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**FINAL REPORT**

**AIRMOBILE OPERATIONS IN SUPPORT OF  
OPERATION LAMSON 719  
8 February - 6 April 1971**

**REFERENCE DATA**

15 May 1971  
Republic of Vietnam

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**GROUP 4  
DOWNGRADED AT THREE YEAR INTERVALS  
AUTOMATICALLY DECLASSIFIED AFTER 12 YEARS**

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## SECTION I INTRODUCTION

### A. (U) BACKGROUND

The reference data compiled herein are derived in part from seminars conducted at Khe Sanh under the chairmanship of the Aviation Group Commander immediately following selected combat assaults. The objective of these seminars was to methodically review each one of the major combat assaults to reconstruct and record in narrative fashion what actually happened and to derive the lessons learned. Also included in the compilation are selected interviews and resumés of activities to include pertinent statistical summaries not included in the basic volumes of the Final Report.

### B. (U) LIMITATIONS

This volume is not an integral part of the Final Report itself. It includes personal observations and deductions attributed to identified individual members of the seminar or to selected interviewees. These observations are not necessarily subscribed to by all participants nor do they represent any official view. The data herein does represent, in many instances, eyewitness accounts and first hand source material not available anywhere else. It is felt that this material may be valuable to the researcher of airmobile operations in the hostile environment encountered for the first time in support of LAMSON 719.

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SECTION II  
COMBAT ASSAULT  
LZ LOLO  
3 MARCH 1971

A. (C) GENERAL

1. CONCEPT

The original LAMSON 719 plan called for an armored thrust with its axis of advance along Route 9 to link up with an airmobile assault which would be placed close to Tchepone, the final objective. The stiff resistance encountered by the armored column to the west and north of A LUOI coupled with the decision to fully search cache sites uncovered by the ground troops north and south of Route 9, dictated a change in the overall plan. The line of progress at the end of February was along a north south line running from LZ 31 (XD 5145) on the north, to A LUOI (XD 5239) on Route 9, south of LZ BROWN (XD 5035) on the southern escarpment. In order to regain the momentum of the attack toward Tchepone, the I Corps Commander directed the 1st ARVN Infantry Division to conduct a series of airmobile assaults along the east-west escarpment south of Route 9. A series of fire bases and staging areas were to be established leading to a thrust into the Tchepone area from the south on March 6. The 1st ARVN Inf Div plan called for a series of four airmobile assaults with accompanying artillery along the escarpment into LZ's LOLO (XD 4337), LIZ (XD 3739), SOPHIA 2 (XD 3440), and HOPE (XD 3545).

2. MISSION

The first step in the revised plan was LZ LOLO (XD 431372) on 3 March. The mission was assigned to the 1st Regiment, 1st ARVN Inf Div to secure LOLO and establish a Forward Operational Base to support future operations to the west and south. The plan included a combat assault of the 3rd Battalion, 1st Regiment, to be followed by the regimental headquarters, the regimental reconnaissance company, and an engineer company with two bulldozers. The engineers were to spend two hours preparing artillery positions prior to the insertion of the 1st Battalion, 1st Regiment, six 105mm howitzers, and four 155mm howitzers. There were no other troop moves scheduled in the 1st ARVN Inf Div or the I Corps area of operation on 3 March. Resupply

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lifts were scheduled and flown to other locations in the Corps area during the day.

### **3. WEATHER**

Visibility on 3 March was a significant factor for the combat assault on LOLO. The original flight route was to be along the escarpment at about 5500 feet. The poor visibility along the escarpment was one of the factors which required the flight route to be moved into the valley to the north so that bends in the river could be used as navigational aids.

### **B. (C) EXECUTION**

#### **1. ENEMY SITUATION**

The air cavalry worked the general area of LOLO about a week prior to the assault and located three 12.7mm positions about one kilometer south of the intended LZ. An aircraft was shot down about two kilometers south of the area during the previous day and numerous hootches and recently used trails were observed. The general area was influenced by elements of the 33d Binh Tram, the 27th Company of the 14th NVA Antiaircraft Battalion, and the 35th NVA Engineer Battalion. Ground fire consisted of small arms, 12.7mm machine guns, and 37mm antiaircraft fire. There was at least one 37mm position one kilometer north of the LZ and numerous 12.7mm positions strung along the escarpment covering the river. Fire was reported by aircraft from all directions around the LZ.

#### **2. COMMAND AND CONTROL**

The chain of command for the combat assault on LOLO was from 1 Corps and 1st ARVN Inf Div located at Military Post near Khe Sanh to the 1st Regiment located at FB DELTA (XD 647300) and then to the battalions that were being inserted. The 3d Battalion was scheduled for the initial assault, to be followed by the 1st Battalion. The Ground Commander (GC) was the commanding officer of the 1st Regt, 1st ARVN Inf Div. The Air Mission Commander (AMC) was the CO, 223d CAB. The PZ was controlled by the S-3, 223d CAB

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who was also the alternate AMC. The AMC proceeded to the LZ area at first light to observe the reconnaissance by elements of the Cav and to observe the airstrikes, which were scheduled to go into the area prior to LZ time.

The primary radio net for command and control of the lift ships by the AMC was the UHF net. All aircraft were to monitor the command UHF frequency for information regarding the coordination between the AMC and flight leaders. The VHF net was used as a link between the AMC and all airborne fire support elements (air cav, ARA, escort gunships, and the FAC). The FM radio net was also used as a communications link with the FAC. The individual companies maintained internal control of their flight on their own assigned VHF and FM frequencies.

The GC had one UHF radio and two FM radios at his disposal in the console of the C&C aircraft. The UHF radio was available to monitor the progress of the flight. One of the two FM radios was used by the GC's Artillery Liaison Officer. The other FM radio was used by GC to communicate with his ground elements.

### 3. RECONNAISSANCE

B Troop, 7th Sqdn, 1st Cav, OPCON to the 2d Sqdn, 17th Cav received the mission for visual reconnaissance and preparation of LZ LOLO. B Troop reconnaissance teams consisted of two AH-1G Cobras for reconnaissance effort and one UH-1H Command and Control helicopter for coordinating the reconnaissance effort and the LZ preparation. The Cav troop commander elected not to use the LOH observation helicopter because of the intensity of antiaircraft activity known to be in the area. Previous experience from earlier operations in LAMSON 719 demonstrated the vulnerability of the LOH to fire from heavy caliber weapons. B Troop relieved their reconnaissance teams on station to provide continuous support. Cav reconnaissance teams had worked the length of the ridge line from east to west one week prior to the insertion on LOLO. The reconnaissance teams did not concentrate on any specific area. The Cav detected recent activity with continuous movement into the area south and west of LOLO. The Cav estimated a possible NVA company or battalion size unit operating in the area. On 2 March, one day prior to the insertion, B Troop performed a visual reconnaissance mission to select the LZ at LOLO

and gave a written report to the 1st ARVN Inf Div. The report included coordinates and descriptions of the primary and alternate LZ sites. Diagrams depicted the LZ and obstacles that were present. An approach route was recommended from the north or the east and the departure route was recommended to the north or the east. B Troop had not reported any fire in the vicinity of LOLO; however 12.7mm fire was received farther south. B Troop was briefed by the AMC and was given control of TAC air to coordinate the preparation of the LZ. Once the airstrikes were being employed, B Troop screened to the south and west of the LZ. Just prior to and during the insertion, B Troop was directed by the AMC to provide security three to five kilometers to the south and west. B Troop was directed to move to several different areas throughout the insertion. The insertion was not completed until the following day.

#### **4. STAGING**

The staging of aircraft for the assault on LOLO took place at the Lagger Pad, Khe Sanh combat base. The aircraft involved were to report to the Lagger Pad between 0800 and 0830 hours on 3 March 1971 and shut down for a crew briefing by the S-3, 101st Avn Gp. At 0930 hours the aircraft under the control of the flight leaders departed the Lagger Pad as a flight and proceeded to the PZ.

#### **5. PICKUP ZONE**

The PZ to be used for the assault on LZ LOLO was FB DELTA. Thirty minutes prior to PZ time, the regimental commander sent word that the PZ had been changed. The PZ was changed from FB DELTA (XD 646300) to a field location described as being 2000 meters from DELTA on an azimuth of 300 degrees. The actual location of the PZ was 1500 meters from DELTA on a 290 degree heading.

The PZ was under the control of the S-3, 223d CAB in a C&C aircraft. The C&C preceded the flight to the new PZ to establish the exact location. Although the flight leader was assisted by the C&C, he experienced some difficulty in locating the PZ. This delay and the fact that the troops took longer to load than was anticipated caused the flight to bunch up. To avoid becoming too close together, the flight began to swing further to the south and west in an attempt to lengthen the flight path and maintain their separation. This path took the flight over previously unknown enemy positions.

Approximately fifteen aircraft landed on the PZ without taking fire. The remaining aircraft in the flight received fire from southwest of DELTA. One aircraft was shot down and destroyed as a result of this fire. There were three crew members picked up by a chase aircraft and one by a dustoff aircraft. No enemy fire was encountered in the PZ itself but had it not been necessary to change the flight route, the pickup of the troops might possibly have been accomplished without incident. Once the aircraft were able to return to the planned flight route, the enemy fire ceased. The additional pickup of the elements of the 3d Bn, 1st Regt from this field location was completed without incident.

#### 6. FIRE SUPPORT

Planned preparatory fires for LZ LOLO consisted of a general LZ prep by heavy artillery from the 108th Artillery Group late on the night of 2 March. Additional preparatory fires were planned including ARC LIGHTS during the early morning of 3 March; tactical air strikes from 0715 to 0930 hours; and an artillery preparation consisting of ARVN 155mm fire from DELTA 1, US 175mm fire from the 108th Artillery Group from TABAT commencing at 0930 hours, and an ARA prep from 0956 to 1000 hours.

