

The VC force in this example is counterattacked with fire power while ambushes are being established on all possible avenues of withdrawal in order to obtain maximum VC casualties. Note that the VC have established an ambush along the main avenue of approach between the reaction force headquarters and the hamlet. By not moving directly to the hamlet, the reaction force avoids this common VC trap.

Figure 50. Reaction to VC Attack of Hamlet

15. Convoy Operations

a. Planning Considerations

(1) No route is 100% secure. The VC/NVA can prepare an ambush anywhere.

(2) Representatives from the security and convoy elements, supporting artillery, and tactical air should participate in the planning.

(3) Effective communications are essential for successful convoy operations.

(4) Convoys of two or more serials should be commanded from a command and control (C&C) helicopter. This affords the commander the best means of control and communication and enables him to react quickly to all contingencies.

(5) Convoy escort and reaction forces are required. Armored cavalry elements, if available, are well suited to both tasks. Similarly constituted mechanized infantry elements reinforced with tanks are effective also as an escort or reaction force. In either case, terrain and condition of the route determine the extent to which various tracked vehicles may be used. Heliborn infantry elements should be a part of the reaction force to enable blocking and fully destroying or capturing the enemy ambush element, if the terrain conditions might preclude accomplishment of this task by the escort or armored reaction force.

(6) The commander of the convoy and the command succession must be known by members of the convoy prior to its departure.

(7) Use of convoy route maps showing the enemy situation along routes in the area is a valuable aid in convoy planning.

(8) Air support is a necessity. The use of

column cover provides a definite deterrent to ambush and makes instantaneous response possible when cover includes tactical air.

(9) Consideration should be given to an Eagle Flight of platoon or company size, either on strip alert or orbiting the convoy.

b. Preparation

(1) Sandbag the floor boards of all vehicles to lessen the effect of mines on personnel. Stack additional sandbags against the sides of trucks to provide protection from small arms fire.

(2) Remove all side panels from the troop carrier or cargo section of vehicles. Tail gates on all troop carriers should be let down. Consideration should be given to the removal of all doors of vehicles so equipped. If seats are used, place them in the center of the vehicle so that troops sit back-to-back and face outward. If no seats are used, the troops should sit or lie in the bed of the truck and face outward. This provides coverage by fire for both sides of the road.

(3) Brief and rehearse all personnel on their individual responsibilities and duties in the event of ambush.

(4) All vehicles should be equipped with tow ropes or chains.

(5) Place the slowest vehicles at the head of the convoys.

(6) Wreckers and maintenance vehicles should follow all convoys.

16. Counterambush Checklist

AT ALL TIMES

Expect an ambush - stay alert.

Rehearse immediate action.

Do not set a pattern.

BEFORE MOVEMENT

Foot and Vehicular

Examine all intelligence data

Request air cover.

Make detailed fire support plans.

Coordinate movement plan with all participating elements.

Reconnoiter routes.

Plan to take an artillery forward observer.

Vehicular

Sand bag vehicles.

Designate convoy command succession.

WHILE MOVING

Foot and Vehicular

Maintain communication with all elements.

Maintain noise and light discipline.

Use point, flank and rear security.

Watch for mines and booby traps.

Foot

Vary formations.

Keep dispersed.

Move by bounds.

Keep off roads and trails

Skirt open areas

Vehicular

Maintain close and continuous contact with column cover.

IF THE ENEMY IS DISCOVERED

Use available firepower consistent with size of enemy force.

Call for reinforcements if required.

Flank him and attack.

Ambush his withdrawal.

Pursue.

SECTION V. AMBUSHES

17. General

a. Current service manuals provide sound and detailed guidance on the conduct of ambushes. Recent experience with ambushes in Vietnam reveals that, all too frequently, ambushes are well laid, properly planned and correctly positioned, but fail because of an error on the part of a single individual.

b. Selection of the site is only the first step in the development of a well organized ambush. Ambush leaders must be capable and be provided with the equipment necessary to carry out their assigned mission successfully. Squad leaders must be capable of calling in supporting arms, and be proficient in methods of blocking escape routes and utilizing booby traps, demolitions and punji traps.

18. Actions Prior to the Ambush

a. Make a detailed map study, including use of aerial photos whenever possible. Commit to memory the route and terrain -- particularly those features which will aid navigation. Confirm these terrain features as you pass over or near them.

b. A complete, detailed rehearsal of the ambush must be conducted to eliminate errors. Each member of the ambush party must understand thoroughly what he is to do.

c. Arrangements must be made for the employment of all available supporting fires.

d. Movement to the ambush site by concealed routes to avoid detection by the VC or VC sympathizers is essential. Contact with civilians must be avoided.

e. Blocking forces must be emplaced in conjunction with mines, booby traps and punji stakes along likely avenues of escape in order to inflict maximum casualties.

f. Repeated occupation of the same ambush site must be avoided. Using several sites in the same general area insures better coverage and more effective results.

g. When a night ambush is planned in conjunction with or as part of a daylight sweep, it is advisable to move through the ambush site prior to darkness and conduct a ground reconnaissance. The site should not be occupied prior to darkness.

