ground tactic deprives air of its superior features noted previously and leaves its weaknesses--vulnerability to enemy weapons, limited resources, weather, etc.

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5. When the ground forces operate from static positions with limited maneuver, these positions must be so placed that they can provide mutual support between adjacent positions with artillery fire and screening infantry. To rely solely on air-delivered firepower to counter a superior enemy ground force is a poor tactical plan because enemy air defenses, limited air resources, or adverse weather may deny the firepower support at a critical time.
  6. While the resources of tactical fighters in Southeast Asia existing during Lam Son 719 insured that some form of air ordnance was always available for close support, such campaigns in the future may not take place in a region where a tactical air force of this size exists. Therefore, to insure the greatest possible responsiveness to the fire support needs of a dynamic ground battle, close coordination of the suppressive fires provided by all services must be maintained.
  7. The in-flight coordination procedures between U.S. Army helicopters and tactical aircraft need to be improved. If the airborne forward air controller cannot communicate with the helicopters, a dangerous situation arises--especially within the confines of a small geographic area.
  8. Language problems with non-English speaking allies can become critical, particularly in the control of tactical aircraft engaged in close support operations. If interpreters are to be assigned to fly with USAF forward air controllers, it would be highly desirable to establish integrated teams

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who could train together sufficiently to work smoothly in the air. Where possible, it would be better to use as interpreters USAF officers who are skilled in the Army's language.

9. A tactical fighter with longer loiter time than any presently in the inventory, and with the capacity to carry a wide variety of ordnance, would be especially effective in the close air support role.

10. Laser-guided bombs were perhaps the most efficient weapons to use against enemy gun emplacements and armor.

11. Airlift personnel should be included in the initial planning of all large scale joint operations which will require airlift support. This is necessary so Army planners may understand the capabilities and limitations of airlift and to permit Air Force personnel adequate time to plan and arrange for essential airlift support.

12. Air Force Air Traffic Controllers with Air Force navigational aids and approach facilities should be used in large scale operations such as Lam Son 719 to handle safely the volume of Air Force airlift and Army helicopter traffic at forward operating bases during periods of peak operation. Army GCA equipment is not designed to provide for multiple IFR approaches and departures required during large scale airlift operations. Army Air Traffic Controllers had neither the training nor the experience to control the volume of Army and Air Force traffic at the forward bases in Lam Son 719.

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EPILOGUE

Although this report covers the Lam Son 719 operation up to 24 March when the last ARVN units left Laos, the operation continued until 8 April when it was officially declared over. Hammer FACs continued to fly over the area directing air strikes on known or suspected enemy targets, reporting that the antiaircraft fire was more intense than ever. The Commando Hunt V interdiction program continued in the Steel Tiger area of Laos which included Lam Son, and enemy truck traffic within Laos, just after the ARVN troops withdrew, reached a peak for the year, surpassing the truck traffic for a similar period the year before. The ARVN made two fairly ineffectual one-day commando raids into Laos. Activity in Military Regions I and II of South Vietnam stepped up considerably as it did in Military Region IV. The true test of the effectiveness of Lam Son 719, according to many observers, would come in late 1971 and early 1972. The rationale for this view was that Cambodia had bought eight months of security for Military Region III and that the Lao incursion might have the same effect in northern RVN.



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SCENARIO

- 30 Jan 71 D-Day.
- 31 Jan 71 DASC Victor established at Quang Tri.
- 4 Feb 71 First C-130 landed at Khe Sanh revealed the runway was too soft and required further preparation.
- 7 Feb 71 DASC Victor became operational and LZ constructs were executed on four sites. Phase II "Jump Off".
- 8 Feb 71 The 2d Airborne Battalion occupied Hill 30 at 0325 and the 3d Airborne Battalion occupied Hill 31 at 0809H without enemy contact.
- 9 Feb 71 First tac air used in support of TIC.
- 10 Feb 71 1st Armored Brigade reached LZ A Loui.
- 11 Feb 71 Consolidation Phase began.
- 12 Feb 71 2/1 ARVN Infantry Battalion Combat assaulted into LZ at FSB Delta.
- 14 Feb 71 First Combat Sky Spot made in support of Lam Son Operation.
- 15 Feb 71 Sustained C-130 operations on the MX-19 assault strip at Khe Sanh began.
- 19 Feb 71 39th Ranger Battalion received the first large-scale enemy attack and perimeter positions were overrun.
- 20 Feb 71 The 39th Ranger Battalion evacuated their position on the evening of 20 Feb after daily attacks since 18 Feb.
- 23 Feb 71 4/3 ARVN Infantry Battalion combat assaulted into LZ Brown.

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25 Feb 71 FSB 30 and 31 received heavy armor and infantry attacks with FSB 31 overrun. First fixed wing combat loss to automatic weapons fire.

26 Feb 71 Contact continued heavy at FSB 31. ARVN tanks and infantry ordered to join up and move forward to defend FSB 31.

1 Mar 71 Old AM-2 runway opened for C-130 operations at Khe Sanh.

2 Mar 71 Heavy attack by fire on FSB 30.  
Seventy-nine C-130 sorties flown into Khe Sanh delivering over 916 tons of cargo, 1143 pax and 35,000 gallons of JP-4 - the largest single airlift in a one-day time period during Lam Son 719.