The 108th Arty Group fired a general LZ prep from 2214 to 2304 hours on 2 March consisting of fifty-six 175mm rounds. Thirteen ARC LIGHTS were planned for 3 March, eight requested by XXIV Corps and five by I Corps, none of which were planned in the vicinity of LZ LOLO. I Corps later diverted ten of the orginal thirteen, but only one was diverted to the vicinity of the LZ. That ARC LIGHT was executed at 0455 hours. At approximately 0700 hours, B Troop, 7/1 Cav arrived on station to identify targets for FAC controlled tactical air strikes. At 0800 hours the AMC arrived at the LZ and found that no TAC air had been employed. The AMC attempted to contact the FAC without success. The AMC contacted HILLSBORO, the airborne USAF command and control center, requesting information on the absence of TAC air and was informed that the air had been diverted. Immediately following this notification, contact was established with the FAC and the first airstrikes began at 0838 hours. From 0838 to 0944 hours, four sets of TAC air with Daisy Cutter and conventional bombs were employed for LZ construction and neutralization of enemy positions. Numerous air strikes were employed for troops in contact throughout the day. At approximately 0930 hours, ARVN 155mm howitzers from DELTA 1 prepared the LZ with 489 rounds until 0956 hours. No heavy artillery from the 108th

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Arty Group was used during the actual prep of the LZ, but 175mm artillery from the 108th was employed on planned targets three kilometers south of the LZ commencing at 1040 hours. The final phase of the preparation for the combat assault was carried out by the ARA from 0956 to 1000 hours working in conjunction with the Cav teams on station.

The 4/77th provided two sections of ARA (station time 0945) to provide fire support for the combat assault. The ARA fired a preparation directly on the LZ and also fired a preparation on the approach axis into the LZ. Once the preparations were fired, the ARA went into a CAP of the area to answer calls for fire from the ground elements or to engage enemy antiaircraft positions. When the enemy gunners engaged the lift aircraft, the fire of ARA was not called for since the source of the enemy fire could not be determined.

#### 7. PICKUP ZONE TO LANDING ZONE

The flight of 35 UH-1H lift ships departed the PZ under the control of the AMC, CO 223d CAB. The flight route was from the PZ to DELTA 1 to BROWN with a straight-in approach along the escarpment to the LZ, landing to the west. This flight route was chosen to avoid the northern face of the escarpment, which was suspected to contain dug-in antiaircraft positions. This route was used for the first two lifts into the LZ. For the third, fourth, and fifth lifts, the flight route was changed to north of the LZ. From the release point the flight flew due south to the LZ with a right break landing to the west. This change was made because of the high intensity of enemy fire along the original final approach path and the reduced visibility caused by the smoke from fires surrounding the LZ. These fires were started by airstrikes which were preparing the LZ.

The enroute altitude was between 5500 and 7000 feet. Gunship coverage of the lift aircraft during the flight route was provided by ARA and Cav aircraft to and from the rearm/refuel point. The prescribed separation between lift aircraft was thirty seconds.

#### 8. ASSAULT

The assault on LZ LOLO on 3 March 1971 consisted of three separate attempts to insert the 3d Bn, 1st Regt. The first and second attempts were aborted as a result of intensive direct and indirect fire. The LZ area received additional preparation by TAC air and armed helicopter gunships after each of these attempts.

The initial assault began at 1000 hours and met heavy resistance from small arms and automatic weapons. One of the 35 lift aircraft had been shot down in the vicinity of the PZ and only the first eighteen remaining aircraft were able to get into the LZ before the AMC aborted the remaining aircraft. During the insertion of the first eighteen aircraft, four lift aircraft were shot down, twelve others hit, and three UH-1C gunships were damaged from enemy fire. Fire was received from the entire area around the LZ, with the heaviest fire coming from the southwest and southeast. The insertion was aborted at 1030 hours and the thirty remaining lift aircraft and their escort gunships returned to Khe Sanh, refueled and awaited further suppression of the enemy fire in the vicinity of the LZ.

After additional airstrikes had been placed in the LOLO area, the second attempt to insert troops was made at 1312 hours. This attempt was made at a touchdown point on the high ground approximately 75 meters north of the initial touchdown point. Only five aircraft were able to place troops on the ground as the second aircraft in the lift received a hit from a mortar round, crashing near the LZ. The second attempt was aborted at 1320 hours, with three lift aircraft damaged in addition to the one destroyed and one escort AH-1G damaged. The flight again returned to Khe Sanh while the third group of airstrikes was employed around the LZ.

During the first two attempts to get into LOLO, the lift package had been reduced from 35 to 19 flyable aircraft. Twenty-three additional lift aircraft were added to the flight for a total of 42 aircraft for the third attempt to complete the assault.

Prior to the third attempt, a decision was also made to alter the flight route, approach path and touchdown point. The new flight route was from the PZ north to the river, then west along the river to the release point (RP), which was a bend in the river due north of the LZ. The approach path was flown directly south from the RP to the LZ with a right descending turn which terminated landing to the west. The touchdown point was moved to a lower slope of the high ground on the northern tip of the ridge. This gave the aircraft cover from artillery hitting on the hilltop.

The third attempt, commencing at 1545, completed the insertion of the 3d Bn, 1st Regt, 12 sorties for the regimental CP and 12 sorties of engineers. The final attempt met with much less resistance as only small arms fire was encountered. This accounted for 13 additional lift aircraft and two UH-1C gunships damaged but

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none shot down. The 1st Bn, 1st Regt, was scheduled to be inserted after the 3d Bn on 3 March. But since the insertion took longer than expected, the 1st Bn, a reconnaissance company, artillerymen, and the remainder of the engineer company were inserted the following day.

The insertion of LOLO was completed on 4 March 1971. PZ's for the 1st Bn, 1st Regt, the reconnaissance company, artillerymen, and the remainder of the engineer company were on HOTEL and DELTA. The move was completed at 1512 hours on 4 March.

## 9. HEAVY LIFT

The mission in support of the insertion of LZ LOLO was assigned to the 159th Aslt Spt Hel Bn with the assistance of the 132d Aslt Spt Hel Co, OPCON to the 159th, and the III MAF Sqdn HMH 463. The support requirement included 70 sorties of 65 tons.

The AMC for the troop-lift was the S-3, 223d CAB and the heavy lift was under the control of the CO, 159th Aslt Hel Bn. The planned sequence of movement included completion of the troop lift prior to the first medium and heavy lift aircraft. This would avoid the mixing of UH-1H aircraft with the medium and heavy lift aircraft. The flight route was north of Route 9 and the Xe Pon River proceeding on a westerly heading until abreast of the LZ at which time a left modified high overhead approach would be initiated ending in an upwind landing.

Gunship cover in the vicinity of the LZ was under the control of the troop lift AMC, giving him as much flexibility as possible with his fire support. Three sets of guns were given the role of Direct Support to the 159th elements under mission control of the C&C for that element. The 159th mission commander planned on using the three sets of guns by maintaining two sets on station over the LZ throughout the heavy and medium lift portion of the insertion. The remaining set of guns would be used to relieve, alternately, the other sets of guns on station. The relief set of guns would be on call at the rear pad at Khe Sanh, and directly responsible to the C&C.

It was decided that one flight would consist of ten aircraft for this operation. The flight of ten aircraft was further broken down into six CH-47's and four CH-53's. Placing the Marines under the control of the Army element facilitated both control and coordination between these units. The use of one flight combining both the heavy

and medium lift aircraft further allowed greater flexibility and mission responsiveness than had been experienced by the 159th in previous operations with the Marine aircraft.

Two minute separation between aircraft was considered to be the best separation time. This time was arrived at with due consideration for aircraft separation in the LZ and PZ while still permitting maximum flight control by the C&C. Heavy emphasis was placed on maintaining proper separation by observing the posted enroute flight airspeed of eighty knots and a return air speed of one hundred and ten knots. The formation most logically chosen for the flight was trail, again maximizing control and coordination while allowing maximum maneuverability and flexibility.

The aircraft were to remain overnight at their home stations and depart not later than 0700 hours on the morning of 4 March to proceed to an assembly area designated as PZ AIRBORNE (XD 8238). This assembly area was chosen for both its size and close proximity to the PZ's. A closing time of 0930 hours was established for the arrival of all the aircraft at assembly area. At the assembly area it was planned that the C&C would give the mission lead and aircraft crews any last minute mission changes and the latest enemy and friendly situation reports. A check of the aircraft would be made by the crews and the flight would be ready for the expected PZ time of 1100 hours, or could respond to an "on call" order to proceed with the insertion. The exact PZ time at this phase was only speculative, and depended on how well the troops insertion progressed. The remainder of the mission would be accomplished as rapidly as possible. With an estimated turn around time of 45 minutes, the mission would be completed in three lifts and a closing time of 1630 hours was estimated.

On the morning of 4 March 1971, all aircraft were enroute to the assembly area by 0700 hours. While enroute to the assembly area, four direct support missions were completed by aircraft assigned to the LOLO operation. All aircraft closed in the assembly area by 0930 hours and the crews received their up-dated mission briefing from the C&C. All aircraft were ready to launch by 1030 hours. The C&C then launched to make an aerial reconnaissance of LZ LOLO. While enroute he contacted the AMC and received an air briefing on the latest enemy situation, suggested flight route, approach direction into the LZ, flight altitudes, winds, an artillery advisory and the current mission status.

After the C&C received the air briefing by the AMC, it was evident that the insertion was not progressing as rapidly as planned. The delay in getting the ground elements inserted made it necessary to begin the heavy and medium lift portion of the insertion prior to the last ground unit closing in the LZ. A warning order was passed to the C&C to prepare the first lift for delivery by 1400 hours. This warning order was followed up by an order to execute the heavy and medium lift phase at 1308 hours. The first flight was launched at 1311 hours and proceeded to the LZ.

The LZ was fairly small and had evidently been prepared by a Daisy Cutter as there were many stumps and some rather large obstacles left within the perimeter of the LZ. The troop-lift aircraft were making their approach from the north to the south with a short left turn and landing in the LZ from the west to the east. They were departing to the east and breaking to the left as they were climbing out. It was evident that there would be problems, first getting in and out of the LZ with all the lift aircraft traffic, and once in the LZ, finding a suitable area to release the loads. As for the first problem, the aircraft commanders had to adjust their approaches to integrate them with the troop-lift traffic. In addressing the second problem, the only solution was to try to keep the loads out of the troop-lift landing area and to avoid blade strikes. Once in the LZ, the CH-47 with its sixty-foot diameter rotor was greatly restricted by obstacles while maneuvering to position its load. The CH-53 was even more restricted.

The first aircraft arrived and began its descent into the LZ, which was completed successfully with no major incident. The first loads to arrive were the 105mm and 155mm howitzers. The last aircraft on the first lift closed on the LZ at 1400 hours. This procedure was followed until the last sortie was inserted and the PZ was clean at 1615 hours, finishing the mission at 1645 hours.