19. Conduct of the Ambush

a. Maintain light and noise discipline in the ambush site. Do not permit smoking. Failure to adhere to these basic practices is the cause frequently of an unsuccessful ambush.

b. Stress the fact that the leader of the ambush is responsible for "springing" the ambush. "Springing" the ambush too early or too late leads to failure or to partial success only.

c. Use a definite, clearly recognizable signal to commence firing. Prearrange and rehearse all signals to be used. Keep signals simple. This eliminates confusion and avoids premature disclosure of the ambush.

d. Place a heavy and accurate volume of fire into the ambush area, completely covering the killing zone and escape routes.

e. Fire low to avoid overshooting the target.

f. Use all supporting fires such as artillery, mortars, tactical air and armed helicopter support.

g. Pursue by fire when the VC/NVA jump into the underbrush opposite the ambush party.

h. Quickly exploit and search the immediate area for casualties, weapons and documents.

20. Night Ambush

a. The night ambush deserves particular emphasis, since most VC/NVA operations are conducted at night. Ambushes during the hours of darkness are more difficult to control, but the lack of light or illumination adds to the security of the ambush party and the confusion of those being ambushed.

b. At night a small ambush party generally is more practical because of greater ease of control and decreased probability of detection. The size of the party will depend on factors such as the size of the unit to be ambushed and the estimated enemy strength in the area. Some means of illuminating the ambush site after contact must be provided so that the area may be searched thoroughly. Pre-planned artillery and mortar concentrations, handheld flares or illumination grenades can be used for this purpose.

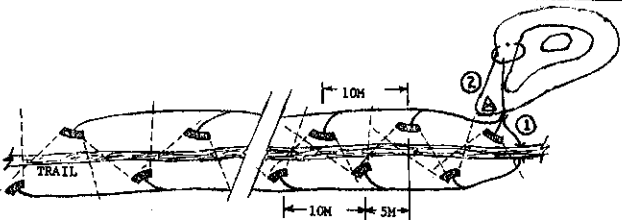


Fig A

All mines are primed with non-electric blasting caps, connected with detonating cord, except one mine, as shown in Figure B. Claymores are emplaced 1-2 meters back from trail, carefully camouflaged, and sighted to provide interlocking kill sectors. Length of trail covered is limited only by amount of claymores and detonating cord carried. (A squad can easily cover 150 meters). Enemy may approach from either direction, and the squad leader (position 2) fires when the most lucrative portion of VC column is in the killing zone. (An added effect can be achieved with WP grenades, secured by a clove hitch of detonating cord between claymores). Detonating cord provides simultaneous firing of all claymores.

Fig B

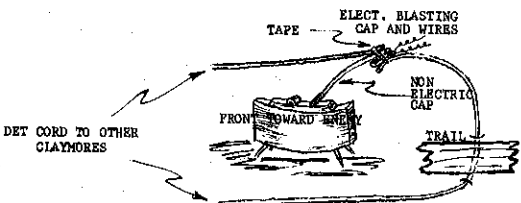


Figure 51

21. Special Considerations

a. The Claymore (M16A1) antipersonnel mine has proved to be a highly effective ambush weapon in Vietnam (Figure 51, Claymore Ambush).

b. "Stay behind" ambushes can be very successful, since the enemy normally follows a unit when it leaves an operational area. Time permitting, these ambush patrols should be prepared to remain in the area for several days and use deception tactics to conceal their presence.

SECTION VI. AIRMOBILE OPERATIONS

22. General

A capability to execute airmobile operations effectively is one of the major tactical advantages possessed by FVMAF and RVNAF. By use of lift and armed helicopters, well supported by artillery and fighter aircraft, commanders are able to achieve surprise and shock effect, to move sizeable forces quickly over obstacles or long distances, and to mass forces or reinforce a position quickly with fresh troops ready for combat. Through precise, detailed planning, aggressive liaison, and a complete understanding of the principles of airmobile tactics by all commanders, airmobile operations can be conducted successfully. There are four types of airmobile operations normally conducted in South Vietnam. They are:

- (1) Airmobile assault.
- (2) Eagle Flight.
- (3) Combat reconnaissance.
- (4) Reinforcement.

23. Planning Considerations.

a. The complex nature of airmobile operations in RVN dictates that planning for the airmobile maneuver be accomplished in considerable detail. Participants in this planning should include representatives from:

- (1) Maneuver and reserve elements.
- (2) Artillery fire support.
- (3) Close Air support.
- (4) Naval gunfire support (if required).
- (5) Aviation units.

b. Timely and detailed weather, terrain and enemy intelligence information is essential to the successful conduct of airmobile operations.

c. Careful consideration should be given always to selection and use of multiple staging areas, pick up and landing zones, varied flight patterns, formations, and alternate flight routes in order to keep losses to a minimum.

d. With the advent of the OH-47 "Chinook" helicopter, the range of supporting artillery need not be a limiting factor in airmobile operations. These aircraft enable the commander to displace his light artillery on the battlefield.

e. A well prepared SOP greatly reduces planning, loading and execution times. These SOPs should include plans for the varying allowable cargo loads (ACL) for each type of assault helicopter employed in Vietnam.

