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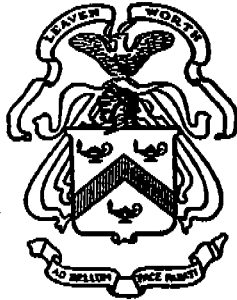
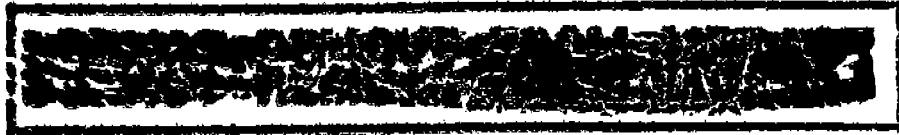
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U.S. ARMY COMMAND AND GENERAL STAFF COLLEGE

AIRMOBILE TECHNIQUES/TACTICS
IN THE MEKONG DELTA



Fort Leavenworth, Kansas

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AIRMOBILE TECHNIQUES/TACTICS IN THE MEKONG DELTA

A Student Paper written for the
Communicative Arts Program

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April, 1970

ABSTRACT

Student Paper Submitted

by

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C&GSC 1969-70

1. The purpose of this study is to examine the airmobile techniques developed by the 1st Brigade, 9th Infantry Division in Dinh Tuong Province, RVN, during the period January, 1969 to July, 1969.
2. Information was collected by library research and personal experience.
3. Airmobile operations conducted in the delta terrain differ significantly from those conducted in other areas of Vietnam. The airmobile force has significant advantages in the delta that are rare or non-existent elsewhere in Vietnam.
4. Conclusions:
 - a. The mini-jitterbug, night search, and night raid techniques are sound, valid operational techniques that should be developed as airmobile doctrine.
 - b. The UH-1C gunship should not be replaced by the AH-1G "Cobra" as the armed escort aircraft in assault helicopter companies in Vietnam.

1. PROBLEM STATEMENT. The purpose of this study is to examine the airmobile techniques/tactics developed by the 1st Brigade, 9th Infantry Division during the period January, 1969 to July, 1969 while operating in Dinh Tuong Province, Republic of South Vietnam.

The brigade was deployed into the province in late summer of 1968, and by February, 1969 had established three semi-permanent fire support bases in the western half of the province. The brigade mission was fourfold and generally reflected the 9th Division mission. These were:

- a. Conduct strike operations against enemy concentrations.
- b. Provide tactical and perimeter security for the division base camp at Dong Tam.
- c. Conduct consolidation operations in areas of high priority for pacification.
- d. Provide support to ARVN military units and Regional/Popular Forces with the objective of improving/upgrading the effectiveness of the Vietnamese military forces.(21: p. 1.)

Although this study will limit discussion to include only those tactics/techniques used to accomplish the first of these four missions, it should be self evident that each of the four was equally important, and, in fact, all were interrelated. Within this context, discussion will be further limited to those actions used by the infantry battalions to make contact with the enemy, and will not, in detail, address the brigade reaction to those contacts. This approach is taken due to the apparent similarity of brigade level response to enemy contact throughout Vietnam, in all U.S. divisions. This study leans heavily on the personal experience and observations of the author. (Annex A)

2. BACKGROUND. The area of operations with which this study is concerned, is actually the western two-thirds of Dinh Tuong Province, and contiguous areas of Kien Tuong Province to the north and Kien Phong Province to the west. Dinh Tuong is the central of three provinces in IV Corps Tactical Zone that share a common boundary with III Corps Tactical Zone. The capital city, My Tho, is located some sixty miles south of Saigon on the northernmost branch of

the Mekong River, which is the south boundary of the province. (Figure 1)

a. Terrain. The terrain in the province is classified as wet ricelands. (1: p.8,9) These are described as flat delta plains, predominantly cultivated to irrigated rice with numerous waterways, irrigation and drainage canals/ditches and generally densely inhabited. Two or more crops of rice are grown each year and the population is concentrated in non-contiguous villages normally located along the major canals or roads. Vegetation is normally concentrated along the canals except for isolated tracts of tall grass and uninhabited marsh. Predominant trees in the area are several varieties of palm and fruit trees. Average elevation throughout the province is less than 5 meters above sea level. Tidal influence on the canals and streams in the province is militarily significant with high and low tide differences ranging to six feet or more.

b. Weather. The dry season extends from January or early February to May. (1: p.8,9) During this period most of the rice paddies dry out and precipitation is limited. The rainy season starts during the latter part of May or early June and continues through December. This season is characterized by extreme and continuous flooding of all rice paddies, westerly winds of up to 30 knots, and line squalls or thundershowers that form suddenly, bringing large quantities of rain, low ceilings, and IFR flight conditions.

c. Military Aspects of Terrain. Throughout the area, cover is very poor except for road and trail embankments, rice paddy dikes, earthen bunkers, and scattered masonry structures. Concealment is also very poor, and is limited to lines of brush and vegetation along waterways and numerous small hamlets. Observation is poor due to a lack of heights, except fair to poor along dikes, embankments, or grave mounds, and excellent from an aerial platform. Fields of fire are