Early in the assault phase while enroute on the first lift, a CH-47 tail # 820, took two hits at three thousand feet from a 12.7mm antiaircraft weapon. One round entered the cockpit area through the aircraft commander's window, pierced the bulkhead just above and behind the aircraft commander's head and continued to pierce the #2 upper dual boost accumulator and eventually lodged in the spar of the green rotor blade. The second round lodged in the aft red rotor blade spar. The aircraft lost its #2 hydraulics which forced the aircraft commander to drop his load and make an emergency landing at ALUOI. The aircraft commander received minor injuries to the left side of his face and left shoulder caused by flying windshield glass. Later in the operation, the aircraft and crew were evacuated to Khe Sanh.

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**C. (C) SUBSEQUENT ACTIONS**

**1. AIRCRAFT DAMAGE**

The assault on LZ LOLO included 92 aircraft. Sixty-eight of these aircraft took part in the initial phase of the assault. The remaining 24 aircraft were replacements for aircraft damaged and lost to the operation. Of the 92 aircraft used, six were destroyed and 34 others received combat damage. All six of the aircraft destroyed were UH-1H's. Of these six aircraft, four were destroyed in the LZ during the initial attempt, one was destroyed before making pick-up in the PZ area, and one was destroyed while landing on the LZ during the second attempt. Twenty-eight lift aircraft received combat damage during the assault on LZ LOLO. All but one of the damaged lift aircraft received their hits while landing, on take-off, or actually in the LZ. The other lift aircraft received damage enroute to the LZ. One of the five damaged AH-1G gunships was hit while covering this damaged UH-1H. The other four were damaged while providing escort to lift aircraft in the LZ area. Twenty-six aircraft were hit by small arms fire, three by 12.7 mm machineguns, four by mortar fire, one by antiaircraft fire, five by both 12.7mm and antiaircraft fire, and one by both small arms fire and 12.7mm fire. The 92 aircraft, 61 UH-1H, 17 AH-1G, and 14 UH-1C, flew a total of 342 hours and 844 sorties.

**2. CASUALTIES**

The forty aircraft which were hit included 16 personnel casualties. Of the 16 casualties two were KIA, two were WIA evacuated to CONUS, six were WIA hospitalized in RVN, and six were WIA treated and released for duty. The 16 casualties were made up of two aircraft commanders, four pilots, six crewchiefs, and four doorgunners.

**3. DOWNED AIRCRAFT RECOVERY**

Seven aircraft were shot down during the assault of LZ LOLO. On 4 March, one of these seven aircraft was recovered. One of the seven aircraft was shot down, inspected, and found to be flyable. The remaining five aircraft were destroyed and could not be recovered.

SECTION III  
AIRMOBILE STUDY GROUP  
COMBAT ASSAULT LZ LOLO  
3 MARCH 1971

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BG SIDNEY BERRY, ASSISTANT DIVISION COMMANDER (OPERATIONS)

Starting today, we are going to methodically review each one of our combat assaults. The combat assault is the ultimate objective of all airmobile operations, and the most difficult phase to achieve successfully. Daily, starting at 1000 hrs and lasting until we are through, we will assemble the key personnel involved in each combat assault. We will start with the combat assault on LOLO. Tomorrow LIZ, the next day SOPHIA and the next day HOPE. We are beginning with these since they are the freshest in our collective memories. During the first discussion we will develop our methodology and our technique and hopefully gain in efficiency and effectiveness as we reconstruct what actually happened. We will take these things from the planning phase, staging and the combat assault, focusing on the preparation of the LZ and then the continuation of the assault. Participants will be the senior advisor of the most interested Vietnamese unit and a representative of the Air Force, who we hope will be able to provide us with the airstrikes that went in and the ordnance they delivered. Of course all of the people involved here in the Army aviation aspect will participate. This being our first session, we are going to have to work our way through to find the most effective technique for doing this. Let me conclude. Our purpose is to reconstruct and record what actually happened in a narrative fashion. We want to get the facts on the table before us, from the planning stages, through the execution, and then make the determinations. Then, having put our facts on the table, we can go back and develop the lessons learned. We must know what it is that we did well, that we should do again in future combat or airmobile operations. We must also know what it is that we did poorly, that we need to strengthen in our next combat assault.

COL EDWARD DAVIS, CO 101ST AVN GP

One general point I'd like to mention is that in an exercise of this type there are going to be some things that appear critical of the things that were done. I think Gen Berry has well pointed out what the purpose is, so let's not take anything personal.

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MAJ JOHN KLOSE, S-3, 223D CAB

The first 17 days set the scene for this one. There were circumstances that we ought to cover before we go into LOLO. Initially, we put the 3d Regiment into HOTEL and BLUE, the 1st Regiment into DELTA and DON, and two battalions down at DON. We were oriented south and west. In a subsequent operation we established Fire Base HOTEL 2 and later put three battalions in the field in the vicinity of LZ GRASS. They did not have too much success there and the division changed their order of combat. We had the responsibility of carrying out this change. In essence, we extracted, after a bitter fight, the two battalions that had been around the HOTEL area and took them to Fire Base DELTA 1, which became the CP of the 3d Regiment. In essence we moved the 3d Brigade to the area occupied by the 1st Brigade. We were going to take the 1st Brigade to LOLO and leapfrog them out. What we had done was move everybody in the division prior to LOLO. Once this was accomplished we had one meeting to cover LOLO, LIZ, SOPHIA, HOPE, and at that time VICTOR. The itinerary of events is almost the identical script we used coming out of HOTEL, DELTA 1 and the fire bases. To put in a fire base a whole sequence of events must happen. We must get the first battalion in on the ground; then the next order of priority is to get a bulldozer in there. To prepare the gunpits we must insert engineers and bulldozers. Once we bring the 155mm howitzers out they have to be put into prepared pits because ARVN cannot manhandle these guns. So, always on the day we established a fire base it was a very busy day. We had to start very early in the morning. LOLO is an example of the requirement. One hundred ninety-eight UH-1H sorties for personnel and 70 CH-53 sorties were scheduled. That was what was planned to be accomplished on LOLO. We had similar itineraries at HOTEL, HOTEL 2, DELTA, and DELTA 1. We had been successful at accomplishing the mission. The times were computed by me to accomplish the mission as assigned by the 1st ARVN Inf Div. I spent two days with it. Let's go back and pick up the mission. The mission was to move to LOLO in one day, the 3d Battalion, 1st Regiment, Hqs 1st Regt, a recon co, two bulldozers and an engineer company. Then there was going to be a two-hour lapse. In the two hours we were going to put in the 1st Battalion, 1st Regiment, a six-gun 105mm howitzer battery, a four-gun 155mm battery, and 66 sorties of ammunition, engineers, and engineer material. The LZ time was to be 1000 hours, but

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prior to the LZ time we were to start with airstrikes at 0715 to run to 0930. From 0930-0956 there was to be an artillery prep. From 0956 to 1000 we would have an ARA prep and the insertion of the first sortie. There were requests for Commando Vaults to prepare both the primary and the alternate LZ. From 0930-0956, an artillery prep was to be fired from DELTA 1. In addition, it was planned that the troops would all depart a PZ at DELTA, which is slightly different than what actually developed. Thirty minutes before PZ time we were told by the regimental commander that the PZ would be a field site. Instead of an insertion, we were running a simultaneous extraction and insertion.

CPT JOHN GOERTEMILLER, 1ST ARVN INF DIV LIAISON OFFICER

The 1st ARVN Infantry Division had been given the mission by I Corps to proceed west, south of the ridge line, eventually to the vicinity of Tchepone, destroying the enemy supplies in that area. The 1st Regt had the responsibility of securing an LZ designated LZ LOLO. This LZ was to support further operations to the west, and subsequent operations of the 1st Regt to the southwest into objective areas which have not been identified.

MAJ JACK CLARK, CO, A/2/17TH CAV

This particular reconnaissance was not done by my troop, it was done by B/7/1st. I did handle the three other LZ's we will talk about the following days. I'll try to give you basically what I remember from the briefings I had. B/7/1st worked the LZ the day prior to the insertion. They screened around it and took no fire. We sent them back out the following morning, to employ the airstrikes, verify the approach routes, and confirm the written brief given the night before to the 1st ARVN Inf Div as to the description of the LZ and the alternate LZ they had picked. They even went so far as to draw diagrams of the ground showing them what it looked like and what obstacles they had noted. As I recall they had not reported any enemy fire around LOLO. They had picked up fire farther to the south and farther to the west from 12.7mm weapons. The reconnaissance was accomplished in conjunction with the Air Force and artillery preparation.

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MAJ KLOSE:

One thing on fire support. There were ARC LIGHTS scheduled on LOLO. I do not know the number but I believe it was two. Before the airstrikes went in at 0715 there would be two. There was one to the north, but the one on the LZ was not flown.

GEN BERRY:

I remember the morning of the landing on LOLO talking with Gen Phu about this. He had desired that the ARC LIGHT be placed on the LZ itself. I believe that on the evening prior to LOLO he had requested nine ARC LIGHTS. One of those nine had been diverted. It happened to be the most critical ARC LIGHT to the combat assault, that is, the ARC LIGHT scheduled to go right on the LZ. That is a critical point. Can you give us the number of airstrikes that went into that area?

MAJ EDWARD MAHONEY, USAF ALO:

No sir, I cannot. I only have the notes on LOLO itself.

COL DAVIS:

Were there any specific landing instructions issued by the 1st ARVN Inf Div?

CPT GOERTEMILLER:

No sir, not that I know of. Just that the 3d Bn would be assaulted and would secure the area before they put in the regimental CP and reconnaissance company. There was no alternative for LOLO. The LZ had to be secured to make the rest work. As for all other LZ's, the earlier LZ was the alternate. For example, if we could not get into LIZ, we would put the troops into LOLO and walk to LIZ. If we could not get into SOPHIA we'd go into LIZ and they would walk. As far as an alternate it was within two hundred meters of the top of the hill. It was just another place to put one helicopter.

MAJ KLOSE:

I think there is another point here concerning all the LZ's we are going to discuss. We had been given the mission of picking an alternate

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LZ within a 200-meter radius of the primary. I don't think this is really acceptable, because if the primary is going to be hot, and you have got 12.7mm and 37mm, 200 meters or 300 meters is not going to be enough distance to pick an alternate LZ. As I recall the first one we tried after the initial assault was within about 75 meters of the first one. They were just extensions of the original LZ and not an alternate. The 200-meter radius was requested by ARVN. Every request we get is to pick an alternate within a given distance of the primary. Normally, it's 200 to 300 meters which is just too close to accomplish the mission. The same weapons covered the second area where we landed. This has been true throughout.