3 Mar 71 Combat assault into LZ Lo Lo from LZ Delta with 42 helicopters hit, seven helicopters lost and 20 nonflyable. Commander of FSB 30 reported 200 casualties, ten friendly APCs and tanks destroyed or damaged, and no food or water for two days. Commander evacuated FSB 30 during the night. Marines were built-up to a full division (three brigades).

4 Mar 71 Fifty-four tac air sorties used to prep LZ Liz for the successful combat assault by the 1/1 and 4/1 ARVN Infantry Battalions.

5 Mar 71 4/2 ARVN Infantry Battalion combat assaulted into LZ Sophia.

6 Mar 71 3/2 ARVN Infantry Battalion combat assaulted into LZ Hope.

7 Mar 71 2/2 ARVN Infantry Battalion established positions around Tchepone (the most western point in the operation).

11 Mar 71 The easterly deployment began.

12 Mar 71 LZ Liz and LZ Sophia abandoned.

- [REDACTED]
- 13 Mar 71 The 1st ARVN Infantry Regiment encountered heavy contact in the vicinity of LZ Lo Lo reporting 1100 enemy KIA.
- 15 Mar 71 5/1st ARVN Infantry Battalion evacuated LZ Lo Lo moving to FSB Brown. Operable field artillery was destroyed in place.
- 16 Mar 71 3d Regimental Command Post and 4/3 ARVN Infantry Battalion lifted from FSB Delta to Khe Sanh.
- 18 Mar 71 1st Regiment lifted from FSB Brown to Khe Sanh after experiencing heavy contact with enemy since 13 March.
- 19 Mar 71 The attempt to extract the 4/1 ARVN Infantry Battalion from their position, 19 km east south east of Tchepone, was delayed due to constant heavy enemy fire. During the night of 18-19 March the CO and XO were killed in heavy contact which had reduced effective strength to 180. FSB A Loui evacuated as the Armored Task Force began moving eastward to FSB Alpha.
- 20 Mar 71 All units experienced contact. The 147th VNMC Brigade reported 1000 KIA (400 KBA) while suffering 85 KIA and 238 MIA.
- 21 Mar 71 2d Regiment, 1st Airborne Brigade CP and the 5th Airborne Battalion airlifted to Khe Sanh.
- 22 Mar 71 Armored Task Force stalled south of Route 9 while preparing to cross Xe Pon River. Enemy tanks moving eastward on Route 9 in Laos were stopped before overtaking the friendly column.
- 23 Mar 71 At 1000H all ARVN Armor and Airborne had crossed into South Vietnam. During the night of 22-23 March FSB Delta was

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overrun and at 1015H tac air destroyed 13 abandoned artillery pieces.

24 Mar 71

Helicopters were attempting to locate stragglers for extraction to South Vietnam. All units were officially listed as withdrawn from Laos.

25 Mar 71

VNMC Recon Teams were inserted into Laos as a rear guard action to stem the enemy's movement into SVN.

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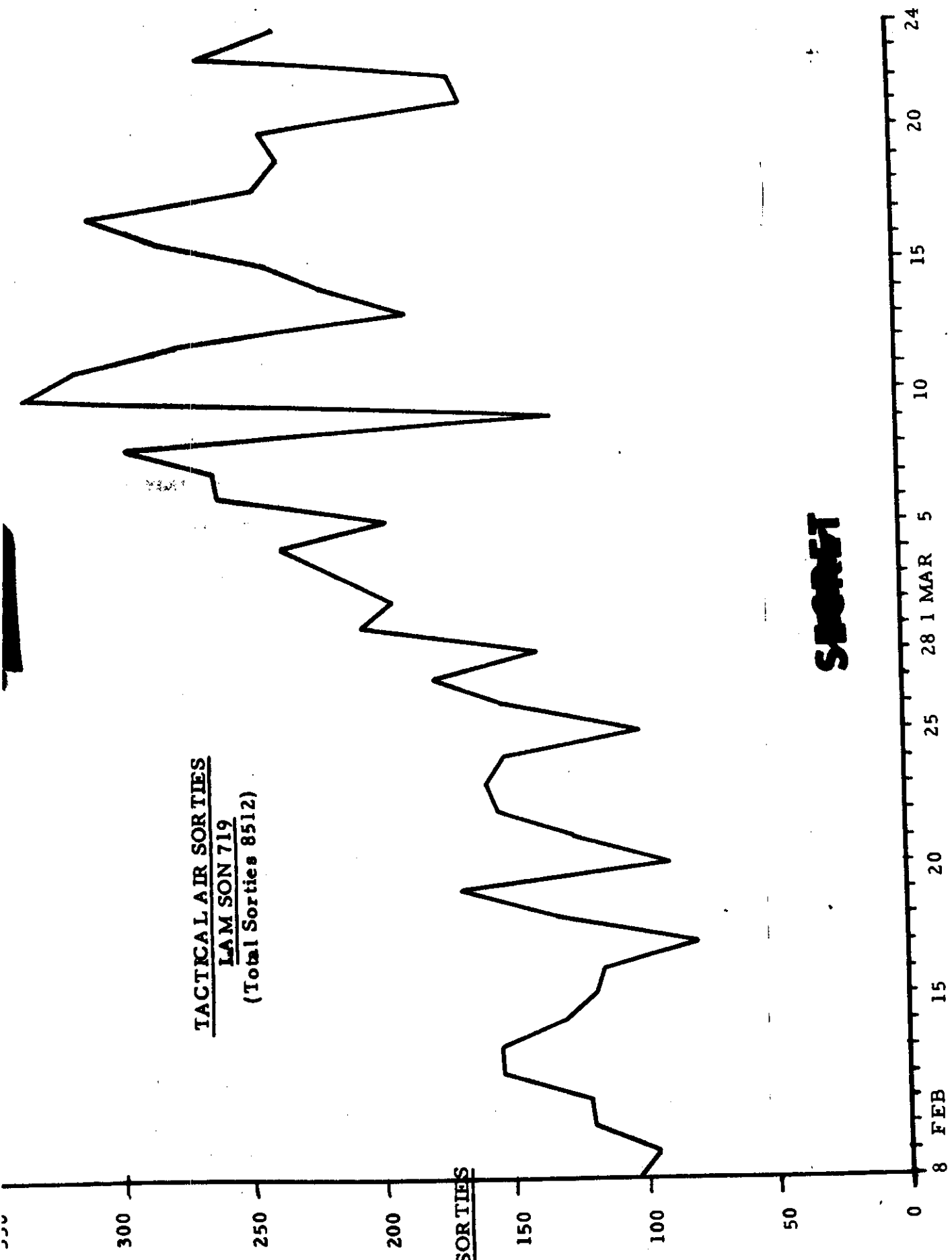
APPENDIX A