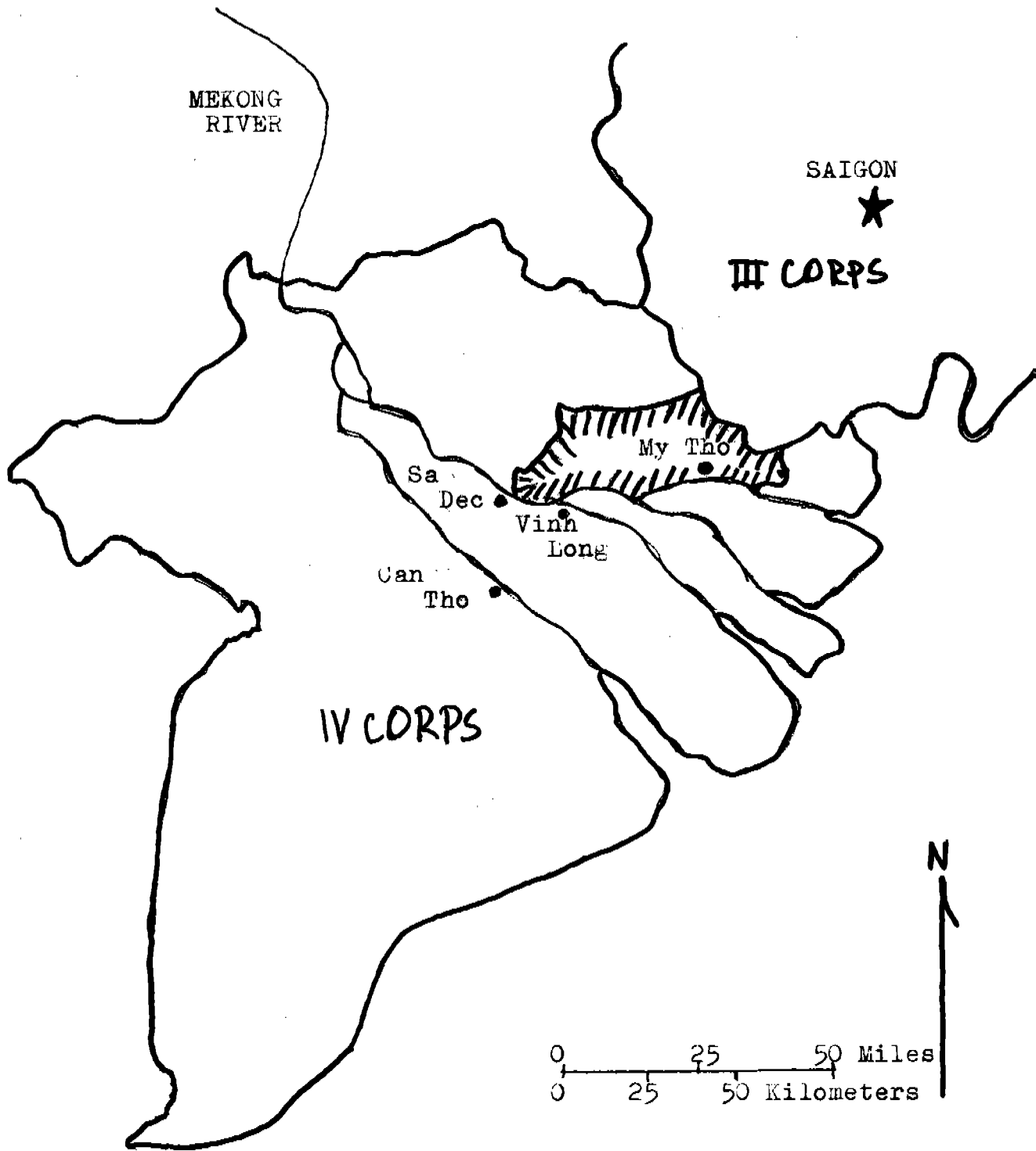


Figure 1
The Area of Operations

excellent and are limited only by the ricepaddy dikes and other embankments previously mentioned. During the dry season cross country movement is very poor to impossible for wheeled vehicles; locally possible but poor for tracked vehicles; fair for foot troops. During the wet season cross country movement is impossible for all vehicles except amphibious types; and limited to impossible for foot troops. All large and unbridged canals, rivers, and ditches are obstacles, as are the local areas of permanent marsh.

d. Effects on the Enemy. The area of operations afforded the enemy only one real advantage. This was the population of the area. The Delta area is the most populous in Vietnam. (21 p.3) Virtually every foot of high ground is occupied by people. This population density affords the Vietcong an invisibility and protection from U.S. fire support that he rarely enjoys elsewhere. It also provides him a manpower advantage that is rarely equalled.

On the other hand he must operate under severe disadvantages tactically. He can mass only in the wooded areas around hamlets or in the dense nipa thickets. When he masses, his concealment from aerial observation is poor and all approaches to and from his location are exposed. Once he is located, friendly forces (particularly air-mobile forces) have a better chance to trap and annihilate him than they do in the jungle.

e. Effects on Friendly Forces. For U.S. units, equipped as they are with aviation resources and massive fire support, the Delta is a killing ground beyond the wildest imagination of the veteran from the jungles of the other three corps areas. The enemy is easier to find when he masses his units, and once he is found he is easier to trap and destroy than in other areas. Control of friendly forces and coordination of fire by airborne

observers/commanders is much easier than in the jungle. (21: p.1) The huge expanses of rice paddies offer the airmobile unit commander extreme flexibility in selecting landing zones. In fact, prior reconnaissance is not required, except for point targets and/or night operations.

On the negative side, perhaps the most serious effect of the terrain is the debilitating result of constant immersion of the U.S. soldier's feet in the water of the delta. Thought at first to be immersion foot, studies have shown that fungal infections are more prevalent. (21: p.2) As a general rule 48 hours in the field is the maximum allowable exposure. (5:p.10)

Another disadvantage is the physical difficulty in traversing the muddy, swampy terrain. The deep mud in the canals and rice paddies forms an obstacle that is difficult to conceive until it is actually experienced.

The high density population is also disadvantageous to tactical units. Fire support is difficult to obtain quickly due to the stringent rules of engagement. (21:inc. 3)

Tactically, friendly forces must overcome two other serious deficits. The flat terrain, with little vegetation, gives the enemy good short range observation. Consequently he can and often does, hold his fire until friendly troops are within a few meters of his position, and thereby frequently inflicts numerous casualties in the initial exchange. (17: p.4) Or if he chooses, and most often he does, he can quietly slip away after observing the direction of our units' movement.

3. ENEMY FORCES. The enemy force in Dinh Tuong Province was composed entirely of Vietcong units. At the top of the force structure was the Headquarters, Military Region 2, COSVN. Tactical units included two regimental headquarters with three infantry battalions, four separate VC companies, one local force battalion,

six local force platoons, two sapper companies, one artillery battalion, and normal combat support and combat service support units. Accepted strengths for these combat units as of 1 January, 1969 were as follows: Regimental units 1900; separate VC companies 400; and local force units 860. (19:p. II-11)

As a general rule, throughout the period covered by this study, the morale and efficiency of the main force units was quite good, although captured documents and PW interrogations indicated that both suffered a serious deterioration toward the end of the dry season. The enemy intelligence net was also of high quality and there were indications that quite often he knew of impending operations as much as 24 hours in advance. (17: p.27) The vietcong infrastructure was firmly established throughout the province and included a shadow government organization that extended down to hamlet level. His communications net was equally well established and included a tactical radio net that was both responsive and reliable. All main force units were well equipped and possessed modern weapons such as are found in NVA units throughout Vietnam. His indirect fire capability included 120 mm mortars and 122 mm rockets. Throughout this period he maintained the ability to mass and employ the equivalent of two regiments against any target he selected in the province. This capability was never used, however, and enemy activities were generally limited to small unit attacks against RF/PF installations, vigorous anti-ambush tactics, interdiction of highway (QL) 4 and subsidiary roads by land mines, extensive anti-personnel mines (booby traps) employed throughout the province, selective terrorism against GVN officials, and continuous recruitment of replacements, often by abduction. Main-force units were always fragmented, often down to squad level and were rarely massed. Movement was normally

conducted exclusively during the hours of darkness and all units were under standing orders to avoid contact with U.S. units.

4. FRIENDLY FORCES: As of January, 1969, the 1st Brigade, 9th Infantry Division exercised operational control over four infantry battalions, one of which was habitually billeted in the division base camp at Dong Tam for purposes of Dong Tam security and will not be further considered in this study. One 105mm howitzer battalion was employed in direct support of the brigade and fire units of the battalion were habitually co-located with the maneuver battalions in their respective fire support bases. In March, a fourth firing battery was attached to the artillery battalion, greatly increasing the fire power and artillery coverage of the brigade. Unit locations and DS artillery coverage is illustrated in Figure 2. Additional artillery was normally available in a GSR role from the division 155mm/8" howitzer composite battalion, and on occasion, a battery of 155mm (SP.) howitzers was attached to the DS battalion.