GEN BERRY

At LOLO, by changing your touchdown point 200 meters you got ships in successfully indefilade from mortars and indirect fire hitting on top of the hill. One alternate LZ was on a steep slope, and to have planned that as a primary would not have been too prudent initially. Again we are distinguishing between, in the planning phase, a true alternate to the primary zone, which is certainly farther away than 200 meters, so you get away from the primary weapon's coverage. We are talking of the techniques once you have committed yourself to change the touchdown point to get out of the incoming fire. These are different subjects. Do you think our recon tipped off the enemy to our coming in on a landing there?

MAJ CLARK

No sir, I don't because we were working the whole ridge line from east-west, not concentrating on that particular point. In subsequent days I did the same thing on the next three LZ's.

MAJ SHEFFIELD, G-2

We've noted that one of the enemy tactics is to hold fire against ships that they know carry weapons, and wait for the ships coming in with personnel on them. They are directing their troops to wait until they can recognize ships with troops in them. When these troops start to deploy on the LZ, the enemy engages them. This could explain some of this.

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**MAJ CLARK:**

I disagree. I don't think that is true at all, because I'm taking hits in Cobras at 3000 feet. They are shooting more at my gunships and me in the C&C than they are at the slicks coming in.

**COL DAVIS:**

In this particular operation, of all the aircraft hit, only two were gunships.

**MAJ KLOSE:**

With the exception of HOTEL, HOPE and SOPHIA, Col Kirklighter (CO, 223d CAB) and I marked every LZ, and we have yet to draw fire. There wasn't a round fired at us at any time. They would almost have to know that we were on a marking run. It may well have looked like an auto-rotation. Of the places we have been, they're always on the high ground in the immediate area. The initial LZ selection is made at division headquarters by maps. Regimental commanders are then given this goose egg and this is their objective. They are the ones that actually determine where we are going to put the lead slick. This might be worthy of review. We always go for the high ground in a given area.

**COL DAVIS:**

The school statement is, "The AMC in conjunction with the Ground Commander (Air Mission Task Force Commander in U.S. unilateral operations) selects the LZ".

**MAJ KLOSE:**

They take the range of a 105mm howitzer and a 155mm howitzer, go to a map and inscribe an arc. It is within this arc that they will search for another fire base. Given the goose egg, it varies from regiment to regiment where the final touchdown point will be. With the 3rd Regt, the decision is always made by the AMC. With the 1st Regt it is the exact opposite. The final determination is always made by Col Diem.

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There has been no room for compromise until LOLO, when it became essential to do something other than what we were doing. With the 2d Regt, on both occasion, the final touchdown point was a compromise between the Air Mission Commander and the Ground Commander. As an example, in SOPHIA and HOPE, we recommended the low ground and both times the regimental commander held out for the high ground. It was just fruitless to attempt the high ground in SOPHIA, and he bought the compromise which was the valley immediately to the north of the high ground.

COL DAVIS

Were there other LZ's available that would have been better, and still fulfilled the regimental commander's mission or objective?

MAJ KLOSE

At LOLO, the closest suitable alternative was the high ground to the southwest of the high ground to the east. Both would have caused the troops to fight through a depression of approximately one kilometer and attack uphill to seize the final objective. On the high ground there was no alternative; but to take the high ground you had only a limited number of places you could put one aircraft, since the Commando Vault were not put in. They were diverted and there were no ARC LIGHTS. Had the LZ been adequately prepped, and some of the trees knocked down, I think we would have more flexibility in determining where we were going to put the aircraft.

CPT GOERTEMILLER

Sir, if I may interject one thing, about the reference to the artillery in support of the LZ. They wanted to make as large a leap as possible to the west on each LZ. However, the artillery was unable to support as far as they wanted to go. The artillery on DELTA 1 that was able to support the landing into LOLO was a 155 battery consisting of four guns. That leaves them a little less leeway as far as what LZ you want to choose. They had a certain direction they had to move in, and they had to move as far as possible to the west. LOLO was in 155 range, but not in 105 range.

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COL DAVIS

Let's look at selection of flight routes and altitude.

MAJ KLOSE

LTC Phillips (S-3, 101st Avn Gp) and I talked about routes expecting to use DELTA as the PZ and go right over DELTA 1, BROWN, and LOLO on the escarpment. Because of the visibility restrictions after the battle began, it became essential to move into the valley because that's the only way we could navigate. We used bends in the river as release points. Normal enroute altitude had been 5500 feet. I remember that day we were up to 7000 or 8000 feet coming down into LOLO because of the visibility problem.

COL DAVIS

I think it might be a good point to digress here for a moment on flight routes, specifically altitudes.

MAJ KLOSE

I would say 5500-7000. I cannot recall losing an aircraft enroute except a chase aircraft that was in the valley going into SOPHIA. We did not have any slicks hit enroute.

MAJ CLARK

I concur. I think 5500 in this mid-intensity environment. Facing the weapons we are, 5500 is a compromise. If you get above 5500 you are going to take air bursts from 37mm's. If you go below 5500 your chances of taking .51 caliber hits are increased. There is one other consideration. After friendlies have been on the ground more than two days out there on an LZ or a fire base, if you plan flight routes within one kilometer or two from that fire base, you are going to take ground fire because the NVA have moved to within 1500-2000 meters of that fire base. You are going to take hits if you plan the flight routes over the friendlies. We succeeded in LIZ, SOPHIA, and HOPE in flying over friendlies because the NVA did not have time to react. They did not have time to set up around those positions. The flight routes over them worked beautifully.

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MAJ KLOSE

There is one other consideration, and that's the terrain you're going into. The LZ's that we were going into here were all on the high ground or the escarpment. When we went in to get the seven survivors the other day, we did go in at low level. We came by the escarpment and dropped down on the trees right on the deck. We had ARA and gunships flying on both sides and fire on both sides of us, and we took four hits on the insertion and zero hits on the extraction. Both of them were conducted in the valley and it was flat. If we would have gone in high at 5500 we would never have made it. We would have been shot down by 12.7's. I think that you have got to evaluate the terrain at the time. On the high ground you can go in high. On the low, flat ground I don't think you can do it high.

GEN BERRY

In our preparation of the high ground, how do we deal with those weapons in the low ground surrounding the high ground?

MAJ KLOSE

We not only prepare the LZ, we prepare the approaches to and departures from it. We found, as an economy measure, an empty slick is a versatile thing. You bring them out the same way you bring them in because you cut down your exposure area by 50 per cent. That way you can concentrate the available firepower on one alley to get in and out. We've found that long final approaches are suicide. All of our approach are buttonhooked. Minimum downwind, minimum base leg, minimum final approach, and out the same way. After we've looked at their 12.7's machine guns they have to lead you to hit you. If you give him three different velocities, he's less likely to hit you. So that's why we have used the rapid descent and the turn-descent. Get as many directional velocities working for you as possible. I think given the proper firepower and the proper time we can sanitize that area and operate efficien-

MAJ CLARK

You have got to prep the approach and departure routes just as heavy

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as you do the LZ itself. Otherwise you have got to lose aircraft on short final or departing the LZ.

MAJ KLOSE

Every simultaneous insertion/extraction that we've run, the PZ's have been carved out where the troops were. They are all less than satisfactory, but we press on with it.

COL DAVIS

How about communication, command and control?

MAJ KLOSE

I'd like to address first the control around the LZ. We use VHF for control of all aviation fire support. The AMC controls the lift aircraft on UHF. All aircraft monitor the UHF for last minute instructions or changes in instructions. The only people who talk on UHF are the AMC and the flight leads. On FM we put other back channel traffic that wouldn't fit on the other two nets. Unfortunately, during all these lifts, all the radios are going all the time. On the VHF we use the Cav Troop VHF. The FAC, because he cannot monitor the VHF all the time, will stay on the FM. It would be ideal to have the FAC, the Cav, and the guns all on a common VHF, under one common control. In the assault company all ships are on UHF. Some control VHF, some on FM. The committed set is a UHF that is committed on air lift UHF. To control the radios on the console in the back of a C&C aircraft we have a UHF and two FM's. In ours those FM's belong to the Ground Commander. One is for his artilleryman and the other is for his use.

COL DAVIS

Should the ALO be in the C&C aircraft?

MAJ KLOSE

If he was there he might cloud the air. There is very little he can do since the FAC puts the smoke on the ground and communicates with

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the fighters. The ALO in the C&C ship is not a wise idea.

GEN BERRY:

Let me state an opposition view here from the standpoint of control circumstances. The brigade CO riding in the back of the C&C ship is with me and the air liaison officer. With the Air Mission Commander sitting in the front seat I, as the Ground Commander, had everybody that I wanted to communicate with. I could work out the same path as the FAC, and I could say to the FAC or to the ALO, "There is where I want the airstrikes or here is where we want the artillery" and then I was free after that. I realized that this is a control situation, that it's unilateral, and I as the Ground Commander was running it, to a greater unilateral degree than is the case where you have one nationality as Ground Commander and another as the Air Mission Commander.

MAJ KLOSE:

I think he would be ineffective because he wouldn't be communicating too well with the regimental CO and his staff. He would be communicating with us, but then all he would have is UHF to communicate with. Where he is now, at DTOC, he has UHF, VHF, and FM plus Americans to get the ever changing situation. He has people he can deal with to get something for us and they have been very responsive throughout.

COL DAVIS:

The airstrikes which were going in around the LZ's in support of the assault, are they not unilateral from your standpoint?

MAJ KLOSE:

The Cav put them in.

COL DAVIS:

You are selecting the target areas?

MAJ KLOSE:

Yes sir.

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COL DAVIS:

Whether or not an ALO, and I'm not saying in lieu of the one at division, whether there should be an ALO on board the C&C?

MAJ KLOSE:

I would like to try one. He could contribute if he could talk to the fighter elements in their language and explain the situation to the fighters. This is the reason in point. Because of the amount of traffic that is on that FM, you are saying "OK, it's a ridge line to the south of the swamp", and this and that. With an ALO inside of the aircraft he could pick it up and put the strike in. We still have to go through the FAC, another communications gatekeeper. He could increase the confusion factor inside the aircraft if he gets in the communications link.