STATISTICAL APPENDIX

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TACTICAL AIR SORTIES  
LAM SON 719  
(Total Sorties 8512)



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FIGURE A-1

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TACTICAL AIR SORTIES IN LAM SON 719

<u>TARGET CATEGORY</u>	<u>SORTIES</u>	<u>PERCENT</u>
PERSONNEL	3593	42.2
VEHICLES *	1433	16.8
DEFENSES **	1284	15.1
LOC INTERDICTION	1111	13.1
STORAGE SITES	538	6.3
OTHER ***	553	6.5

\* Includes trucks, armored and auxiliary vehicles and truck parks

\*\*Includes antiaircraft artillery, automatic weapons and weapons positions

\*\*\*Includes helicopter landing zone construction, fortifications, communication centers, etc.

FIGURE A-2

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U.S. TAC AIR DELIVERED ORDNANCE  
(SHORT TONS)

LAM SON 719

	<u>EAST</u>		<u>WEST*</u>	<u>TOTAL</u>
3-9 FEB	173.9	8-9 FEB	419.7	593.6
10-16 FEB	264.5		2159.3	2423.8
17-23 FEB	190.3		2162.4	2352.7
24 FEB-2 MAR	248.3		2752.9	3001.2
3-9 MAR	94.7		4213.7	4308.4
10-16 MAR	210.4		4076.6	4287.0
17-23 MAR	<u>214.5</u>		<u>3568.2</u>	<u>3782.7</u>
TOTAL	1396.6		19,352.8	20,749.4

\* Lam Son West was that part of the overall AO in Laos

FIGURE A-3

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ARC LIGHT SORTIES  
LAW SON 719  
(Total Sorties 1358)