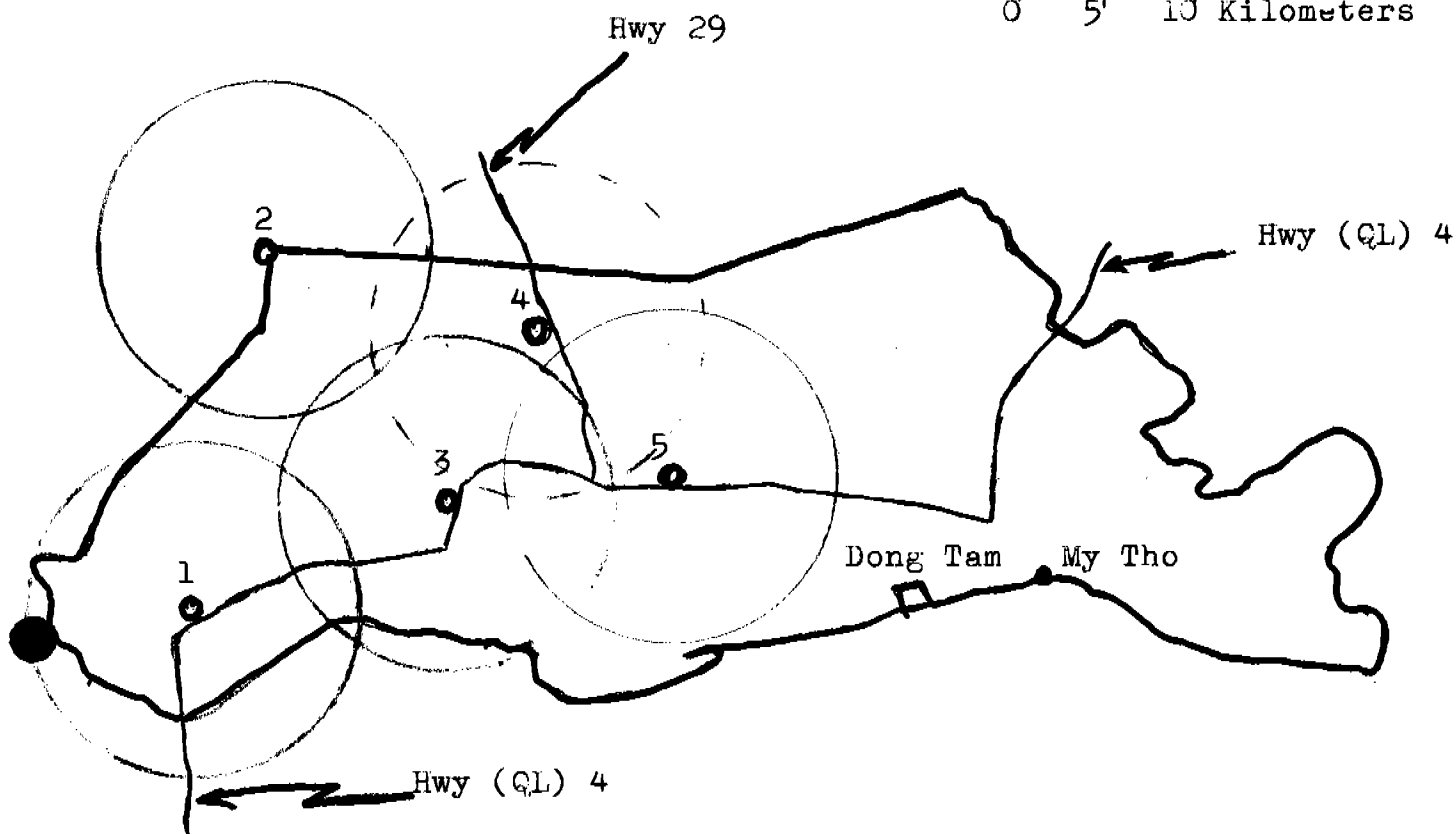
Normal combat support and combat service support unit attachments included an engineer company in direct support, an MP platoon, a forward area signal center platoon with VHF stations at each battalion base camp, and a platoon of 40mm self propelled automatic weapons. Specific unit identifications/locations are not deemed necessary as they were subject to change, and in fact did change throughout the time frame under consideration.

On a daily basis the brigade commander could expect to receive operational command of two separate "packages" of aviation assets. One, hereafter referred to as a "mini-cav," consisted of one-half of an air cavalry troop and was composed of one UH-1H command and control aircraft, two OH-6A LOH aircraft, and two AH-1G "Cobra" gunships. The other was essentially an assault helicopter company and consisted of one UH-1D command and control aircraft, four UH-1C gunships, and ten UH-1D lift

LEGEND:

- 105mm Range
- 105mm Range from alternate position
- Fire Bases

0 5 10 Miles
0 5 10 Kilometers



Units located at fire bases:

- | | |
|--|---|
| <p>1. Inf. Bn
105 How Btry (6 Tubes)
Alt. Psn for 155 How btry</p> <p>2. Plat 105 How. (3 Tubes)</p> <p>3. Inf. Bn
105 How btry (6 Tubes)
Alt. Psn for 155 How Btry
Arty Metro Station</p> | <p>4. Alt Psn for two btrys
of arty.</p> <p>5. Brigade Hqs.
Inf. Bn
Arty Bn Hqs
105 How btry (6 Tubes)
155 How Btry (6 Tubes)
Flat, 40mm AW
Flat, MF
Engr. Co.
Flat, LRRP</p> |
|--|---|

Figure 2
Brigade Dispositions

aircraft. Each night he could expect to receive operational command of another "mini-cav", or its equivalent formed from divisional aviation assets.

Restrictions on the time allowed for employment of these assets were instrumental in the formulation of tactics. These restrictions encompassed both "real" and "blade" time. Both the "mini-cav" and the helicopter company were to be released upon the completion of ten hours of "real time" employment, i.e., 10 hours after receipt; and the assault helicopter company was limited to 90 hours of "blade time" per day. Simply stated, this limits employment to a total of 90 hours of actual rotor turning time for the 15 ship package. At night the restriction was normally for 4 hours of real time. Of the two types of restriction, blade time was by far the most binding, and required both imagination and thorough planning on the part of the battalion commander in order to efficiently utilize these assets. Naturally both restrictions were waived in the event of contact or other tactical emergencies, but the brigade was strictly limited to a cumulative total of 2700 hours of blade time per 30 day period.

These restrictions, combined with the physical distances that separated the maneuver battalions, precluded the use of the aviation assets in a general support role at brigade level. Consequently, as a general rule, operational command of the aviation packages was always passed to maneuver battalion level.

5. TACTICS TECHNIQUES DEVELOPED PRIOR TO 1969.

The 9th Infantry Division had established a reputation for combat efficiency that was as good as, or better than, any other division in Vietnam since its arrival in country. Under the leadership of MG Julian J. Ewell, a tremendous premium was placed on excellence and precision while conducting tactical operations. (5:p.2)
He also required that "the intelligence cycle work with

lightning speed" and that "commanders react to every intelligence report received." (5:p.4,5) From these guidelines, based on the terrain and enemy situation, techniques evolved that later developed into tactics. As usual names were also generated and thereby came the "Jitterbug", "Seal and pile-on" operations, and "checker-board and bushmaster" operations.

a. Jitterbug Operations. This is an airmobile technique designed to find the enemy. When perfected, it requires doing well many sequential operations, from brigade through platoon level.