GEN BERRY:

The VHF is what you use to run the guns and talk with the FAC whenever you can?

MAJ CLARK:

If I can't get him on VHF, then I get him on FM. He is on one of those two nets normally. He is talking to the fighters and then we have a little problem getting back to him.

MAJ KLOSE:

The absolutely critical time is right at the LZ time. Now this works well once we have six or eight loads on the ground and have a man on the ground. Once they say, "Receiving fire from the east!", the minute I hear that I tell the Cav the threat is from the east and the response is good. I believe we could handle up to three different directional threats at the same time.

COL DAVIS:

Please continue on the use and control of fire support.

CPT JOE ALTMAN, 4/77 ARA

I feel they (ARA) are not being used effectively because of commun

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tions breakdowns, particularly when aircraft start taking hits near the LZ. The Air Mission Commander goes through his UHF to his individual lead and back through the Cav and then there is no one to adjust ARA.

### MAJ KLOSE

The Daisy Chain was not an escort. It is a 360 degree security, greater reaction force that can give us immediate fire power in the vicinity of the threat. We don't have time to adjust. If we know the threat is in the east, we can keep them honest in the east. In Daisy Chain control everybody listens to Cav commanders. If a threat develops we can hit them. You have your Daisy Chain for immediate reaction and suppression of the threat wherever it may be.

### MAJ RICHARD MILLS, CO Btry A, 4/77 ARA

The Daisy Chain, due to its construction, has to keep moving. Once you have suppressed that fire we pick it up immediately and we kill it. So in essence, when we are in that Daisy Chain we move on with it and we don't stay there and kill him. Once you suppress and mark it for us we can go in and kill it.

### COL DAVIS

We have used the quadrant system wherein the artillery continues to fire in one, airstrikes in another quadrant, escort guns in another segment, Cav, etc. You retain the ability to strike the targets you identify or are identified for you. We used this on RANGER PZ.

### GEN BERRY

It was used by us in the 1st Division. Were you at RANGER?

### COL DAVIS

I was. It worked fine. There was no control problem at all. Was it a circle or area suppression at LOLO? What was planned for fire support?

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MAJ KLOSE

A few ARC LIGHTS. Air prep started at 0715. There were Commando Vaults before the LZ and alternate LZ, two to four minutes of artillery and four minutes of ARA were planned. Artillery came from DELTA 1. That caused us to go off the escarpment to the north on the initial flight run because we would not be directly on gun target lines if we tried to use safe haven routes. Because we were exposed to the face of the escarpment, we had to shift even further north. We didn't want to expose slicks for the length of time so close to the face of the escarpment.

MAJ MAHONEY

Most of the time we had two FAC's in the air. We only have one UHF and can listen to only one FAC giving his reports. If there are any gaps in the timing sequence there is a very good chance of getting it back from DASC VICTOR back at Quang Tri.

MAJ KLOSE

The Cav was to be on station at first light and to observe the air-strike going in. We picked up Col Diem at DELTA 1 at 0800. We got on the scene and determined that no airstrikes had been delivered yet. In the meantime, we were told that we did not get the ARC LIGHTS, because the air had been diverted. Immediately thereafter we started to get the FAC, and the first bombs fell at 0840. However, from 0715, the time scheduled for the air prep to start, to 0840, no airstrikes had been delivered.

MAJ MAHONEY

The best bomb load after a Commando Vault is a Daisy Cutter, which is a fuse extender on a 1000 pound bomb, Daisy Cutters went in. They asked for four sets of air, Daisy Cutters and hard bombs. They got it. The first air that went in was the Daisy Cutter - hard bombs, which went in at 0840-46. At 0855 another LZ construction went in until 0906 and another from 0910-0923. The fourth planned LZ construction went in from 0930-0944. Again, I want to give LOLO first, then other strikes went into the area. Next was troops in contact (TIC) from 1020-1030 on XD435475, which was LOLO. Next, 1020-1030, 1115-1130.

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Again troops in contact; 1130-1140 troops, 1140-1150 same. Then 1200-1210 same, 1217-1225 TIC, 1244-47 TIC, 1347-1350 TIC, 1350-1400 TIC, 1402-1405 TIC. This was on the LOLO area. There were 6-9 additional sets of air.

MAJ KLOSE:

Later in the day we had HAMMER 48 up who has become an outstanding FAC.

MAJ MAHONEY:

One thing I was going to bring up, there was a very good possibility, at the time, of a search and rescue mission (SAR). Now the FAC's were briefed that TIC for the first time in this war had priority over SAR.

GEN BERRY:

About 2200 hours 3 March at XXIV Corps HQ at Quang Tri, in conversation with XXIV Corps G-3 and XXIV Corps-Air Liaison Officers, I requested that henceforth for the duration of this operation first priority air go to combat assaults and LZ prepping and the continuation of insertions. Second, I requested that no air be diverted from combat assaults without the permission of Air Mission Commanders.

COL DAVIS:

Let's discuss fire delivered in close proximity to friendly troops.

MAJ CLARK:

In the Cav, we don't fire anywhere close to friendlies unless we know for certain where that friendly element is or have contact with the ground. Unless you can positively identify weapons you cannot return fire when close to friendlies.

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MAJ KLOSE:

We did use people who talked to ground commanders and then told the FAC's where the friendlies were. This works ideally on small operations like SAR. On at least two occasions airstrikes were not put in.

GEN BERRY:

Another point is the number of guns available. It was a limiting factor that day and some of the other days in our combat assaults. The number of guns limits the number of resources available to us.

MAJ KLOSE:

About 12 February, the fourth day of the operation, we committed our reserves. This leaves us no surge capability. I believe that we might have to look at what resources we have and determine our optimum commitment level, and still have some guns. We haven't said no to a lift, to my knowledge.

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SECTION IV  
COMBAT ASSAULT  
LZ LIZ  
4 MARCH 1971

A. (C) GENERAL

1. CONCEPT

LIZ (XD 3739) was the second of three fire bases that were established along the escarpment leading to Tchepone. LIZ would provide a link between Fire Base LOLO and SOPHIA 2 which would be established on 5 March.

2. MISSION

On 4 March 1971, the 1st ARVN Infantry Regiment had two priorities. It was decided that the first priority would be to complete the artillery lift and troop insertion to LOLO which was not completed on 3 March. As soon as the lifts were complete and the 105mm howitzers were registered, the 1st Regiment would initiate the assault to LZ LIZ. The regimental plan called for the 4th Battalion to combat assault from DELTA 1 to LZ LIZ. The purpose of LIZ was to secure a link between Forward Operational Base LOLO and FOB SOPHIA 2 which was scheduled for 5 March. LIZ was also to provide a staging area for movement to the south once the Tchepone objective was achieved. The Corps plan gave priority of the air cavalry, ARA, airstrike assets, and ARC LIGHTS to the 1st ARVN Inf Div for the move to LIZ. It was planned to use 105mm artillery from LOLO and 155mm artillery from ALUOI to prepare the LZ prior to troop insertion. Because the heavy lift to LOLO of artillery was not completed on 3 March, there was some question as to whether the 105mm howitzers would be laid and ready to fire for support of the assault. It was decided that should the 105mm howitzers not be ready, the insertion would go without the 105mm artillery support.

In other air activity in the LAMSON 719 area of operation on 4 March, the VNMC conducted air moves to the FB DELTA area. The 1st Battalion, 1st Regiment, 1st ARVN Inf Div remained north of FB DELTA

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to screen for the VNMC. The VNMC moved the CP of the 147th VNMC Bde; the 4th Bn, 147th VNMC Bde; three infantry battalions; and personnel from the 4th Artillery Battalion from PZ KILO to FB DELTA closing at 1830 hours. The move involved a total of 2785 personnel.

### 3. WEATHER

Weather contributed to the difficulty of the operation. The cloud cover continued to be scattered and broken during the day with heavy fog in the morning hours. In the area there was a continuous haze that grew more dense as the afternoon progressed. Visibility was extremely limited to the front but visual contact with the ground for navigational purposes was reasonable. As the sorties flew to the west the sun combined with the haze to limit the visibility. Pilots reported that returning to the east they could see with the sun at their back. The environment was such that the antiaircraft positions could see aircraft coming into the area. The same condition coupled with smoke created during the LZ preparation resulted in the diversion of planned smoke missions by the Air Force.

## B. (C) EXECUTION

### 1. ENEMY SITUATION

On 3 March a combat assault was conducted on LZ LOLO (XD 431 373), which was interrupted after 18 sorties because of intense enemy fire. The assault was completed later in the day but with a total of 35 helicopters damaged and five destroyed. Approximately four kilometers to the southwest of LZ LIZ was the center of the suspected 33rd Binh Tram, identified by XXIV Corps prior to the beginning of LAMSON 719. Elements of the 2nd NVA Division containing the 1st VC Regiment and the 141st NVA Regiment were believed to be in the general area as well as elements of the 591st Antiaircraft Regiment. On 3 March one gunship was hit by 37mm antiaircraft fire to the southwest of LZ LIZ. This was the only indication that weapons larger than 12.7mm and small arms could be expected on LIZ.

### 2. COMMAND AND CONTROL

The chain of command for the ARVN troop units was from I Corps and 1st ARVN Inf Div located at Military Post in the vicinity of Khe Sanh

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to the 1st Regiment located at FB LOLO (XD 431373) to the 4th Battalion which was in a field location (XD 625309) just north of FB DELTA (XD 648300). The 223rd CAB, OPCON to the 101st Aviation Group had habitually been working with the 1st ARVN Inf Div and was assigned the mission to combat assault the 4th Battalion into LZ LIZ. During the early part of the day, the AMC was preparing the LZ with B Troop, 7th Sqdn, 1st Cav, and an Air Force FAC. The S-3, 223rd CAB, picked up the 1st Regt Commander at FB DELTA 1 (XD 552345) at 0800. The 1st Regt commander was the Ground Commander for all moves of the day. In the 1st ARVN Inf Div, if there is a battalion move, the regimental commander controls the move.

The 223rd CAB used its UHF radio to control the air move. VHF radio was used for control of the gunships and the Cav, and the FM radio was used for AMC routine traffic and the Air Force FAC. The 223rd CAB used three C&C ships, one for the AMC preparing the LZ, one for the S-3 conducting the earlier moves of the day, and the third controlling the PZ. The 101st Avn Gp Co and the ADC (O) of the 101st Abn Div (Ambl) were above the operation and provided a means to the AMC for additional support when and if needed and a communications link between the 1st ARVN Inf Div, through the advisors, and the US XXIV Corps G-3.