24. Airmobile Assault

a. General

An airmobile assault makes use of preplanned landing zones (LZ), a specific objective or series of objectives to be taken, a reserve element and the coordinated use of fire support elements (discussed later in Chapter 5). The size of the airmobile assault force is determined by the assigned mission.

b. Organization. An airmobile force normally consists of the following elements:

(1) A command and control (C&C) element consisting of the air mission commander, airmobile task force commander, air liaison officer, artillery liaison officer, and a member of the airmobile task force staff. A naval gunfire liaison officer may be added when such support is provided. This element will utilize the C&C aircraft with its special radio equipment to control the entire task force. Once the assault element is on the ground, the C&C element is available immediately to provide additional support and assistance as may be required.

(2) Sufficient troop carriers (slicks) to lift the desired number of first phase assault forces. Sufficient medium helicopters are needed to move artillery if the operational area is beyond supporting artillery range. Additional forces normally will be ferried into the combat area subsequently. See helicopters in Figures 52 thru 61.

(3) An escort element composed of fighters and armed helicopters which provide reconnaissance and have the mission of protecting the flight of slicks into the LZ. They also provide protection by fire for the entire force. As the enemy antiaircraft capability increases, the use of fighter escorts also must be increased for flak suppression.



Figure 52 CH3C Helicopter



Figure 53 CH-43



Figure 54 CH-54 Skycrane



Figure 55 UH1B "Iroquois"



Figure 56 UH1B "Iroquois"



Figure 57 UH-1D "Iroquois"



Figure 58 CH-46 Sea Knight



Figure 59 CH-53



Figure 60 CH-47 "Chinook"



Figure 61 CH-34 "Choctaw"

(4) A maintenance aircraft crew to provide on-the-spot repairs for disabled aircraft. It is backed up normally by a CH-47 evacuation aircraft at the staging area, which can also assist the MEDEVAC helicopter in the removal of casualties and downed crews.

(5) A fire support element, generally "on call", which is composed of an O-1 aircraft with radio relay capability, and a forward observer and/or forward air controller (FAC).

(6) Additional ground based fire support and combat maneuver elements if they are available in the area.

(7) Radio communications equipment for operating the type communication network illustrated in Figure 62.

c. Conduot of an Airmobile Assault.

(1) The airmobile assault begins with preparation of the landing zone (LZ) by close air support and/or artillery fire. Consideration should be given under certain circumstances, to conducting an assault without preparation to achieve surprise. The assaulting infantry are loaded at staging fields or picked up in the battle area from pickup zones (PZ). Flight routes, release points, landing headings, and touch down areas normally are preplanned; however, tactical developments often make it necessary for the command and control aircraft to vector the troop lift helicopters and gunship escort into the LZ. The arrival of lift ships is timed so that there is a minimum time lapse between the lifting of LZ preparatory fires and the landing of the assault force. After they have received the command to proceed to the LZ, the command and control aircraft will relay the following information (if other than preplanned) to the lift ships.

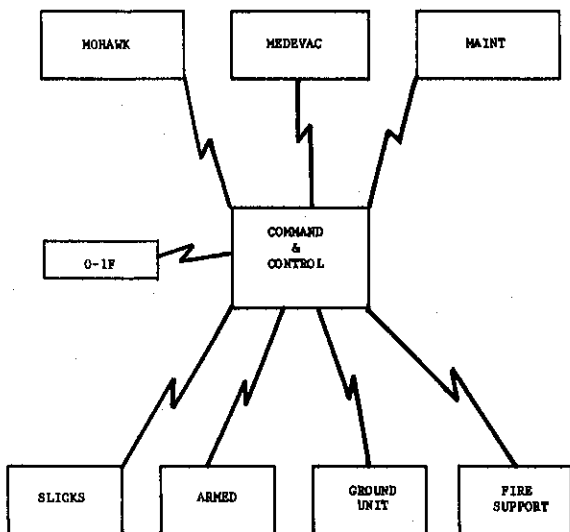


FIGURE 62. Type Radio Net for Airmobile Assault Force

- (a) Final approach heading.
- (b) Touchdown point (may be marked with smoke).
- (c) Heading and route for departure from the LZ.
- (d) Brief summary of condition of LZ, including enemy and friendly troop situations.
- (e) Where suppressive and supporting fires will be delivered.
- (f) Direction of attack or movement from LZ.

(2) The direction of attack is monitored by crew chiefs in the slicks; they indicate the direction to the assault force by hand and arm signals just prior to touchdown.

(3) As the lead elements of the airmobile force approach the LZ, armed helicopters provide suppressive fire while the slicks are landing, unloading and departing the LZ. Artillery fire and air strikes also may be made simultaneously and in close proximity to each other. Flank suppression strikes may be required during the landing.