The typical operation actually starts the evening prior to the receipt of the aviation assets. The first step or event is what Gen. Ewell refers to as the "three cycle intelligence approach". Every evening, the brigade commander, with the battalion commander tasked for jitterbug operations the next day, would study the latest intelligence reports, select likely targets, and plan the following day's operations. The following morning, both would review the night's developments and revise the plan. During the day, operations would be changed to react to new information as it became available. (5:p.2)

When the two aviation packages report to the maneuver battalion commander, the second phase of the jitterbug is initiated. Both aviation commanders are briefed with respect to target locations, intelligence, friendly force locations, call signs and frequencies of units to be lifted and general sequence of events. The "mini-cav" commander will be given "hunt zones" and/or specific targets to check with his scout team and/or the people sniffer. His operation is strictly an air cavalry operation, and his job is to find and fix the enemy. (9:p.7-13) He reports directly to the battalion commander.

The airmobile phase of the operation then begins. Insertions are based on actual contact made by the air cavalry and on the pre-planned targets. Techniques vary but generally these operations follow a set pattern.

The battalion commanders, his operations officer, an RTO and the DS artillery battalion liaison officer constitute the command and control ship which will be flown by the air mission commander. On occasion the rifle company commander of the first lift unit will accompany the battalion commander. Immediately following the briefing, the C&C aircraft, accompanied by two gunships, depart for the first insertion area.

All rifle elements designated as participants will have configured into five ship lift elements. This generally corresponds to platoon size, and normally the platoon leader will be the commander and will enter the battalion commander net. The first two lifts will board the aircraft and wait for departure.

Upon arrival in the target areas, the C&C party and the two accompanying gun ships make a brief visual reconnaissance. At this time the battalion commander, utilizing facts, observations, intuition, or the toss of a coin, decides to commit or not to commit one of his insertion units. Should he decide to commit the insertion force, he does so immediately. The air mission commander cranks the required number of lift ships, gives them flight instructions and coordinates the actions to be accomplished by the gunships during the insertion. When the flight arrives in the area, the C&C aircraft will mark the exact touchdown point with a smoke grenade, and the insertion is accomplished. As soon as communications are established between the battalion commander and the ground unit commander a fray order is issued by radio transmission. This order would normally include, but is not limited to, the following information:

- (1) Coordinate location of touchdown point. (Your down grid is
- (2) Mission. (Move west until you reach the canal, turn north, search the bunker area.....)
- (3) Any intelligence about the area that is available. (Enemy sightings, trails, reports....)
- (4) Coordinating instructions. (Location of friendly units, call signs of gunships, location and time of pickup, if know.....)

The operation then becomes a reconnaissance in force and the unit mission is to find the enemy and report his location. This is a very important point that is sometimes ignored. Many times a platoon will spot a suspected enemy trying to flee the area and immediately start a unilateral operation. The first thing the battalion commander knows, the platoon leader is reporting a dead VC, (or a suspect that has escaped) and he's 1000 or 1500 meters away from the point of first contact. By this time all element of surprise is lost, the enemy force, if there was one, is dispersed, and another dry hole is the ultimate result. The point here is: report all sightings, findings, contacts, or even odors as soon as they occur. Experience indicates that one or two VC usually mean more. (4:p.8) Additional insertions are then made as rapidly as possible to cut off his escape routes, provide additional maneuver forces and/or bases of fire. It is not uncommon to make three or four insertions in the same general area, just to trap and destroy or capture two or three guerrillas.

Unless contact is immediately established upon insertion of the first unit, the battalion commander will normally move to the next target area and make a second insertion. He will continue to make these insertions until he feels he has committed all the forces he can control or support. The jitterbug operation then becomes an exercise in patience. The commander waits for a contact.

During this waiting period, should one of the inserted units indicate that it's a dry hole, then the unit moves to a pick-up zone, is picked up, and re-inserted into another target area. The major objective of the operation is to find the enemy, and the more insertions that can be made, the greater the opportunity to make contact.

Salient characteristics of the operation are:

- (1) The operation must be characterized by speed of execution. The insertion of the ground element should always be as soon as possible after arrival of the C&C ship in the target area, and never later than 30 minutes. Aerial reconnaissance of the target prior to first arrival is expressly prohibited.
- (2) After multiple insertions have been made, the battalion commander must be mentally prepared to command and control as many as five to seven ground elements with as much as 15-20 kilometers separation between flank elements.
- (3) Many of the ground elements will be out of support range. Radio communications from the battalion fire base will be marginal or non-existent.
- (4) Initial fire support, in many cases, will be available only from gunships and/or tactical air support.
- (5) The battalion commander must be capable of mentally juggling flight times to his unit locations, refuel/rearm times, reaction times of maneuver units, flight time remaining, physical condition of his troops and many other ever changing variables. All are used in making insertion decisions.
- (6) Above all else, he must be capable of reacting to enemy contact, regardless of the source. Be it air cavalry, gunship or maneuver unit initiated, whether it's two VC or two hundred, let it be day or dark, do something about it! His job is to find, fix, and destroy the enemy. If it takes three or four insertions

to get one VC, then make the insertions. If he takes care of the little contacts, the big battles will take care of themselves.

b. Seal and Pile On Operations. Once the enemy is found, seal him in, and pile on the fire support until he is destroyed. As practiced by the 9th Division, this operation is a logical extension of the jitterbug operation. The ultimate goal of jitterbugging is the entrapment of a VC battalion. (4:p.13)

The secret to a successful encirclement is the rapid accurate emplacement of enough maneuver units (platoons and companies) so as to block all routes of withdrawal. The key decision therefore, lies in the early stages of contact, when the size of the enemy force must be estimated. The battalion commander can normally contain an enemy force of up to a reinforced company. If the terrain is good, possibly two companies. Any force larger than that however, normally requires more combat power than is available to the battalion commander. At this point the brigade commander must assume control. The earlier this decision can be made the better. Both commanders must continuously evaluate the situation, and if required, the brigade commander must step in and override control of the operation early enough to allow employment of sufficient reinforcements to create a large seal. Experience has proven that if this decision is made later than 1500 hours, fifty percent of the insertions will be made after dark. (17:p.25) This is extremely undesirable, since the enemy only requires a gap of 20-50 meters to escape. (4:p.13)

Characteristics of this operation are:

- (1) Movement of artillery fire units, by road or air to support the seal, is normal and should be anticipated.
- (2) Rigid control of lift assets must be exercised by the commander who controls the seal. Resupply, medevac, and coordination missions cannot be allowed

until all insertions are made.

(3) Flight paths, artillery gun target lines, attack headings for armed helicopters and tactical air support aircraft must all be planned for and coordinated. All means of fire support should be employed concurrently with insertion operations, so as to fill in gaps in air cavalry coverage, and seal all avenues of escape.

(4) Physical link-up between encircling units is a requirement. This is most easily accomplished with the assistance of an airborne observer. Panels and strobe lights must be carried by all units for this purpose.