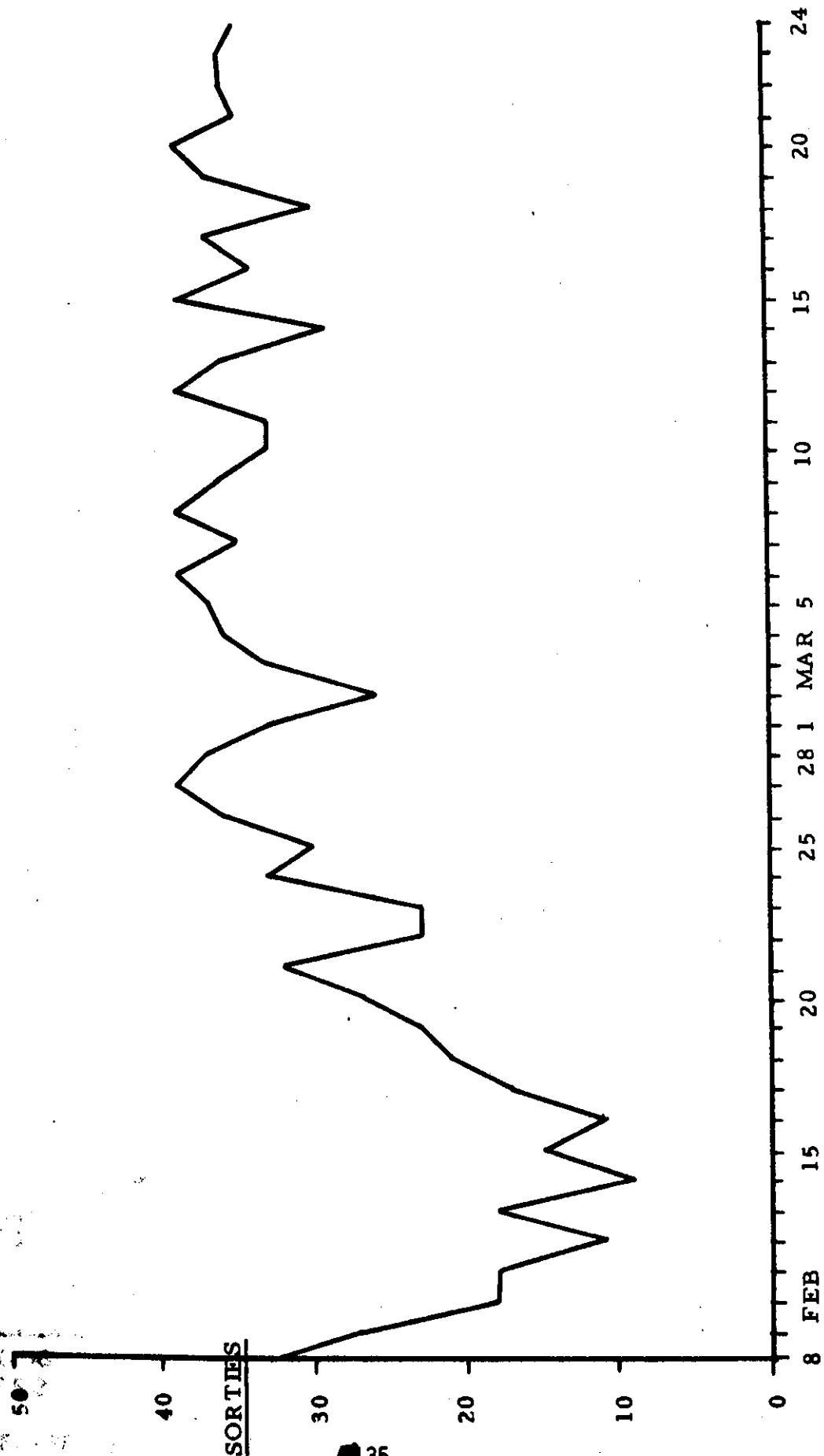


FIGURE A-4

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TACTICAL AIRLIFT SUPPORT

LAM SON 719

<u>DATE</u>	<u>MISSION</u>	<u>SORTIES</u>	<u>PASSENGERS</u>	<u>CARGO(S/T)</u>
26 JAN-6 FEB	DEPLOY US SUPPORT FORCES	338	2045	2633.8
30 JAN-6 FEB	DEPLOY CONTIN- GENY FORCES	247	9254	1711.5
5 FEB-3 APR	RESUPPLY AND REINFORCEMENT	2083	15545	20513.7
28 MAR-6 APR	REDEPLOYMENT	<u>141</u>	<u>4638</u>	<u>1261.7</u>
	TOTAL	2809	31482	26120.7

FIGURE A-6

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# US GUNSHIP SORTIES FLOWN IN LAM SON 719

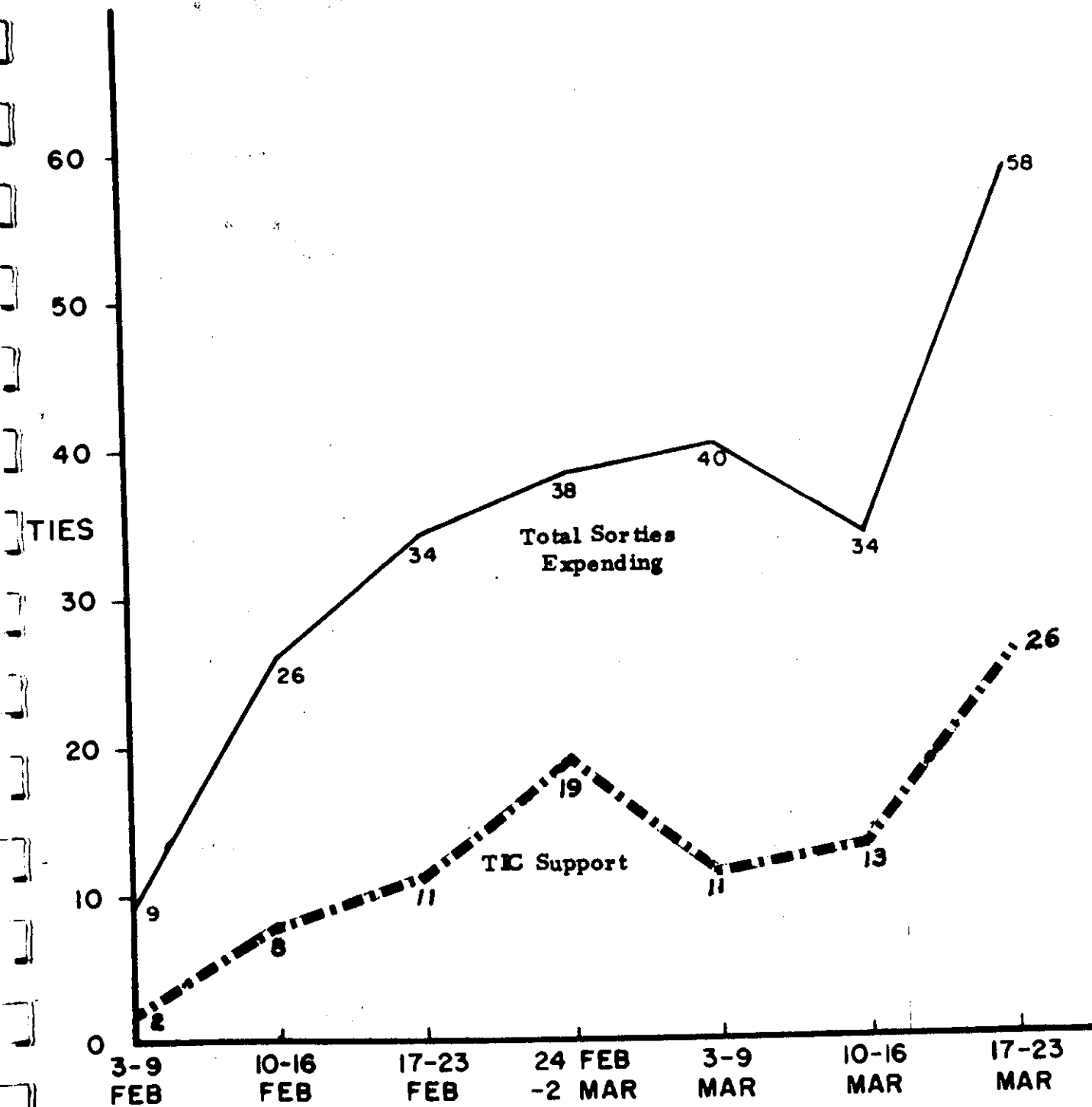


FIGURE A-5

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BATTLE DAMAGE ASSESSMENT LAM SON 719