### 3. ECONNAISSANCE

The 2nd Squadron, 17th Cavalry placed three air cavalry troops in direct support of the 1st ARVN Inf Div on 4 March 1971. C Troop, 7/17 Cavalry, OPCON to the 2/17 Cav, received the mission of screening to the north and west along Route 9. B Troop 7/1 Cav received the mission of providing security to the south and west of LZ LIZ during the insertion. A Troop, 2/17 Cav had the mission of conducting reconnaissance of the LZ, and preparing LZ LIZ for the insertion. Each of the Cav troops used teams of two AH-1G Cobras for reconnaissance and one UH-1H, command and control, for coordinating the reconnaissance effort and the LZ preparation. The Cav troop commanders elected not to use the LOH's because of known high density of antiaircraft fire in the area. The Cav troops, to insure continuous coverage during the operation, relieved their reconnaissance teams on station throughout the day.

B Troop, 7/1 Cav was briefed on the morning of 4 March by the AMC and diverted to LZ LIZ with control of TAC air to prepare the LZ.

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A Troop, 2/17 Cav was diverted to LZ LOLO during the morning by the AMC to provide security for the continuation of that move. A Troop provided security to the south of LZ LOLO and was prepared to direct suppressive fire against any mortars or small arms fire that the troop-lift or heavy-lift might receive during the move.

At 1345 hours A Troop moved to the vicinity of LIZ for visual reconnaissance of the LZ and to prepare the LZ for the insertion. B Troop, 7/1 Cav reverted to a screening mission to the south and west of LIZ. A Troop received fire in the vicinity of the intended LZ (XD 374395). The troop's organic gunships were employed in destroying the weapon. A Troop received control of TAC air and employed them on selected targets: heavy vegetation in and around the intended LZ, high ground on the flanks, and the approach and departure routes. While airstrikes were being employed in and around the intended LZ, A Troop made a visual reconnaissance of the high ground to the west in the vicinity of the intended LZ for 5 March. This reconnaissance revealed trenches with bunkers and antiaircraft weapons. The AMC directed the Cav to work with the FAC and employ the close air support on that area during the insertion on LZ LIZ.

A Troop's visual reconnaissance following the airstrikes on LZ LIZ revealed a 300-meter trench line, L-shaped, near the intended LZ. There were fifteen 12.7mm positions located throughout the trench line and in the surrounding tree line. A Troop marked and directed airstrikes on these locations destroying seven 12.7mm positions and 200 meters of the trench line. A Troop continued reconnaissance of the intended LZ area but could find no acceptable touchdown point. A Troop began reconnaissance of the intermediate ground to the north, between the escarpment and the intended LZ, searching for an acceptable touchdown point. A Troop received 12.7mm fire from the vicinity of XD 367396, and engaged these targets with organic gunships, destroying one 12.7mm. A Troop located three additional 12.7mm weapons active in the vicinity of XD 366396. These were engaged with organic gunships and airstrikes and were subsequently destroyed. During this period A Troop, though receiving 12.7mm fire, had not received any small arms fire. The intermediate ground was recommended for the touchdown point because of the heavy vegetation and enemy positions on the intended LZ. Even though twelve to fifteen 12.7mm's had been destroyed, the possibility existed that additional 12.7mm's could be positioned in the heavy vegetation. The recommended touchdown point was in an open area that had been cleared by an Air Force Daisy Cutter bomb. It was a large,

dark-brown area, surrounded by a burned-out area, which could be easily identified by the pilots approaching the LZ. This touchdown point departed from the high ground concept in that it was in a shallow draw with high ground on both sides. The only dangers seen were huts and buildings to the west of the LZ and north of the escarpment, vicinity XD 366403. This information was passed to the AMC along with the recommended approach and departure routes. The recommended approach route was from north to south, slightly west of the LZ, with a short descending left turn to the east into the LZ. The recommended departure route was straight out of the LZ to the east along the escarpment. A Troop had been flying over the area for three hours and had not received any fire. The approach and departure routes had been prepared by airstrikes.

The recommended LZ was passed to the AMC and ultimately approved. A Troop was given control of TAC air and two sections of ARA to provide adequate security around the LZ. TAC air was shifted to targets on the planned LZ for 5 March. The two sections of ARA were assigned to make runs on the west side of the LZ from north to south in a high CAP. A Troop covered the east side in a low CAP, making runs from the north to the south. After this coordination was made A Troop made one final reconnaissance of the LZ, and did not receive any fire. By now the first flight of aircraft was on final approach. A Troop remained in a low CAP to the east. Early in the second flight small arms fire was received from the huts in the vicinity of XD 366403, resulting in two aircraft receiving hits, forcing them to land in the vicinity of the LZ. A Troop shifted to the west in a low CAP to locate the targets. The Cav and ARA worked together as a team in suppressing the enemy fire.

#### 4. STAGING

The aircraft which conducted the combat assault on LZ LIZ also took part in the completion of the move into LOLO on the morning of 4 March. The AMC for the insertion of LZ LIZ controlled airstrikes around LIZ while the completion of LOLO took place, under the control of the S-3, 223rd CAB. The final briefing for LZ LIZ was given to the flight leaders by the S-3, 101st Avn Gp and the S-3, 223rd CAB. This briefing was conducted at Khe Sanh combat base with the aircraft staged on the Lagger Pad. The flight was formed and arrived at the PZ under the control of the S-3, 223rd CAB.

## 5. PICKUP ZONE

The aircraft for the combat assault on LZ LIZ arrived at the PZ, a field location (XD 641321) north of LZ DELTA, at approximately 1655 hours. The PZ was under the control of an additional C&C aircraft with two sets of UH-1C gunships for fire support if needed. However, no enemy fire was encountered at the PZ.

The planned ACL for the first flight was six. Since nine aircraft had been lost earlier in the day because of maintenance difficulties and combat damage, a request to increase the ACL was submitted and approved. An ACL of seven was employed which reduced the number of aircraft required. This meant the entire mission could be accomplished with two flights of 31 UH-1H aircraft.

## 6. FIRE SUPPORT

Planned preparatory fires on LZ LIZ were announced by the I Corps Commander during the 1730 briefing on 3 March. These fires consisted of five ARC LIGHTS from 040001 to 040635, 105mm howitzers firing from LOLO, 155mm howitzers firing from ALUOI, airstrikes from 040710 to 040935, two Air Force smoke sorties, and continuous air cover to include ARA on station. Priority of fires and airstrikes would be for the combat assaults.

At 2300 hours on 3 March one ARC LIGHT was employed approximately three kilometers southwest of the LZ with the center of mass at grid XD 355365. A total of seven ARC LIGHTS were employed prior to the assault. One of the ARC LIGHTS was dropped at 0140 hours approximately two kilometers south of the LZ on a suspected enemy strong-point. Two were overlapping on the LZ at 0313 hours and 0635 with centers of mass at XD 365395 and XD 365385 respectively. The remaining ARC LIGHTS were employed north of the flight route into LZ LIZ with centers of mass located at grids XD 475430, XD 485435, XD 520445, and XD 537455.

At 0635 hours the FAC on station began coordinating airstrikes with the AMC. The FAC coordinated with B Troop 7/1 Cav at 0710 hours. Between 0710 and 1040 hours, 13 close air support LZ construction missions were employed, four of the first six being Daisy Cutters. From 1040-1115 hours there existed an unplanned gap in the TAC air. The ADC (O) of the 101st Abn Div (Ambl) called the XXIV Corps G-3 and requested that TAC air be on station every 15 minutes. Between 1115 and 1700 hours 18 sets of TAC air were employed in the vicinity of LZ LIZ. From 1620-1650 hours no TAC air was employed because the FAC

was not on station. The 155mm artillery from ALUOI fired 390 rounds on the LZ; however, the time is uncertain. The 105mm artillery from LOLO was not employed because it was not laid and ready to fire in time for the assault. Between 1700 and 1843 hours three sets of TAC air were diverted to the west in the vicinity of the planned LZ on 5 March. The two planned smoke sorties were not used because of poor weather and visibility. The final phase of fire support for the combat assault was conducted by the ARA working in conjunction with the Cav teams on station.

To support the combat assault into LZ LIZ the 4/77th ARA used two sections (4 aircraft) to sustain a continuous ARA CAP of the area. One section was used to provide relief on station for the other section when it became low on fuel and ordnance.

The ARA sections working in the LIZ area were controlled by the Cav troop commander. Consequently the Cav directed that the ARA prep the LZ and approach axis for the LZ in conjunction with a Cav gun team. This was to be accomplished just as the flight of aircraft were making their approach into the LZ. Subsequently the ARA was directed to provide a high CAP to the west of the LZ.

The first flight went in without incident. However, the second flight was taken under fire by enemy antiaircraft weapons to the west of LIZ. Thereupon the ARA came out of the CAP and engaged the anti-aircraft positions. The Cav fire teams moved from their orbit east of LIZ to develop the situation on the western side of the LZ. By working together the Cav fire teams were able to mark the enemy positions and then have the ARA attack the enemy weapons from a higher altitude.

#### 7. PICKUP ZONE TO LANDING ZONE

-As the flight was departing the PZ, the AMC was enroute to Khe Sanh to refuel after having completed the airstrikes on the LZ. Thus the first flight of 31 sorties was moved to the LZ and inserted without incident under the control of the S-3, 223rd CAB. After refueling, the AMC picked up the second flight as it was leaving the PZ and supervised the assault until its completion.

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The first aircraft departed the PZ at 1700 hours. The flight route to the LZ was from the PZ north to the river and west to the release point, along the river. The RP was a bend in the river, north of the LZ. From the RP a heading of 190 degrees was flown to the LZ. The approach into the LZ was a descending left turn which was terminated into the wind on an easterly heading.

The departure was a climbing turn to an approximate heading of 020 degrees, until abreast of the RP. A flight route slightly to the south of the approach route was then flown back to the PZ.

The recommended enroute altitude was 5500 feet indicated. All aircraft were reported to have flown at least that high, some higher. The point at which to begin the descent into the LZ was left to the discretion of the flight leader.

Enroute gun coverage of the lift aircraft was provided by the gunships, ARA and Cav that were flying the flight route back and forth to rearm/refuel. There was no enroute enemy fire experienced during conduct of the combat assault on LZ LIZ.