(5) After completion of the seal, every artillery piece that can be brought to bear, must be individually adjusted into the target area so as to avoid friendly casualties. If available, continuous tactical air support should also be employed against the trapped enemy.

(6) Air Force flare ships (Spooky or Moonshine) should be requested to be on station at EENT. Continuous illumination is required throughout the night.

(7) All commanders should be alert for enemy counter-attack. The VC units are well aware that our units are extremely vulnerable during the encirclement process.

(8) Concertina wire is used to seal all canals, and grenades should be dropped in the canals periodically. Intervals between grenades should be varied, and should never exceed 7-8 minutes.

(9) Periodically, all fire into the encirclement should be shut off. Psyops teams on the ground and in aircraft should enjoin the enemy to surrender. Ample opportunity should be given him to do so. CS cannisters should also be employed to assist him in

making this decision.

(10) The following morning a coordinated attack, employing hammer and anvil techniques, is utilized to follow any enemy who might have escaped. Stay behind ambush patrols should always be employed.

c. Checkerboard and Bushmaster Operations. These operations were designed to "take the night away from Charlie." (5:p.7) They have little or nothing to do with airmobile operations and are mentioned here, only as background material, prior to describing two airmobile techniques designed to accomplish the same task.

Basically, these two operations are the same, and differ only in duration and size of unit employed. A checkerboard operation normally was planned for 48 hours and employed both platoon and smaller elements.

Both are designed to interdict, by ambush, the canals and trails that form the enemy's lines of communication. Detailed planning, reconnaissance, and coordination are required to mount a successful operation.

Both techniques were successful. However, intense anti-ambush tactics employed by the enemy in January and February negated the effectiveness of these operations and required new approaches to the problem of night operations.

6. TACTICS/TECHNIQUES DEVELOPED BY THE 1ST BRIGADE AFTER JANUARY 1969. One of Gen. Ewell's theorems called for commanders to stress productive operations and cancel or deemphasize those that were not paying off. An example: Don't conduct night operations just for the sake of night operations if they are only a third as productive as day operations. (5:p.8) It was at this point that the brigade found itself in February, 1969. Jitterbug operations were not paying off.

Battalion checkerboard and bushmaster operations were suffering more casualties than they were inflicting.

Brigade blade time totals were consistently in the red with results that were less than average. Obviously the enemy was making every effort to avoid contact. The inherent disadvantages of the jitterbug were now noticeable. Specifically:

- (1) Insertions of five ship elements were uneconomical. One insertion per target left the enemy too many options. He could easily avoid detection and did. He had detected the pattern of our operation.
- (2) On the other hand, multiple insertions of five ships each, on each target, without contact, cost too much in terms of blade time and left too much of the AO untouched. In "Pentagonese" it was just not cost effective.

The old saying that necessity is the mother of invention was never more applicable than here. Out of this situation of lower body counts, fewer contacts, and below average kill ratios, new techniques evolved. Naturally they did not come about overnight, nor were they all immediately successful. The following discussion, however, will describe three of these new techniques, as they had been "perfected" in July, 1969. These will hereafter be referred to as the "modified or mini-jitterbug" technique, night search operations, and night raid operations.

a. The Modified or Mini-Jitterbug Technique. The basic changes made in the technique previously described as jitterbugging, center around the size of the insertion element, the number of insertions made in a target area, and concentration of effort geographically.

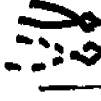
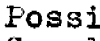
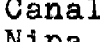
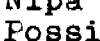

Generally the technique is the same. The first step again is the three cycle intelligence approach, previously described. Again the battalion is given operational command of the two aviation packets. Briefings and reconnaissance are the same. The first major departure from form comes with the selection of landing zones at the

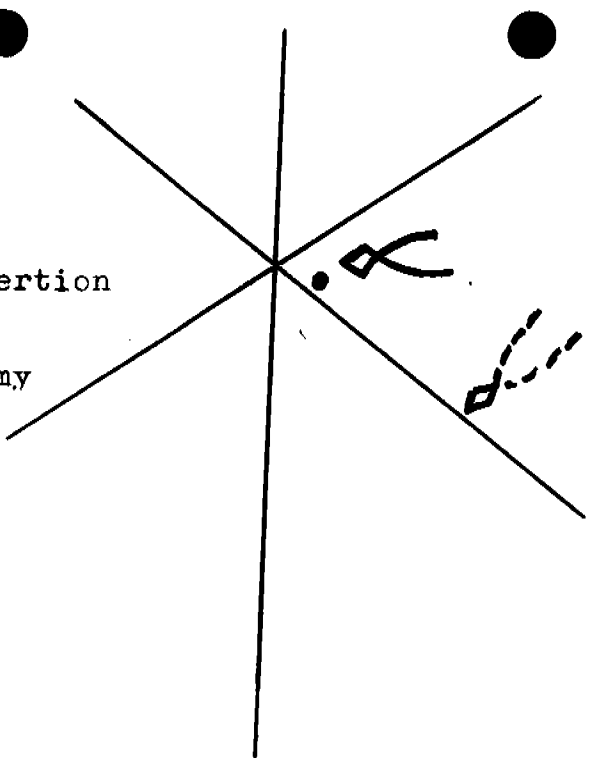
first target. Instead of one LZ or two at the most, depending on the terrain as many as six LZ's are selected in the target area. Maneuver units are configured in lift elements of three ships each and as soon as LZ's are firm the first three insertions are made with one or two minute separation times. Again, touch down points are marked with smoke, and frag order techniques are used to give missions to maneuver elements. The lift ships proceed directly to the next pick-up zone and return with the next elements to be inserted. Normally at least four insertions will be made per target, and six would probably be closer to the norm. Distances between elements rarely exceed 1500 meters, and after all insertions are complete, the company commander is put on the ground and operational command of the maneuver elements would normally pass to him. The battalion commander can then turn his attention to another target, preferably in the same geographic area, and the process is completed. (Figure 3)

The objective is the same as in jitterbugging. Find and fix the enemy. However, with this technique we attempt to panic the enemy into movement, and thereby discovery, or we fix him prior to finding him, thereby making the subsequent encirclement easier to conduct.

This operation is characterized by:

- (1) Employment of half platoon size elements.
- (2) Continuous airborne coordination between maneuver elements.
- (3) Immediate reaction to enemy contacts and sightings. Units are repositioned as required, and air movements of less than 1000 meters are common.
- (4) Supporting firepower often plays a less dominant role. Quick maneuver and accurate small arms fire were used to destroy enemy movement. (5:p.5) This technique is sometimes called "flushing" as opposed to "sealing" and requires an enemy who has panicked.