REPORTED BY AIRCREWS AND FACS

8 FEB - 24 MAR

<u>TARGET</u>	<u>BDA</u>
PERSONNEL	2307 KBA
FORTIFICATIONS, STRUCTURES	374 DESTROYED 57 DAMAGED
DEFENSES (AA and Automatic Weapons)	225 DESTROYED 48 DAMAGED 54 SILENCED
LOCs	316 CUTS & SLIDES
VEHICLES:	
TRUCKS	1539 DESTROYED 485 DAMAGED
TANKS	74 DESTROYED 24 DAMAGED
OTHER VEHICLES	22 DESTROYED 8 DAMAGED
SECONDARY EXPLOSIONS	9291
SECONDARY FIRES	2049

NOTE: On 24 March, tactical air strikes were also made against abandoned friendly tanks, destroying 14 and damaging 9. These are not reported in the above table.

FIGURE A-7

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**ENEMY EQUIPMENT CAPTURED/DESTROYED\***

**THRU 25 MARCH 1971**

INDIVIDUAL WEAPONS	4957
CREW SERVED WEAPONS	1913
AMMUNITION	
SMALL ARMS (TONS)	13,631
OTHER (TONS)	479
RICE (TONS)	1550
OTHER FOOD (TONS)	30
MEDICAL SUPPLIES (POUNDS)	7900
RADIOS	96
POL (GALS)	209,710
MISC SUPPLIES AND EQUIPMENT (TONS)	40

\*As reported by RVNAF ground commanders

FIGURE A-8

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CASUALTIES IN LAM SON 719\*

AS OF 24 MAR 1971

	<u>RVNAF</u>	<u>US</u>
KILLED IN ACTION	1118	137
WOUNDED IN ACTION	4081	818
MISSING IN ACTION	209	42

ENEMY

KILLED IN ACTION	13,341 (KBA 4126)
DETAINED	51

\*As reported by RVNAF ground commanders

FIGURE A-9

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... to western forces, the  
... protection and  
... evidence, through the  
... logistical capabilities

... only selected  
... in the

**APPENDIX B**

**LOGISTICS MOVEMENT APPENDIX**

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LOGISTICS MOVEMENT

Although the enemy was not forced to shift to western routes, the flow of logistics in Steel Tiger was disrupted by ground action and air strikes in the Lam Son 719 area of operations. That the enemy's logistics flow was disrupted is supported by clear objective evidence, although the longer term effects of Lam Son 719 on the enemy's logistics capability is less clear.

SENSORS MONITORED

The entire sensor field was studied daily, but only selected sensor strings, as shown on the accompanying map are referred to in this analysis of the effects of Lam Son 719 on the enemy's logistics flow. In some instances two or more sensor strings are grouped into a band across parallel route segments for the purposes of studying movement into an area.

NOTE: The term "detection" refers to the activation of one or more sensors in a sensor string. The term "detected movement" refers to the passage of a vehicle past two or more sensors in a string, for which direction of travel, time and speed could be determined. The detected movements referred to in the text are all presumed to have been truck movements. Truck movements could be differentiated from those of tracked vehicles. Tracked vehicle movements are not included with "detected movements" in this analysis. The information contained in this appendix was taken from an intelligence analysis of Lam Son 719 prepared by 7AF DCS/Intelligence.

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TRAFFIC ANALYSIS

South of DMZ:

Sensor strings 09-350 and 09-390 on Route 1032B (Annotation 1 on map)\* were used to monitor the input traffic from the DMZ into the eastern Lam Son 719 area. In the five weeks before Operation Lam Son 719 began, movements averaged 12 northbound and 16 southbound each day. Shortly after Lam Son 719 traffic to the south on Route 92B came to a halt as ARVN forces cut this LOC. Nevertheless, traffic detected on the sensor strings along 1032B continued and probably functioned mainly to bring in troops and supplies to counter ARVN forces further south. This traffic fluctuated and generally remained at less than 20 southbound each night although on some nights over 40 southbound movements were detected along this LOC.

Sensor strings 08-480 and 08-540 on Route 92B (Annotation 2 on map) reflected the most dramatic change in traffic patterns caused by Operation Lam Son 719. Previous to 8 February, Route 92B supported roughly the same amount of traffic as Route 1032B as supplies which had entered from the DMZ were moved southward to Route 92C and Base Area 611. The daily average before Lam Son 719 was about 14 movements northbound and 14 southbound, just slightly less than the average on 1032B. There was one surge of activity on 9 February (17 northbound and 32 southbound), then traffic dropped off to zero and remained virtually stopped for the duration of the operation. In summary, traffic on Route 1032B was probably used to support enemy troops in the immediate vicinity, since it did not proceed south to Route 92B.