(4) The desired timing includes simultaneous touchdown and takeoff of all slicks with less than ten seconds on the LZ.

(5) As the first lift of helicopters departs from LZ, armed helicopters, tactical air, or artillery can be used to support the ground force.

(6) The armed helicopters are used also for reconnaissance and surveillance.

(7) Troops initially employed in securing an LZ are highly vulnerable to VC/NVA attack, especially when the first troop lift is small because of restricted LZ. Insure that all members of the assault force completely understand the plan for reorganization on the LZ and the signals, such as those used for marking the assembly point with different panels, or colored smoke grenades. Keep in mind that often there will be grass or brush higher than a man's head and that smoke must be coordinated with the helicopter unit. Never use smoke which marks an enemy position to mark assembly point or friendly position. Whether the first airmobile force is designated to provide security for the LZ or to assault an objective from the LZ, it should:

- (a) Send out patrols to search the perimeter.
- (b) Consolidate the remainder of the airmobile force into a strong point located off the LZ or objective.

(8) The reserve force commander must keep abreast of the operations so that his counterattack plans address the actual situation to which he may be committed.

(9) At the termination of the mission, troop extraction is completed in the following sequence:

- (a) Ground unit secures the area.
- (b) Armed ships assume security of the LZ as the ground unit moves into pickup formation.
- (c) Slicks deploy to pickup formation prior to reaching the LZ.

(10) Fire support for the extraction is furnished by tactical aircraft, artillery and armed helicopters.

(11) Ambush of US airmobile forces by the VC is a constant threat. The enemy's capability to ambush pos-

sible LZs in force can be decreased by:

- (a) Limiting and varying reconnaissance of LZs.
- (b) Conducting tactical air strikes and/or artillery preparation on the LZ.
- (c) Utilizing alternate LZs.
- (d) Deceiving the VC/NVA as to the actual location of the LZ by establishing a decoy LZ.
- (e) Varying techniques by conducting assaults with no preparation on occasion.
- (f) Avoiding the most likely LZ, or one which was used previously.
- (g) Committing a maximum number of troops in the LZ at one time.
- (h) Using random stretches of available roads as LZs.

(12) In addition to the points mentioned, the following considerations also may influence the outcome of the operation:

(a) Airmobile operations in high canopy jungle. Troop ladders may be used for exiting of troops from CH-47 aircraft, engineers may be lowered by use of the forest penetrator to prepare LZs, and bomb craters may be utilized as single ship LZs. In addition, troops trained in rappelling may use that method of exiting.

(b) On the ground time for lift helicopters can be reduced appreciably by training troops in entrance and exit procedures (hattle drill) and preparation and practice of varied loading plans and SOPs. Use assault fire techniques or reconnaissance by fire techniques on the nearest woodline.

(c) Troop and cargo lift capability is determined not only by type helicopter and the amount of fuel on board, but also by meteorological conditions and terrain. For example, in the high plateau transport helicopters can carry about 60% of the load possible in the lowlands.

25. Eagle Flight

a. General.

(1) As its name implies, the eagle flight is a force capable of searching out and pursuing its prey, attacking it quickly and violently, and withdrawing to seek other prey. Eagle flight operations were developed especially for flat, low-lying terrain like that of the Delta where lack of roads, great expanses of inundated land, vast networks of tree-lined rivers and canals and widely dispersed population make fighting the VC/NVA on foot a most difficult task.

(2) The eagle flight forces usually are small -- varying in size from platoon to company. Their employment is characterized by lack of preplanned landing zones and acceptance of limited fire support. The effectiveness of an eagle flight unit depends upon its ability to react and maneuver rapidly in any combat situation and to harass and disrupt the activities of VC units.

b. Organization. An eagle flight requires essentially the same elements as an airmobile operation except that the eagle flight normally has sufficient slicks for lifting the entire assault force in one lift.

c. Conduct of an Eagle Flight.

(1) The assault force commander orders the eagle flight forces airborne when armed reconnaissance helicopters make or anticipate making enemy contact, or when a need arises for an immediate search of a limited area. The eagle flight force also may be

ordered airborne and instructed to orbit at a specific location until such time as it is committed. Once committed, movement into the LZ follows the procedures outlined above for the airmobile assault.

(2) Prior to landing at a designated LZ, the unit commander is briefed in detail by the commander of the armed ship element on the direction the attack should take, what he will encounter to include the location of enemy positions or terrain features which might pose a threat, and where and how contact was initially made by the armed ships. Fire support for the assault is provided by the armed ships until tactical air support or artillery becomes available. The armed ships come under the operational control of the unit commander after the slicks have cleared the LZ.