- LEGEND:
-  Insertions
 -  Possible Insertion
 -  Canal
 -  Nipa Palm
 -  Possible Enemy Location



Jitterbugging

Mini-Jitterbug

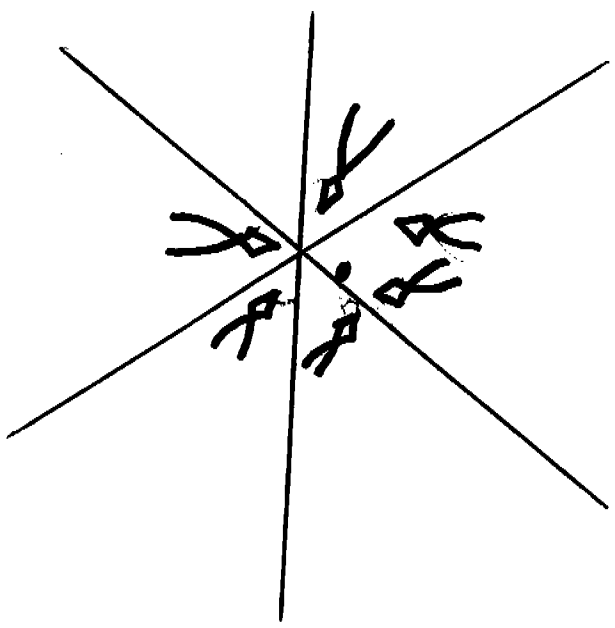


Figure 3
Comparison of two techniques

(5) Employment of the UH-1C gunships in the assault helicopter company as scouts. Normally this will not take place until after all insertions are made, and will thereby not conflict with their primary mission of protecting the lift ships. There are several reasons for this departure from doctrine. First the air cavalry troop is not really compatible with the assault helicopter company. They can and do work together, but it slows insertions. Secondly the UH-1C gunship is ideally suited for "knocking off strays" and sealing the area. It is heavily armed and flies low and slow, and can be used for close support when required. (5:p.7) This technique also keeps the cav out in other areas looking for another contact.

(6) As a general rule, a saving on blade time is realized. Units will rarely be separated by more than ten kilometers, and in a target area, by more than 1500 meters. Insertions are made in bunches, rather than singly, thereby easing many factors that affect the decision making process.

b. Night Search Operations. This technique was first tested by the brigade in January, 1969. It was designed to interdict VC boat and foot traffic, from an aerial platform, during the hours of darkness. The technique is predicated on the proposition that trained observers, utilizing starlight scopes mounted on M-16 rifles, can acquire, identify, and mark targets at night from a UH-1D helicopter. Once the target is marked, gunships destroy it.

Aviation requirements are simple: one UH-1D helicopter, "search aircraft," and two AH-1G "Cobra" gunships. On nights when there is less than one-third moonlight, a second UH-1D aircraft for use as a flare ship is required.

The using infantry battalion must provide two controllers, one of which must be an officer, two spotters equipped with M-16 rifles mounted with starlight scopes,

and armed with full tracer ammunition.

The mission is always flown after curfew and only in those areas where free fire rules are in effect. A typical night search AO could be 40 by 40 kilometers in size. Areas within this AO may be designated no fire areas due to friendly force locations or other reasons.

All aircraft fly with all lights except the top rotating beacon blacked out. All infantry personnel ride in the search aircraft as shown in figure 4. The officer controller is charged with overall command of the mission, in all matters except those pertaining to aircraft safety. He must maintain a log of events, target locations, and results of engagements. He also controls the spotter on his side of the aircraft. The other controller does the same for his spotter. This system of controllers is required to prevent the spotter shooting up the deck or skid of the aircraft. The spotters duty is as previously described. When they identify a target, they mark it by shooting automatic fire, full tracer, at the target. The door gunner on the aircraft picks up the mark with his M-60 machine gun, and one of the trailing Cobras attacks the target with his weapons system. If flares are required, they should be employed at least 10-12 kilometers away from the target area, so that only enough ambient light is provided to activate the starlight scopes.

The aircraft fly a "Y" formation with the search aircraft in the lead, at 600 feet and 60 knots airspeed. Many pilots object to this altitude and speed for safety reasons, but it has proven to be worth the risk. Greater altitudes and speeds seriously detract from the spotting capability. The aircraft blackout status, and fear of reprisal have effectively nullified ground fire. The Cobras trail the search aircraft by 1500-30000 meters, at an appropriate attack altitude. Standard tactics are used for engaging targets.