\*Figure B-1 on page 150.

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Northeast of Tchepone

Sensor string 09-380 on Route 1035B (Annotation 3 on map) was chosen to monitor traffic moving toward Tchepone and Route 9 from Ban Raving, one of the two input gates from North Vietnam feeding directly into the Lam Son 719 area. The daily average in the five weeks before Lam Son 719 was 14 northbound and 14 southbound movements, increasing weekly from ten to 22 per day. After a short surge of southbound movement on 8-9 February, northbound traffic dropped sharply while southbound movements increased. About 15 March, as the ARVN withdrew from Tchepone, northbound traffic resumed the pre-Lam Son 719 daily average. Southbound traffic continued at a very high level as greatly increased numbers of trucks moved through the Ban Raving entry corridor into Laos destined for the core routes below the Lam Son 719 area. Most of this traffic was not detected along Route 913 moving toward Route 9 and the center of the Lam Son 719 area, rather, it was known to be moving west on Route 9110 to join the main flow onto Route 914 west of Tchepone. Thus, southbound traffic to support troops engaged in the area shifted after the ARVN withdrawal from Tchepone, and became part of the flow through the Tchepone area and southward.

North of Tchepone

String 08-520 monitors traffic moving from the Ban Raving entry corridor to the junction of Routes 913 and 9G, just north of Tchepone (Annotation 4 on map). During four of the five weeks prior to Lam Son 719 an average of nine northbound and 12 southbound movements per day

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[REDACTED]

were [REDACTED]. In the week immediately preceding 8 February, however, traffic in both directions doubled the previous averages, possibly reflecting movement of goods out of threatened storage areas. Traffic continued at unusually high levels until 14 February, after which it declined dramatically. Traffic remained very light until the last week in March when vehicles resumed movement along this route.

Northwest of Tchepone

The average daily movements on sensor strings 08-770, 08-820 and 08-840 on Routes 91B, 911G and 918, located northwest of Tchepone, for the five weeks previous to Lam Son 719 was 20 northbound and 18 southbound (Annotation 5 on map). On 8 and 9 February, northbound traffic increased greatly, indicating that the enemy was probably moving stored supplies away from the threatened areas. However, on 10 February, traffic was heavily southbound, almost twice the previous daily average. After one more northbound surge on 13 February, traffic through this area declined and stayed light throughout the remainder of Lam Son 719, averaging four northbound and two southbound movements a day. Thus, after a few surges to move endangered supplies or to support enemy forces, these LOCs served no vital function. The regular logistics traffic that had moved along this route prior to the Lam Son 719 operation was diverted elsewhere.

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### West of Tchepone

Sensor strings 07-640 and 07-680 monitored the very heavily traveled Route 917, the main route by which traffic from Mu Gia and Ban Karai entry corridors was moved down into Base Area 604 surrounding Tchepone (Annotation 6 on map). Before Lam Son 719, the traffic from these input gates moved either along 91A toward Tchepone or along Route 917 entering the main routes at a point south of Tchepone. But as has been noted, the traffic entering Tchepone from the northwest along 91B, 911G and 918 declined during the Lam Son 719 period. Route 917 was supporting a daily average of 25 northbound and 40 southbound movements before 8 February. During Lam Son 719, Route 917 was generally subjected to heavier use as a high of 60 northbound and 90 southbound movements were detected. Traffic declined throughout Steel Tiger as moon illumination reached a minimum on 23 February. Traffic declined on Route 917 in the last week of March and more traffic appeared to shift to the west on Route 23G. In summary, during Lam Son 719, more trucks from the northern entry gates moved south on Route 917 toward the southern core routes and base areas than in the period prior to 8 February.

### Southwestern Lam Son 719 Area

Sensor strings 07-350 and 07-320 monitor traffic on Route 914, the main route network used to move supplies from Base Area 604 to Base Area 611 (Annotation 7 on map). Before Lam Son 719, the daily average of detected movements for the five previous weeks was 24 northbound and 30 southbound. After Lam Son 719 began, northbound movements increased

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only 11,000, but there were many days of extremely large increases in southbound movement. Traffic averaged 25 to 40 northbound and over 50 southbound movements each night and on two evenings exceeded 100 southbound movements. After a lull between 24 February and 1 March (detected throughout the Tiger), traffic generally leveled off but was still about 40 southbound movers on Route 914 each night. Thus, the very heavy traffic on Route 914 (heavier than that detected on Route 917) reflected the movement of greatly increased amounts of goods southward. These goods probably came from a combination of inputs from Route 917 and Ban Raving, the emptying of threatened storage areas, as well as the localized shuttling of troops and their materiel. There was extensive shuttle activity and many more movements detected on Route 914 than on routes south of 914 leading to Base Area 611. Much of this traffic was, therefore, involved in countering ARVN operations north of Route 914.

South of Lam Son 719 Area

String 10-650 (Annotation 8 on map) monitors traffic entering the Route 99 network, directly south of the Lanong River and reflected the amount of traffic leaving the Lam Son 719 area heading to the major storage areas further south, below Base Area 611. Before Lam Son 719, traffic on this string was erratic but generally averaged 20 north and 20 southbound movements each night. During Lam Son 719, detections increased in both directions, but not to the degree expected if all supplies detected earlier along Route 914B were indeed continuing on to the south.