(3) When the mission is completed, the eagle force is picked up by the slicks and committed to another area or returned to the staging area. The technique of deploying, striking and then redeploying to strike again was used successfully as a reaction to a VC attack on a friendly hamlet in IV Corps. The VC had positioned an estimated company south of the hamlet to ambush the expected reaction force. While reconnoitering an appropriate LZ, the commander of the operation spotted the VC ambush site, immediately called for aerial suppressive fire, and landed his force near the ambush. The VC ambush unit was caught completely off guard by this maneuver and attempted a rapid withdrawal. After a short fire fight, the eagle flight force reloaded on the troop carriers, landed at another position and ambushed the withdrawing VC force. As a result of this mobile and aggressive eagle reaction force, the VC sustained 12 killed and an unknown number wounded.

26. Combat Reconnaissance

a. Combat reconnaissance operations using small, highly trained units are effective against squad or smaller size units in VC/NVA areas, and are capable of collecting accurate and up-to-date information on larger

enemy forces. It should be standard practice to use combat reconnaissance before committing large forces so that when committed, they have increased chances of engaging effectively. These operations are conducted without preplanned landing zones, without a multiple landing capability, and without dependence on aerial suppressive fires. In addition to the military value of such operations, they demonstrate to the guerrilla and the VC sympathizer that they have no sanctuary. An airmobile combat reconnaissance operation is a patrol. It may have the mission of reconnoitering an area, of capturing prisoners or of destroying enemy personnel and equipment. The assault force, normally composed of 20 to 24 men armed with lightweight automatic weapons, is not capable of conducting sustained operations. It should complete its task on the ground in less than 15 minutes.

b. Organization. Organization of the combat reconnaissance unit is as follows:

- (1) Combat reconnaissance force.
- (2) Armed helicopters for selection and reconnaissance of LZs.
- (3) Slicks for transportation.
- (4) Evacuation aircraft for prisoners.

c. Conduct of the Operation.

(1) Based on the need to gather information, the combat reconnaissance unit is airlifted into the LZ after the armed ships verify that there is no larger VC/NVA force in the area. The unit rapidly searches a limited area, questions the inhabitants, and apprehends any suspects. After spending a reasonably short time in the area, the unit is airlifted into another area. If contact is established with a unit larger than it can handle it is reinforced or withdrawn. However, the contact is followed up by the necessary force to destroy the enemy.

(2) This type of operation was employed effectively in I Corps when, after landing in the initial area, contact was established with three VC. Two of the VC were killed and one captured. Eight houses were searched and several pounds of documents found. After pick up, a quick scan of the documents coupled with interrogation of the prisoner indicated that the area was worth a second and more thorough search. The unit was airlifted into a new area on the opposite side of the village. Again, the unit made contact killing one more VC, wounding one and capturing seven. The documents carried on the dead VC revealed the intelligence network and names of infiltrators within the district headquarters. The unit and its prisoners were again picked up and returned to the staging area. The total time that had elapsed from takeoff until return was one hour and ten minutes. This example points out how a small force can be used effectively to achieve major results in information gathering.

27. Reinforcement

The reinforcement mission illustrates how the fundamental procedures for an airmobile assault and an eagle flight mission can provide the basis for an effective strike force operation. An example of the flexible reinforcement capability of airmobile units was demonstrated in Bac Lieu Province during a search and destroy mission. The operation was initiated by a coordinated assault of ground and airmobile units. While the operation was in progress, a Mohawk reconnaissance aircraft reported unusual movement in an area 40 kilometers from the battle area. The commander immediately dispatched an armed helicopter platoon to investigate the movement and ordered an eagle flight force airborne to be available should contact be established. Upon entering the new area, the armed helicopter platoon encountered two platoons from a VC main force unit crossing an open field. While taking the VC unit under fire, the armed platoon encountered additional armed personnel in and around a small hamlet 1500 meters away. The armed platoon was instructed to determine the flanks of the unit, and find secure an LZ. The commander employed the eagle flight force in the LZ near the larger body of VC troops, and it quickly made heavy contact. In anticipation of this, the commander had ordered the original units extracted from the first area and the selection of several landing zones located to isolate the

VC units. Fire support aircraft were obtained and 12 lifts were employed for the envelopment of the two VC battalions. The VC suffered 238 killed (body count) and 250 wounded. In this example, the original operation was initiated by conventional ground and airmobile forces. A lucrative target was developed by an eagle flight force, and the target was destroyed effectively by multiple, reinforcing airmobile assaults.

SECTION VII. SEARCH AND DESTROY OPERATIONS

28. General

Search and destroy operations are conducted against enemy forces and installations. They can be conducted inside or outside of a unit's tactical area of responsibility (TAOR). It includes both committed and reserve units.

a. The primary objectives of search and destroy operations are to find, fix and destroy the enemy, to destroy or seize his equipment, foodstuffs, medical supplies and base areas; and whenever possible, destroy his political and military infrastructure (his local organization at province, district, village and hamlet level). An additional objective is to keep the enemy on the move and dispersed, to prevent him from planning, assembling and executing operations on his own initiative.

b. Most operations are conducted without detailed prior information of the VC/NVA, and the commander must produce necessarily his own intelligence as he goes. It is abundantly clear that sweep operations, that is, moving quickly through an area without diligent search, are not productive. The VC are trained to sidestep such operations, maintain surveillance over them by the use of local guerrillas, and wait for an opportunity to strike and destroy detached small elements or larger forces whose

guard is down. Thus, the success of offensive operations to destroy VC forces depends upon finding the enemy and engaging him with superior forces. It follows that information must be gathered from every conceivable source. There are three main sources, and all three should be used simultaneously and continuously whenever possible:

(1) Combat reconnaissance. Aggressive, continuous combat reconnaissance is essential in all operations. Saturation patrolling by platoon-size or even smaller units, either on foot or delivered by helicopter, is a prime source of information. Platoon-size airborne reconnaissance elements should reconnoiter all populated areas and likely enemy concentration points within a wide radius around operating units.