#### 8. ASSAULT

The Cav recommendation to shift the touchdown point was received by the S-3, 223rd CAB, who discussed the actual location with the 1st Regimental Commander. The regimental commander did not like the recommended touchdown point but wanted an alternative between LIZ and LOLO. The AMC informed the regimental commander that if the Cav recommended touchdown point was not used, the troops would have to be inserted at LOLO and move overland to the LIZ area.

In view of the decreasing visibility resulting from haze, heavy 12.7mm fire, and the lateness of the afternoon, the ADC(O) of the 101st Abn Div (Ambl) suggested to the 1st ARVN Inf Div Commander, through the XXIV Corps representative, that the troops be inserted at LOLO and move to the LIZ area on foot. The 1st ARVN Inf Div Commander did not agree and stated the assault must go into the LIZ area since it was essential to operations which would follow to the west. The regimental commander gave his approval to the touchdown point recommended by the Cav in the lower portion of the high ground between the

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escarpment and the original intended touchdown point.

The combat assault on LZ LIZ began with the first aircraft touching down at 1715 hours. The first flight of 31 sorties inserted elements of the 4th Bn, 1st Regiment, 1st ARVN Inf Div. The first flight was completed at 1731 hours without incident.

The first aircraft that went into the LZ was escorted by ARA and Cav Cobras firing a prep of the LZ and approach path. ARA under the control of the Cav then went into a CAP and the Cav team remained in a low CAP to the east. During the first flight both ARA and the Cav provided 360 degree security. The UH-1C's were given the mission to cover the valley floor north of the escarpment.

Approximately 15 minutes elapsed between the flights, with the first aircraft in the second lift touching down in the LZ at 1745 hours. The decreasing visibility encountered during the second lift caused the aircraft to close on each other to maintain visual contact. This tightening of the formation caused a slower approach into the LZ and the aircraft had a tendency to shift to the west after leaving the RP. As the aircraft shifted to the west they began to receive fire from the area containing the huts identified earlier by the Cav.

When the second flight started receiving fire from the west of LIZ, ARA and the Cav shifted into assigned sectors of fire. The Cav shifted to the west in a low CAP to locate targets. ARA began engaging targets and worked with the Cav as a team. Two UH-1H aircraft in the second flight were hit by enemy fire and forced to land in the LZ. Both of these aircraft were reported down in the LZ at 1758 hours. By 1801 hours all crewmen from both aircraft had been extracted.

The last sortie of the second lift and the insertion touched down in the LZ at 1805 hours. The entire insertion of 62 sorties (over 400 troops) was completed in 70 minutes.

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C. (C) SUBSEQUENT ACTIONS

1. AIRCRAFT DAMAGE

The assault on LZ LIZ included 72 aircraft with only 12 aircraft hit, two of which were shot down, and one forced to land from an unknown hit on the return flight. The aircraft were hit between 250 feet and 80 knots leading into the LZ, and 200 feet and 60 knots leaving the LZ. Seven of the aircraft hits were from small arms fire, three from 12.7mm machine gun fire, and one from both small arms and 12.7mm machine gun fire. The eleven aircraft hit in the vicinity of the LZ were UH-1H lift ships, the unknown hit causing the precautionary landing was on an ARA AH-1G. The 72 aircraft (40 UH-1H, 18 AH-1G, 10 UH-1C, and four ARA AH-1G) flew a total of 338 hours, and a total of 627 sorties.

2. CASUALTIES

The twelve aircraft which were hit included only three personnel casualties. One was an aircraft commander hit in the leg by small arms fire on his approach into the LZ at an altitude of 100 feet. The aircraft commander remained in Vietnam. The crew chief and door gunner of one of the aircraft shot down at an altitude of 20 feet on take-off from the LZ were hit by small arms fire and mortar fragments in the arms and chest after they were on the ground. The crew chief was evacuated to CONUS but the door gunner remained in Vietnam.

3. DOWNED AIRCRAFT RECOVERY

The two UH-1H's shot down in the LZ were destroyed. The ARA AH-1G which made a forced landing on ALUOI was later extracted on 7 March. The aircraft was damaged by mortar fire while on ALUOI and had to be evacuated to CONUS.

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SECTION V  
AIRMOBILE STUDY GROUP  
COMBAT ASSAULT LZ LIZ  
4 MARCH 1971

10 MARCH 1971

COL DAVIS:

We will discuss the combat assault made on the 4th of March at LZ LIZ. Concurrent with this was the completion of the insertion into LZ LOLO of both troops and heavy lift. The Air Mission Commander for LZ was also involved with the continuing requirement to LOLO. These two operations are necessarily going to overlap. The same aircraft that were used on LOLO were also used for the LIZ insertion.

BG BERRY:

At the 1730 briefing on 3 March at I Corps Headquarters, the ARVN I Corps Commander, Lt Gen Lam set the following priorities:

1. Complete the move to LZ LOLO.
2. Combat assault the 2d Bn, 1st ARVN Inf Div from DELTA 1 to LZ LIZ.
3. Combat assault two Vietnamese Marine battalions from the Khe Sanh area to an LZ in the vicinity of XD 5929.
4. As a matter of urgency, arrive at objective HOPE in the Tchepone area on 6 March. Gen Lam stated that we should try to assault four combat battalions into the Tchepone area, but even if we got one rifle company or one rifle platoon into Tchepone on 6 March it was absolutely necessary that we make it with that size force.
5. Accord the 1st ARVN Inf Div priority of the air cav assets and ARC LIGHTS.
6. Before the combat assault on LIZ, position 105mm howitzers on LOLO, sufficiently in advance to have them registered on LIZ to fire an artillery preparation. If the sequence of events was such that the artillery did not get on LOLO, we should go to LIZ without the artillery preparation.

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7. The following preparatory fires would be employed on the combat assault on 4 March: five ARC LIGHTS from 0001-0635 hours; preparatory fire by 155's from ALUOI; airstrikes from 0710-0935 hours; two smoke sorties; and continuous air cover and priority of fires and airstrikes to troop insertions over troops in contact, tanks, etc.

On the morning of 4 March at his 0815 briefing, Gen Lam stated emphatically that by the 6th of March his forces must combat assault into the Tchepone area. (Referring this time to objective HAIPHONG, he cited Gen Abrams and Gen Vien as having given to Gen Lam the directive to take Tchepone not later than 6 March). At this time he stated we should plan for three infantry battalions into objective HAIDONG and one infantry battalion into objective HAIPHONG. At the same briefing Gen Phu requested medical evacuation of 87 seriously wounded ARVN soldiers from LZ LOLO.

MAJ KLOSE:

We returned to the 1st ARVN Inf Div TOC after dark and determined that there were 101 slick sorties that had to go into LOLO before we could go into LZ. In addition, there were 64 heavy-lift sorties. We decided, at that time, to split our forces. Col Kirklighter would brief the flight crews and borrow a C&C from one of the reinforcing elements, which he did. He departed at first light to go to LZ and start the artillery and air preparation. To the best of my knowledge, 33 sets (66 sorties) of air were to be available. He started using these around 0815 in the morning and continued until LZ time. Maj Lloyd and I C&C'd 101 sorties into LOLO. However, the ARVN changed the battalions. We did it in this order: The 2d of the 1st was located in two positions. They had 34 sorties at DELTA 1, 34 sorties at HOTEL, and then 33 sorties of engineers and artillery at a PZ north of DELTA. Because there were 80 wounded that had to be extracted I recommended, and the recommendation was accepted, that we take the first 34 sorties from DELTA 1, which was the shortest leg into LOLO. We would then backhaul the wounded to KILO, and immediately start the second leg from HOTEL. We got in the 68 sorties from DELTA 1, HOTEL, and backhauled the wounded in one refueling. Then we refueled and started from DELTA with 33 sorties. I don't know how many it developed into because as the pressure to insert the heavy

lift increased, we kept asking, "How many were left?" It was still seven. At this time I determined that we could no longer follow this course of action. We would go ahead with LIZ, and I would police up those last seven lifts, which turned out to be four, after LIZ. Meanwhile, Col Kirklighter continued to put in airstrikes at LIZ. We picked up 31 sorties north of DELTA 1. I moved out to the vicinity of LIZ and assumed the responsibility for the LZ as Col Kirklighter went to refuel. We inserted 31 sorties without incident. It's notable here that we did not go to the high ground LZ. This time we went to a low ground LZ because the high ground was unacceptable. There was just too much antiaircraft fire. About this time Col Kirklighter came back on the scene and I left. Thirty-one more sorties were inserted, but during that insertion two aircraft were shot down in the LZ, and the crews were subsequently extracted. I then took four aircraft back to DELTA, and cleaned up the PZ into LOLO, and that was the day's activity.

CPT GOERTEMILLER:

Our objective as stated by BG Phu, was to provide a security link between LZ LOLO and another fire base which was to be Fire Support Base SOPHIA II. This would also be a staging area for the 1st Regiment operations to the south once the area of Tchepone had been taken. We talked for many hours about what had to be done, and what the best way to do it would be. We decided to follow this sequence of events: Continue LOLO in that order, and then go to LIZ when it was ready. We had no time estimate of when LIZ would be ready or when LOLO would be finished. Things were a lot slower than we had hoped.