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String 10-610 (Annotation 9 on map) monitors what is basically a secondary Route 929X, leading to the south out of the Lam Son 719 area. Before Lam Son 719 movements on this string rarely averaged more than four northbound and eight southbound each night; movements decreased after 8 February. Most of the increase in traffic which occurred during Lam Son 719 moved south on Route 99 and did not affect Route 929X which is easily interdicted by air strikes.

Throughput to RVN

Sensor string 11-520 monitors traffic going directly toward South Vietnam from Base Area 611 on Route 922 (Annotation 10 on map). Before Lam Son 719 traffic here was steady with a daily average about eight northbound and eight southbound. For the first two weeks of Lam Son 719 the southbound average remained about the same but traffic dropped off to a daily average of less than one northbound and two southbound and with rare exceptions remained at this low level. Southbound movement again increased during the last week of March and supported daily throughput at ten movements.

SUMMARY

The patterns of logistics movement during Lam Son 719 conveyed the enemy's intent to continue using the central route structure. Only once was there any indication of a possible shift to the western Route 23. He abandoned the 1032 and 1035/913 access routes for moving supplies into Base Area 611 and used these routes for direct support to tactical units engaged with the ARVN. The enemy relied on Route 917 and 914 to

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move goods coming through the entry corridors from North Vietnam and Base Area 604 to points south of the Lam Son 719 area.

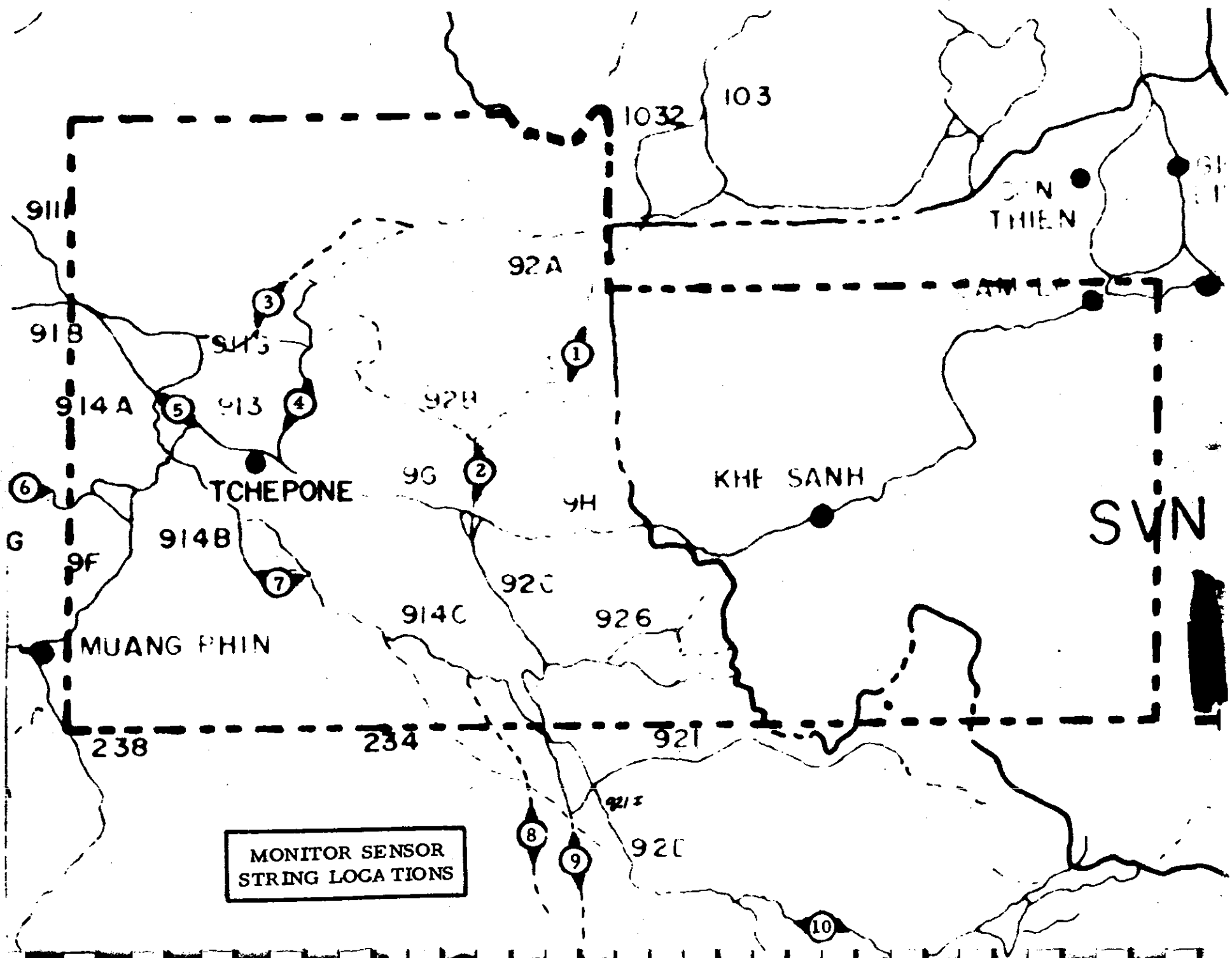
These key routes were also used to support enemy tactical forces; since the volume of southbound traffic on Route 914 in the Lam Son 719 area was not reflected further south. However, traffic south of Lam Son 719 area was slightly higher than in the period prior to 8 February. Some of this traffic was almost certainly to move goods away from areas threatened by the ARVN.