(2) Locally available information. The best source of accurate information exists at province, district, village, RF and PF levels. Close liaison and frequent visits to appropriate officials and commanders can result in much accurate and useful information.

(3) Aerial surveillance and target acquisition -- aerial photography, infrared detection, side-looking radar (SLAR) and continuous visual observation all have proven their effectiveness in Vietnam.

c. There are three types of search and destroy operations:

(1) Operations to destroy a VC/NVA base area.

(2) Operations to destroy VC or NVA main force units.

(3) Operations to destroy VC local and guerrilla forces and the VC military/political infrastructure in a given area -- district or province.

d. During these operations security cannot be provided for any appreciable time. Therefore, civic action programs must be limited to those actions that

will relieve suffering, such as first aid or evacuation of civilian injured, minimum replenishment of destroyed food stuffs, and the evacuation of key local officials if they so desire. Civic action projects which may benefit the VC, be destroyed by the VC in the event they return, or which may cause VC reprisals, will not be undertaken.

29. Operations to Destroy VC/NVA Base Areas

a. Offensive operations against enemy base areas contribute to the defeat of the enemy by causing him to move and thus to exhaust time and supplies. Such operations should uncover and destroy the logistics base itself, including shelter, training areas, and command posts.

b. Since installations in enemy base areas invariably are completely camouflaged and protected by security troops and booby traps, operations against these targets must involve a thorough combing of the base area, organized by the establishment of a series of search zones. Forces assigned to zones must be given full opportunity to cover each zone thoroughly and ample time and means to destroy what they find.

c. Operations against enemy base areas should be repetitive, based on a carefully designed campaign of sustained action which ultimately will dominate the bases and render them useless.

d. Limited operations against enemy base areas also are effective in keeping the enemy off balance, denying him free utilization of safe areas, and forcing him either to move frequently or to withhold forces for the defense of base complexes. Long range artillery, naval gunfire, fighter bombers, strategic bombers and land and amphibious raids will hamper his operations, reduce his force, destroy his morale and materially detract from his ability to prosecute the war effectively.

30. Operations to Destroy VC/NVA Main Force Units

a. The success of offensive operations designed to destroy VC/NVA main forces depends upon finding the

enemy and engaging him with superior forces. In those few instances when reliable information becomes available regarding the size or location of such a force, the opportunity should be exploited immediately and aggressively in coordination with appropriate FMAAF and RVNAF commanders.

b. It must be emphasized, however, that those instances in which firm intelligence is available will be very rare. Therefore, acquisition of detailed information in the early stages of operations is essential. In almost every case this will include a requirement for aggressive ground reconnaissance. Specially trained small reconnaissance units, such as the Delta Teams discussed on Page 76, should be established. In most instances these reconnaissance units should include one or two Vietnamese soldiers.

c. Schemes of maneuver inherently must be flexible to enable immediate response to any opportunity which promises defeat and destruction of the enemy. Rigidly pre-planned schemes of maneuver, with successive objectives, by a force moving in one direction, will fail nearly always to fix the enemy unless the "fix" is at a place and time chosen by the VC/NVA.

d. The first step in destroying VC or NVA main force units is to entrap or encircle the enemy force. It is not sufficient, in most cases, to use only an attacking and a blocking force -- more is required. The VC on many occasions have slipped between these two forces, escaping relatively unscathed. Therefore, the VC forces' most likely routes of withdrawal must be covered by ground combat elements, and the less likely routes of withdrawal by light reconnaissance on the ground, placed or extracted by helicopters, if available, in order to exploit time and space advantages.

e. Once contact is made commanders must be prepared to rapidly adjust plans to enemy movements, and to alter schemes of maneuver to fix and destroy the enemy. Action must be quick, aggressive and responsive to the movement of the VC. In this situation mission-type orders should be issued to combat units; they must move with great speed around, behind and on the flanks of any located VC force. This will require bold and skillful commanders at every echelon. Speed and deception must characterize tactical maneuver - and all this must be done with meticulous attention to continuous provision of air, artillery and where feasible, naval gunfire support.