MAJ CLARK:

This is the first time we departed from the high ground concept. This one was actually in a little draw. There was high ground on both sides of it. The high ground to the south was the first intended LZ. It was actually the lowest ground anywhere in the area. We placed the three Air Cav troops supporting the 1st ARVN Infantry Division as follows: C Troop, 7/17th along Route 9 to the west; A/2/17th reconning the LZ; and B/7/1st screening south of the LZ. When they got into the area, about 0800, B/7/1st joined up with the C&C and started coordinating and controlling the airstrikes for LIZ. -- My troop, A Troop,

joined up with the C&C and we started screening south of LOLO. I was given the ARA sections to screen around the LZ, and a section of ARA east of the LZ. We continued this throughout the day until the insertion was completed, and the heavy lift was completed. Our primary mission here was to try to detect mortars and stop any ground fire that the slicks might be taking or the heavy lift might be taking coming into the LZ. After this was completed, which was around 1345, A Troop moved to LZ LIZ and we started to recon LIZ. As soon as we got into the area we detected a 12.7 position. The weapon started firing at us, and we engaged this target and destroyed it with the gunships. Then we started selecting targets for the TAC air, targets we thought were important on the ridge line where the LZ was preplanned. We placed airstrikes on this area throughout the afternoon. About 1530 one airstrike opened up trees and found a 300-meter trench line on the intended LZ, which had 15 12.7mm positions located throughout the trench line and tree line. We placed airstrikes on these positions. Airstrikes destroyed seven positions and 200 meters of the trench line. We continued to VR the area. We could not find an acceptable LZ in the high ground, and we started to work the intermediate ground between the escarpment and the high ground where the intended LZ was. Again we picked up 12.7mm fire. We destroyed one weapon with Cav fire and a second with airstrikes. At about 1615, continuing with the VR, we located three more 12.7's, all of them active. These were engaged with cavalry and airstrikes, and they were subsequently destroyed. At this time we thought we had all the 12.7's destroyed. We had not taken any small arms fire. The only danger we saw were some huts and buildings out to the west. This was passed on to the Air Mission Commander and as the assault started we shifted to start hitting targets to the west. The reason that we picked the intermediate ground for the LZ was because the highest ground was heavily vegetated. We had not destroyed all the vegetation, and we thought there still could be some 12.7's in the heavy vegetation even though we had knocked out 12 to 15 weapons. The LZ that we did pick was in an open area that had been blown out by a Daisy Cutter. It was a large, dark brown area surrounded by a burned out area which could be easily identified by the pilots coming into the LZ. The haze again was getting pretty bad that afternoon. We recommended an approach that we had flown over for about three hours and had not taken any fire. We had prepared the area with airstrikes and ARA. The decision for the LZ was reached through the cavalry commander and Col Kirklighter.

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We had to go with the brown area surrounded by the black area. I got up there and identified this area for the Ground Commander from the air. He did not like it. I told him that the Air Mission Commander said this would have to be the LZ. He did not offer any opinion after that. This just had to be it if we were going to get into LIZ. It had to be there. He wanted an alternative between LIZ and LOLO. Then we told him if he wanted an LZ between LIZ and LOLO we would have to repeat the preparation process. The choice was really between LIZ and putting a battalion into LOLO and having them walk to LIZ. He said, "OK, go ahead."

GEN BERRY:

While you are discussing alternate LZ's, I should point out that at 1614 while you were observing the preparation of LZ LIZ, I talked by radio with BG Meyer who was at Gen Lam's headquarters and BG Phu's headquarters. I requested Gen Meyer to get from Gen Phu an alternate LZ to the LIZ area. I recommended landing of the troops at LOLO. What I had in mind was the poor and decreasing visibility and the heavy antiaircraft fire in the LIZ area. I believed it might be more sound to go ahead and land those troops designated for LIZ on LOLO that evening, and then the following day, make a combat assault into the LIZ area. The word came back from Gen Phu that he would select no alternate LZ's. We had to go into the LIZ area. Let's review the fire support thing if you want to. At 1225 hours, 4 March, at 1st ARVN Inf Div headquarters, LTC Byers, then the senior advisor, related to me by radio that Gen Phu wanted the combat assault on LIZ without waiting for the artillery preparation from LOLO itself.

MAJ KLOSE:

The troops that went into LIZ came from the north side of Fire Base DELTA. We had three separate C&C's. Col Kirklighter had one slick from KILO as his. I borrowed one from AUCTION, and AUCTION came up with another ship to be the alternate C&C. One was working LIZ, one LOLO, and one was on the PZ. Col Kirklighter would cover LOLO while I was refueling. It's a case of staggering all the key people on refueling, so any one of them can mind the store while the other is gone. These things could be planned in the future, but there is no guarantee things would work out that way. It seems to work out pretty well as long as you can figure out the fuel state everyone has and decide

who has to leave and when.

BG JOHN HILL, CG, 1ST BDE, 5th INF DIV (MECH):

What happens when the C&C ship is shot down or has mechanical failure? That is one situation, but I am talking of when the battle has changed and then we have to do something different with the troops. If C&C is shot down the cavalry commander can go ahead. If you have to change the battle plan then you get a different deal.

GEN BERRY:

If Gen Phu had been in the ship with me at the time, you would have had a situation which could have dealt with a change in battle plans. Under the circumstances under which all of these have been flown, a drastic change in the battle plan would have required my flying back and landing to talk with Gen Phu.

MAJ KLOSE:

As to the vulnerability of a primary C&C ship with the key staff aboard, I have serious doubts, on the ARVN side of the house, that they would have a second team ready to take over.

GEN BERRY:

Discussing the command decisions during LZ, there was a series of consultations by radio going on between me, over LZ in an aircraft, and BG Phu on the ground at his headquarters. That discussion was conducted through the intermediary, Gen Meyer and LTC Valz. I was relaying back the situation to these two individuals who were in turn relaying them to Gen Lam and Gen Phu. This was their combat assault. The leading example is that of my recommendation of an alternate LZ. At the same time, from the air over the operation, I was talking by radio to the XXIV Corps G-3 and keeping him informed. This, gentlemen, is in no way an alternative for an alternative command party and command ship, but at least there was some continuous consultation going on. Fortunately, we did not have a situation that required a drastic change in the battle plan.

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COL DAVIS:

Was Gen Phu so located so as to direct the operation?

GEN BERRY:

I think the answer is probably yes. He had two regiments and was in his CP. At the same time his senior advisor was monitoring the FM radio over which both LIZ and LOLO were being conducted. His Air Liaison Officer was, I guess, monitoring both FM and UHF and telling him about the airstrikes going on. His advisor, LTC Valz, was doing a very good job of keeping abreast of what was critical, LOLO completion and the preparation of LIZ. I venture to guess he probably was at the most critical spot until, perhaps, the landing on LIZ. I think he was in the right place, and I think the key decision makers were there at the LZ.

COL DAVIS:

We have not completed the discussion of TAC air.

MAJ MAHONEY: (speaking of LIZ preparation)

We did have 34 sets of air. From 0707-1015 we used 13 sets of air that were LZ construction. Four of the first six had Daisy Cutters for LZ construction. From 1015-1723 we put in an additional 15 sets of air. From 1723-1814 we put in three other sets.

MAJ KLOSE:

It is our opinion now that the actual LZ used for LOLO was a misplaced Daisy Cutter and it worked in our favor. In the future, when we prepare an LZ we are going to have to prepare several places to touch down. I would say it would be ideal to have aerial photography so that we could see the actual condition of the high ground. Then we could sit down with the FAC's, tell them where we want the Daisy Cutter, where we want the Commando Vault, both on high ground and an alternative. We could take a Leica, put it in the front seat of a Cobra and come back and develop it this afternoon and have it.

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GEN BERRY:

You can also have an alternative touch down point on the same LZ. That's really what we ended up doing on LIZ. We had three different touch down points within the same objective area. Also, I want to make this point: anyone flying C&C ships should restrict himself to that job. At 1815 there came word that there were wounded on the LZ. The Battalion S-3, with one other ship, very courageously and admirably came in to pick up wounded and got two ships hit and did not get the wounded out. From a professional standpoint there were several things wrong with that action. One - that was not his mission. His mission was to run the operation. Two - he did not coordinate with the people on the ground and insure that the wounded were ready for extraction prior to going in. Therefore, a very brave act could have been disastrous to two ships and crews and resulted in the elimination of a key command and control ship.

MAJ KLOSE:

I dropped two parties at LOLO. The regimental commander asked me to get the wounded. That's when I made the decision to take the one remaining ship with me.

COL DAVIS:

Please summarize the key points.

MAJ CLARK:

The visibility those two days was limited to the west. Anyone from the west looking east could see us and take us under fire, but we gave up the ability to identify the source of the fire. On the weapons in the LIZ area, we had 12.7's and small arms fire. We were taking hits with small arms right around the LZ. We are probably not prepping the LZ's as well as we should. Hereafter, we have got to prep them better. LIZ was almost blown away, yet there were nine aircraft hit. We had four accurate 12.7mm positions working on us within 100 meters of the LZ. Those four survived the ARA, and they didn't open up until the slicks started going in. Also, this is the first incident I've seen of a double 37mm mounted on the back of a truck.

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MAJ KLOSE:

Khe Sanh is the main logistic center for this operation. If we had to go any further west than SOPHIA or HOPE, we would have to have a resupply base at DELTA 1. Our rearm and refuel stations almost have to be as mobile as the forces they support. It might mean dedicating heavy lift to this purpose alone. Can an airmobile division support itself by air?

GEN BERRY:

Non-divisional infantry and mechanized units have been supporting our airmobile division, so you cannot be talking about the airmobile division operating in a vacuum. If we had to secure our own rearm/refuel points we would have eaten up a major portion of this division simply in securing logistic installations for aircraft.

COL DAVIS:

We have about two airmobile divisions worth of aircraft working the area - some 781, I believe. Not all of us work out of here. We have a ~~sanctuary~~ here, a relatively secure base from which we operate.

MAJ KLOSE:

There was debris aloft at LIZ. In addition to the particles in the air, there were things larger than we normally encounter in the air. Also, the ARVN requested five ARC LIGHTS, three of which were to the south of the LZ. We moved 175 sorties of people from field locations to LOLO and LIZ, as a group, starting with 40 slicks and ultimately getting down to 31. Once we got this thing in motion we kept it in motion all day, and were able at the end of the day to conduct a successful combat assault. If you lose the inertia you have got to build it again. In essence, we kept these people occupied working LOLO and then put them right into LIZ with very little lost motion. If we have an all-day job working our way into an LZ, and the crews are doing other things, we have to put them together to capitalize on the insertion. It's not as efficient as using them as a unit.

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COL DAVIS:

So, in essence, what you are saying is that you have a primary mission to combat assault. The AMC must have time to adequately prepare and brief his aircrews and they cannot be fragmented and then be expected to form an instant combat assault in a complicated environment and expect it to come off successfully. We've proven this time and time again. If you put something together bad, that is how the operation is going to turn out. This is something we want to make sure we don't violate in the future.

MAJ KLOSE:

Another very important factor that we have learned is the importance of the lead aircraft. If that first bird cannot find the LZ then the whole mission falls apart, and you have a hard time getting the whole thing straightened out. You may never get it straightened out. Another lesson learned: regardless of the direction and type of fire, at the last minute you have got to make your landing into the wind. We've tried to solve the problem by using a short buttonhook come in with the wind, cut a sharp 90 degrees in the last 35 seconds.

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