Communications systems varied from unit to unit, but

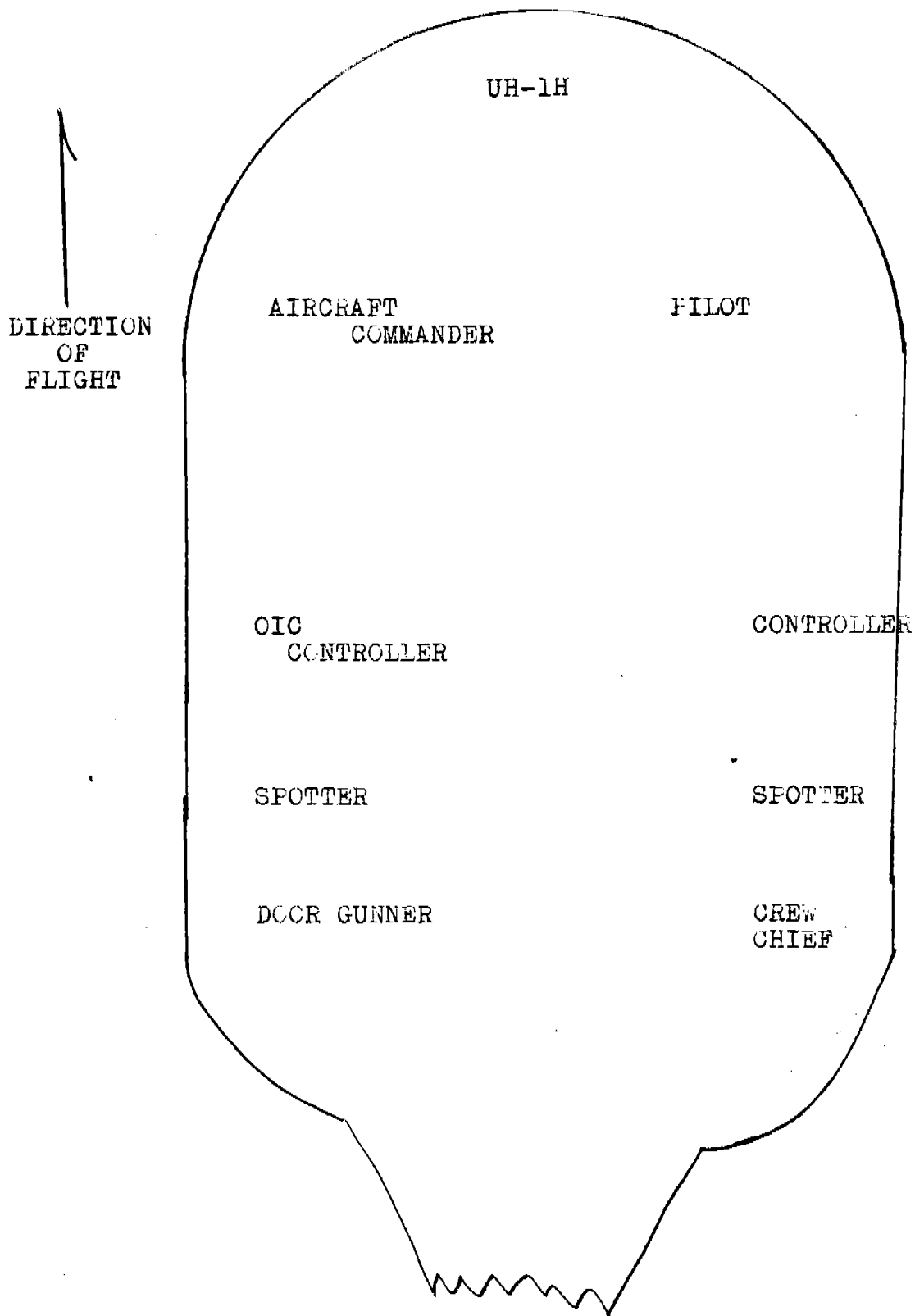


Figure 4
Seating Arrangements For Night Search

generally all three aircraft and the infantry commander were in the battalion command net. In addition both controllers should be provided "Y" cord hook-ups into the intercom system aboard the search aircraft. Transmissions between aircraft were made on the UHF radio, and FM radio was used only in an emergency or for immediate value intelligence.

This technique effectively interdicted the canals and trails heretofore inaccessible to ambushes. The effectiveness of the system will never be fully established, but from personal observations, I would estimate that night sampan traffic was reduced by 70%. Tremendous secondary explosions were common, and on several occasions violent exchanges of fire, to include B-40 rockets in an anti-air role were initiated. On one occasion, a large unit was trapped in an open rice paddy. The resultant air ground battle lasted three hours and resulted in 52 VC killed. Friendly casualties were limited to one round hitting one of the gunships. The aircraft remained flyable.

c. Night Raid Operations. These operations were principally directed at point targets, about which we had hard intelligence. Normally the target was a member of the infrastructure. Guides who were familiar with the area, and who knew the wanted individual would accompany the raid force.

Aviation requirements were for one UH-1H C&C aircraft, two UH-1H lift aircraft and two AH-1G "Cobras". An Air Force flare ship was also required for the duration of the mission.

Generally, the scheme of maneuver called for the night insertion of a 12 man raid force on top of the target. If the target was a house, for example, space permitting, the touchdown point would normally be within 10 meters of the house. Length of time the force was allowed to remain on the ground never exceeded 30 minutes.

Success depended on violent and sudden execution, complete surprise, and limited exposure. Tactics used on the ground, by the raiding force, would generally vary from unit to unit. They will not be discussed as they are not pertinent to the airmobile techniques used to insert or extract the force.

In direct contrast to other airmobile operations conducted by the brigade, night raid operations required detailed prior reconnaissance. The reconnaissance party included the air mission commander, as many of the pilots who were to take part in the operation as was possible, the ground force commander, and the artillery liaison officer. Specific touchdown points for both insertion and pick-up were identified by all concerned. During the reconnaissance, orbits of the objective area or repeated overflights were prohibited.

The conduct of the operation required detailed coordination of fires and flight paths. Artillery illumination was pre-planned for initial target illumination. High explosive concentrations were also pre-planned throughout the objective area, and were designed to cut routes of escape and provide immediate fire support in the event it was required.

Prior to take off, a thorough briefing was required. Last minute changes would be coordinated, and an Initial Point and final heading would be selected, based on current wind conditions. After take off, all aircraft rendezvoused at a holding area approximately five to seven minutes from the IP. As soon as the Air Force flare ship checked in and was briefed, the operation could start.

The C&C and lift ships turn inbound to the IP in a "V" formation with the C&C aircraft 10-15 seconds in front of the two lift ships. Cobras fly a standard protection pattern to the flanks and rear of the formation. The artillery illumination mission is loaded and ready

to fire at the command of the artillery liaison officer. Upon reaching the IP, the aircraft turn final and start a standard rate descent. The aircraft commander notifies the C&C party when the formation is one minute from touchdown, ideally at the IP. The artillery LNO uses this time as a base, and fires the illumination so that the rounds burst over the LZ when the C&C ship is 5-10 seconds from touchdown. The LZ is then visually identified, marked with a smoke grenade, and insertion is made by the two lift ships. Ideally, touchdown occurs no more than 20-25 seconds after first light from the artillery illumination. The Air Force flare ship uses the artillery illumination as a reference and starts two-flare, continuous illumination. The artillery is then given end of mission.

After lift off from the LZ, the two lift aircraft execute a violent turn and maintain a maximum climb rate to 1500 feet. This is done for protection from ground fire and to insure that the objective area is cleared of aircraft as soon as possible in case the Cobra fire support is required by the raid force. The lift ships return to the holding area and wait for pick-up instructions.

While the raid force is on the ground the C&C aircraft orbits at 800-900 feet. The two Cobras maintain visual contact with the raid force as it conducts the sweep. This is facilitated by the use of strobe lights which are left on as long as the troops are on the ground. The Cobras' altitude varies from 100 to 1000 feet, depending on the aviation unit providing support. Their only mission during this part of the operation is to provide immediate fire support, when required, for the raid force.

On order, the raid force assembles for extraction. The two lift aircraft are summoned from the holding area sufficiently in advance so that the troops occupy the PZ as short a time as possible. Steep approach techniques

are used during the pick-up to insure minimum exposure to ground fire.

Assuming that all night raids were initiated on good intelligence, results were entirely dependent on execution. Sloppy or poorly timed execution invariably generated dry holes. Risks inherent in this operation are negated by violent execution. On one occasion, a raid force was inserted in an area occupied by a main-force VC battalion. Surprise was so complete that the enemy did not react for 20 minutes. Although the friendly force was eventually outgunned and forced into a defensive perimeter, friendly casualties were limited to 2 KHA and 1 WHA, while enemy losses were 33 known dead and 12 weapons.

The fire support provided by the Cobras during the three hour fire fight was the key to success. On one occasion the friendly position was in danger of being overrun, until close fire support from the gunships broke up the enemy assault. Other than this one instance, however, enemy reaction to the night raids was one of panic and immediate attempts to escape the sweep.

7. DISCUSSION OF DOCTRINAL VARIANCES AND INNOVATIONS

a. Command and Control. "Because of the great demand for airlift throughout the field army, aviation elements normally will be placed in support of a ground unit force for the shortest possible time, consistent with the mission of the airmobile force," (15: para.1-6) To date this doctrine has been the guideline for the employment of assault helicopter units. The concept of employing an assault helicopter company under the operational command of an infantry battalion commander for a 10 hour period each day violates the intent of this doctrine, but in the delta it is the best solution to the problem. Holding the unit under operational command of brigade had only one advantage. All three infantry battalions could plan and conduct one or two insertion daily. Due to the

physical separation of the battalions however, this advantage is more than offset by the prohibitive cost in blade time.

b. Selection of LZ's. FM 57-35 further states that in planning for airmobile operations commanders and staffs should conduct as much reconnaissance as possible. This position is justified by explaining that since airmobile operations are based heavily on intelligence, verification of this intelligence by reconnaissance is an overriding consideration. (15:para.3-13)

In Dinh Tuong Province, experience indicates that reconnaissance is the greater of two evils. Reconnaissance invariably warns the enemy and jepordizes the success of the operation. (17:p.3)

c. Employment of Armed Escort Helicopters. An accepted mission for armed helicopters is escort of other helicopters. (15:para.6-4) All assault helicopter units have organic escort or attack aircraft. At present the UH-1C is the most used aircraft for this mission, but it will soon be replaced by the AH-1G aircraft.