31. Operations to destroy VC local and guerrilla forces and the VC military/political infrastructure

a. Normally, operations designed to destroy local and guerrilla forces and the VC military/political infrastructure are classified as clearing operations or securing operations designed to bring specified areas permanently under GVN control. In such cases the clearing forces are to be followed by police. Regional and Popular Forces which, together with the cadre, are intended to eliminate the entire VC organization and to substitute therefore district, village and hamlet authorities who are loyal and responsive to the government.

b. However, because the VC objective is to take over the government at every level through the gradual development of powerful local guerrilla and political organizations and because these local organizations provide intelligence, tactical support and resources to main force units, it is sometimes necessary to attack this local structure even if there is no capability or intention to follow up pacification measures (clearing and securing).

c. Therefore, search and destroy operations may be undertaken when revolutionary development is not possible in accordance with techniques quite similar to clearing, which are treated separately in this handbook.

d. US and Free World Forces of approximately brigade size often may be deployed into a province, or even a district, for sustained operations over 2, 3, or 4 week periods designed to destroy local and guerrilla forces and the political and military infrastructure of the VC. The techniques which are most effective in this connection are as follows:

(1) The tactical commander establishes a base from which he can launch quick reaction forces by helicopter, by vehicle and sometimes on foot.

(2) The commander, his staff and his subordinate commanders establish contact with the local province, district, hamlet and village officials in order to obtain from them most recent intelligence on enemy activities and forces in the area.

(3) Because the intelligence gathered from these sources usually will be incomplete, it is necessary also to conduct extensive combat reconnaissance patrols. Battalions will be assigned areas within which companies, platoons and squads will conduct extensive foot, motor and heliborne patrols into areas identified by local officials as enemy concentrations or areas of habitual enemy activity.

(4) US platoons and squads, or sometimes companies, may accompany Regional Forces and Popular Forces on local operations. This will bolster the morale of the RF/PF and provide them with the necessary communications for artillery and air support.

(5) In conjunction with local officials or Regional and Popular Forces, hamlets should be surrounded and searched. VC officials, identified through prior intelligence or interrogation, should be apprehended and turned over to GVN authorities.

(6) Saturation patrolling by small units over a long period of time will produce a number of small contacts. Intelligence acquired through these contacts should be exploited immediately. After a week or two, the intelligence picture in the area should become reasonably clear and a number of prisoners or ralliers should be in hand.

(7) Whenever a contact is made, a quick reaction by a large force should ensure destruction of the enemy while sustaining few friendly casualties.

(8) After 3 or 4 weeks of such operations the following results should be attained:

(a) RF and PF aggressiveness should be increased.

(b) Local intelligence should be forthcoming in ever greater quantity and quality.

(c) The number of small VC elements at hamlet and village level should have been destroyed and the enemy forced generally on the defensive.

(d) Opportunities to recruit additional RF/PF should increase.

(e) Opportunities for civic action and psychological operations should multiply.

(f) GVN control should be strengthened through domination of the area at the lowest level.

e. In the type of action described above most contacts will be with enemy squads and platoons and only rarely with companies or battalions. Nonetheless, this type of operation strikes at the heart of the enemy organization and at his capability to conduct or support successfully his major operations. Troops should expect a large number of small successes. The cumulative effect of this type operation will be as important or even more important than engagements with a large enemy force.

SECTION VIII. SECURITY OPERATIONS

32. Security operations provide area resources control, population, LOC and/or harvest security and defense of political and economic centers. They are conducted in support of revolutionary development and normally will involve multiple small unit actions. It includes former clearing operations.

a. Clearing Operations.

(1) Clearing operations are offensive combat operations conducted to rid an area of organized VC/NVA main forces and eliminate permanently the threat of overt VC action therein in preparation for securing operations. (See paragraph 32b below). US and other FVMAF will conduct clearing operations in and around their base areas and communications complexes, or in other carefully selected areas. As a guide, an area is considered to have been cleared when VC/NVA main forces of company-size or larger have been destroyed or ejected.

(2) Clearing operations are conducted by saturating the area with mobile friendly military forces over an extended period with emphasis on small unit patrolling, hamlet searches, offensive ambushes and quick reaction by larger units to exploit intelligence or initial contact. Extensive operations are employed to "take the night away from the VC" and make it unsafe for the VC to move and enter hamlets at night.

b. Securing Operations.

(1) Securing operations, which usually follow clearing operations, are designed to provide area, population, LOC and/or harvest security in areas which already have been cleared and undergoing revolutionary development.

(2) Military forces conduct operations adjacent to and within the area to provide a military secure climate for the accomplishment of civil activities. ARVN regular forces and/or US/FVMAF will operate aggressively on the periphery of the area to prevent VC/NVA main forces from returning to interfere with Revolutionary Development actions within the area. RF/PF forces replace regular forces within the area and assume primary responsibility for security operations. Regional forces, operating under the control of the sector commander, actively seek out and destroy VC guerrillas and protect sensitive areas and critical lines of communications. Popular forces, operating under control of the subsector commander, provide local security for villages and hamlets and perform other local static tasks. In these operations, primary emphasis remains on small unit activity, both day or night, to saturate the area with patrols, ambushes, checkpoints, and outposts. Ultimately, many of the securing forces will be replaced by National Police.