Overall, the levels of input from North Vietnam during Lam Son 719 were higher than during the same period in 1970, and after 1 March, the total number of detections throughout Steel Tiger reached a high for this dry season. In part, this may have been necessary to support NVA combat elements in Laos, but mainly the heavy input indicated an enemy intention to continue his logistics effort later in the dry season and perhaps into the wet season. The gradual rise in throughput into South Vietnam and Cambodia, although far below last season's total, continued during Lam Son 719.

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MONITOR SENSOR  
STRING LOCATIONS

911

918

914 A

SH'S

913

914 B

MUANG PHIN

238

MONITOR SENSOR  
STRING LOCATIONS

92 A

92 B

9 G

914 C

92 C

926

92 I

92 C

1032

103

SVN  
THIEN

KHE SANH

SVN

3

4

7

2

1

8

9

10



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(TS) OPORD, 7AF, p 4
33. (S) OPORD, XXIV Corps, p 2 and 3  
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34. (S) OPORD, XXIV Corps, p 3  
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81. (TS) MACV Lam Son Report #35
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- 154. (TS) MACV Lam Son Report #89
- 155. (TS) MACV Lam Son Report #91
- 156. (TS) MACV Lam Son Report #90
- 157. (C) MACV COC Log, 20-21 March 1971, Entry #53
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## GLOSSARY

AA Antiaircraft  
AAA Antiaircraft artillery  
ABCCC Airborne Battlefield Command and Control Center,  
AC-130 aircraft equipped with a control capsule  
Airborne  
ABN Armored Cavalry Squadron; Air Cavalry Squadron  
ACS Airmobile  
AML Area of Operations  
AO Armed Personnel Carrier  
APC Aerial Rocket Artillery, helicopters equipped to  
ARA fire rockets  
ARC LIGHT (S) B-52 strike operations  
ARVN Army of the Republic of Vietnam  
AW Automatic Weapons (12.7 and 14.5mm)

BARKY Call sign of the Forward Air Controllers (20th TASS)  
who operated in Military Region I, South Vietnam during  
Lam Son 719

BARREL ROLL Northern Laos area of operations for air interdiction  
and close air support

BDA Bomb Damage Assessment  
BLUE CHIP 7AF Command and Control Center

CHECO Contemporary Historical Examination of Current Operations  
COMBAT SKYSPOT (S) MSQ-77 controlled bombing  
COMMANDO HUNT V (S) The Northeast Monsoon air interdiction campaign in  
Southern Laos  
COMMANDO VAULT (S) Employment of the BLU-82 weapon (15,000-pound bomb)  
with C-130 aircraft to create helicopter landing zones  
COMUSMACV Commander, U.S. Military Assistance Command, Vietnam  
CP Command Post

DAISY CUTTER (S) MK 82 (500 pound, high explosive bomb) or MK 84  
(2,000 pound, high explosive bomb) with fuze extenders  
designed to explode at the surface of the ground to  
kill personnel and defoliate

DASC Direct Air Support Center  
DISUM Daily Intelligence Summary  
DMZ Demilitarized Zone  
DTOC Division Tactical Operations Center

FAC Forward Air Controller  
FSB Fire Support Base

GCA Ground Controlled Approach  
GIAP General Vo Nguyen Giap, Minister of Defense of the  
Democratic Republic of Vietnam (North Vietnam)

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G-3	General Staff, Operations
G-4	General Staff, Materiel and Logistics
HAMMER	Call sign assigned to the Forward Air Controllers of the 23d TASS (Augmented) who operated over the Laos portion of the Lam Son 719 Area of Operations
IFR	Instrument Flight Rules
KBA	Killed by Air
KIA	Killed in Action
LGB	Laser Guided Bomb
LOC	Line of Communication
LZ	Landing Zone (Helicopter)
MACV	Military Assistance Command, Vietnam
MAW	Marine Air Wing
NAPE	Napalm, a fire bomb of petroleum jelly
NBL	No Bomb Line
NDP	Night Defensive Position
NVA	North Vietnamese Army
NVN	North Vietnam, North Vietnamese
OFF-SHORE	USAF units permanently located outside of South Vietnam but with elements operating in-country
POL	Petroleum, Oil, and Lubricants
PREP	Preparation, ordnance delivered to suppress enemy weapons fire in the area of a helicopter landing or pick-up
PT-76	Soviet-built, light, amphibious tank
PZ	Pick-up zone (helicopter)
RECON	Reconnaissance
RLAF	Royal Laotian Air Force
RPG	Rocket Propelled Grenade
RVN	Republic of Vietnam (South Vietnam)
RVNAF	Republic of Vietnam Armed Forces
SA	Small arms (7.62mm or smaller)
SAM	Surface-to-Air Missile
SNAKE	Snakeye, MK 82 high drag bombs
STEEL TIGER	(S) Geographic area in Southern Laos designated by 7th Air Force to facilitate planning and operations
TF	Task Force (Armored)
T-34	Soviet-built, medium tank

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T-54 Soviet-built, medium tank  
Tac Air Tactical Air, used generally to mean tactical strike aircraft excluding B-52s  
TACAN Tactical Air Navigation System  
TACP Tactical Air Control Party (Post)  
TIC Troops in contact  
TOT Time over target  
UHF Ultra High Frequency  
VHF Very High Frequency  
VNAF South Vietnamese Air Force  
VNMC South Vietnamese Marine Corps

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