Army aviators naturally bristle with parochialism when ground commanders try to employ their gunships. As far as the aviator is concerned, the only reason for that aircraft's existence is to protect the "slicks". (The term "slick" in itself explains this attitude, since it refers to an unarmed helicopter.)

During jitterbug operations however, this attitude can deny the ground unit two or three contacts daily. Employment of the gunships as a light fire team in a scouting role, while insertions are not being made, is vital to a successful operation. The ground unit commander should be prepared to pay the price required in blade time for this support. He should also be prepared to demand that the support be provided.

Replacement of the UH-1C aircraft by AH-1G aircraft poses another problem for both the aviation and ground

commanders. The Cobra does not have door gunners and is consequently vulnerable from the sides. For this reason, employment of Cobras in a scout role is highly inadvisable. This means that the aviation commander loses the ability to perform armed reconnaissance of the LZ prior to touch-down, and the infantry commander loses the scout team.

d. Night Operations. In the delta terrain, night helicopter operations pay off. Gen. Ewell stated that, "Each night less than half the force conducts checker-board and bushmaster operations. Each brigade conducts a night search or night raid. Done well, with adequate air cavalry and helicopters, this almost guarantees high body count with appreciable PW, Hoi Chanh, and VCI in addition, kill ratio should be 50 to 1. The pressure on the VC is so great it tears his guts out." (5:p.8) FM 57-35, Airmobile Operations, points out that night operations can be conducted under certain conditions. However, little or no details are given, and the approach is very low key.

8. CONCLUSIONS. Initially, this study was designed to be primarily an accounting of techniques developed in the delta terrain. Formal conclusions were not a programmed part of the study. However, in researching the subject and recounting techniques certain basic conclusions can be postulated. Admittedly they may be formulated more by experience, than research, but an honest attempt has been made to strip all prejudice and tunnel vision from these conclusions.

a. The jitterbug and mini-jitterbug techniques are valid, sound airmobile techniques and should be developed as doctrine for delta or similar type terrain.

b. Night search and night raid operations, as described, are also sound, valid techniques, and should be developed as "type operations" that are extremely effective in counter-guerrilla warfare.

c. The UH-1C gunship is a valuable tool in Vietnam.

It should be used in a scout role. It should not be completely replaced by the AH-1G aircraft.

9. RECOMMENDATIONS. Proposed recommendations based on this study are:

a. Appropriate agencies in the U.S. Army Combat Developments Command develop, test, and evaluate doctrinal guidance for the jitterbug, mini-jitterbug, night search, and night raid techniques.

b. The Ranger Training Command, U.S. Army Infantry School, incorporate instruction on night raid techniques into the Ranger course program of instruction.

c. Appropriate departments of the U.S. Army Infantry School incorporate instruction on all four techniques in the programs of instruction of courses deemed appropriate. This instruction should be keyed to the preparation of junior officers and NCO's for service in Vietnam.

d. Appropriate agencies in the U.S. Army Combat Developments Command should conduct a study to determine the requirement/feasibility for other than AH-1G aircraft for use as an armed escort helicopter in Vietnam.

BIBLIOGRAPHY

1. Analysis of the Area of Operations-Mainland Southeast Asia; Special report No. 470; Hqs. U.S. Army, Pacific; Ass't Chief of Staff, G-2 (1 Dec., 1964)
2. Army regulation 310-25; Dictionary of U.S. Army Terms; Department of the Army (March, 1969)
3. Bieri, Maj. Leon D.; An Analysis of the Current Concept for employment of the Airmobile Division in an Underdeveloped Area; Master's Thesis (1966)
4. Deagle, Maj. Edwin A., Tactical Operations in the Delta; Operational Report; Hqs., 9th Infantry Division (1968)
5. Lwell, LTG Julian J.; Senior Officer's Debriefing Program; Hqs., II Field Force Vietnam (17 Sept., 1969)
6. FM 1-100; Army Aviation Utilization; Department of the Army (August, 1969)
7. FM 1-105; Army Aviation Techniques and Procedures; Department of the Army; (January, 1966)
8. FM 1-110; Armed Helicopter Employment; Department of the Army; (July, 1966)
9. FM 17-36; Divisional Armored and Air Cavalry Units; Department of the Army; (November, 1968)
10. FM 6-20-2; Field Artillery Techniques; Department of the Army; (January, 1962)
11. FM 30-5; Combat Intelligence; Department of the Army; (June, 1967)
12. FM 30-10; Terrain Intelligence; Department of the Army (October, 1967)
13. FM 31-16; Counterguerrilla Operations; Department of the Army (March, 1967)
14. FM 56-46; Army Air Transport Operations; Department of the Army (May, 1967)
15. FM 57-35; Airmobile Operations; Department of the Army (October, 1967)
16. FM 61-100; The Division; Department of the Army (November, 1968)
17. Hunt, Col. Ira L., History of the Battle of Thanh Phu, 11-12 Mar, 1969; Combat After Action Report; Hqs., 9th Infantry Division (29 May, 1969)

18. Malone, LTC. Paul B.; "Jitterbug, The Delta Dance of Death"; Army; (July, 1969)
19. "Monthly Order of Battle Summary"; The Combined Intelligence Center Report; Hqs., Armed Forces of Vietnam, Office of JGS, J-2; Hqs, United States Military Assistance Command, Vietnam, Office of Ass't Chief of Staff, J-2 (1 December-31 December, 1968)
20. "Monthly Order of Battle Summary"; The Combined Intelligence Center Report; Hqs., Armed Forces of Vietnam, Office of JGS, J-2; Hqs., United States Military Assistance Command, Vietnam, Office of Ass't Chief of Staff, J-2 (1 July-31 July, 1969)
21. O'Connor, MG G.G.; Senior Officer's Debriefing Program; Hqs., 9th Infantry Division (25 February, 1968)
22. Operation Pershing- Battle of Tam Quan; Combat After Action Report, Hqs., 1st Brigade, 1st Cavalry Division (Airmobile)(May, 1967)
23. Operation Pershing-Battle of Tam Quan; Combat After Action Report, Hqs., 2nd Brigade, 1st Cavalry Division (Airmobile) (May, 1967)

ANNEX A (Combat Experience of Author) to student paper submitted by Major James R. Taylor, Infantry.

1. July, 1966 to July, 1967:

Assigned to 1st Cavalry Division (Airmobile). Assignments included duty as a rifle company commander for four months and infantry battalion S-3 officer for seven months. Operated in Fleiku, Kontum, Binh Dinh and Quang Ngai Provinces.

2. December, 1968 to August, 1969:

Assigned to 9th Infantry Division. Assignments included duty as infantry battalion executive officer for five and one-half months, and infantry battalion commander for two and one-half months. Operated in Dinh Tuong Province.