(3) During securing operations, comprehensive civic action programs should be conducted in conjunction with local officials and utilizing local GVN forces. The objectives of these programs are to improve the sociological and economic status of the community in order to remove the causes of insurgency and secure the support of the people for their government.

SECTION IX. RESERVE OPERATIONS

Reserve operations are those involving forces in training, forces undergoing rehabilitation, newly arrived forces undergoing combat readiness preparations, and/or alerted reaction forces.

SECTION X. POPULATION AND RESOURCES CONTROL

33. Objective

The objective of a population and resources control program is to deprive the VC/NVA of the support of the population and the material resources he needs to engage in continuous warfare. The enemy cannot operate effectively without civilian support.

34. Population Control

a. The Vietnamese have been using individual identification cards since 1938. Today, all persons over the age of 18 must be in possession of an ID card. The present card is laminated and contains a photograph and prints of the left and right index finger of the bearer.

b. Curfews are imposed only as necessary, and primarily in areas where the VC/NVA or supporters are active. Any person having a legitimate need to be outside their area during curfew hours, must be issued a special curfew pass. Curfew violators are assumed to be insurgents or supporters until proven otherwise.

c. Travel permits in most areas are required for any travel outside a person's village or area. These permits may be issued to individuals or groups, either on a one-time basis or a multiple day basis usually not to exceed 90 days.

35. Enforcement

a. To enforce the controls imposed on the population, a system of checkpoints is established on roads and highways, railroads, bus terminals and airlines. Along the 2,500 miles of waterways in the Delta region, river craft and assault boats provide control. Mobile checkpoints, both land and water, are established on an irregular basis to apprehend personnel attempting to avoid or by-pass fixed checkpoints.

b. Civil police are more suited, by training and experience, to conduct this type of operation. Their normal police operation, in their own specific area, provides them a familiarity with the area and its people. Police may require support from the military when insurgents or sympathizers are actively belligerent, but generally, the military is called in for support only in cases where superiority in manpower and armament is required for effective enforcement.

c. US Forces do not have authority or jurisdiction over Vietnamese nationals. On joint operations, US military police check only US vehicles and personnel while civil police check Vietnamese vehicles and personnel.

36. Resources Control

a. It is imperative that the populace be controlled if basic resources are to be denied the VC/NVA. Resources required by the enemy to continue operations are the same as required by insurgents everywhere. Critical items are:

(1) Food. This includes anything fit for human consumption. Most of the food obtained by the enemy is procured locally, either by "taxation" of the local population or from sympathizers and supporters, or in some cases, grown by the VC in remote areas.

(2) Medicines and medical supplies.

(3) Arms, ammunition and explosives.

(4) Clothing and textile materials.

(5) Money.

(6) Transportation of all types.

b. Various control procedures have been established to deny the enemy access to the resources he needs. Among them are inventories of material manufactured and shipped

from processors and importers, and maintenance of formal records of the amounts of material being shipped and the destination. Upon arrival at the final destination, the goods are inventoried again to insure that there has been no loss or pilferage.

c. Food stuffs and clothing are rationed to prevent delivery of these items to the enemy by local supporters. Police also guard supply depots and storage areas where such items are stored.

d. The most effective method of resources control employed by the civil police is the search of land and water vehicles. Critical items required by the VC/NVA are hidden by sympathizers and supporters in every imaginable place in an attempt to pass inspection at checkpoints. Thorough inspection by land and river police is a tedious and painstaking process but it is necessary if the resources control operation is to succeed.

SECTION XI. OPERATIONS IN THE CENTRAL HIGHLANDS AREA

37. General

The central Highlands area constitutes almost 50 percent of the land mass of South Vietnam. It is a rugged, mountainous area, with maximum elevation ranging from 4500 to 7000 feet in the vicinity of Dalat and from 3000 to 8000 feet in the area west of Quang Ngai. The area slopes down steeply to the coastal plain on the east and more gradually in the western plateau, resulting in a strong contrast between the shorter, swifter, eastward flowing streams with their steep walled, narrow valleys, and the more sluggish westward flowing streams with their broad flat valleys. All streams are swollen and difficult to ford during the rainy season. Operations in this area differ greatly from those in the Delta and coastal plains because of the differences in terrain, weather and population. (See relief map of Vietnam, Figure 63).

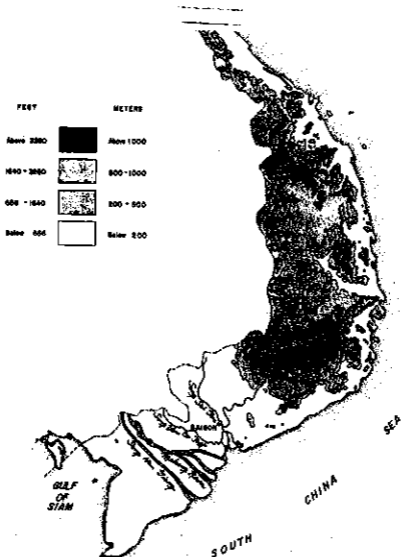


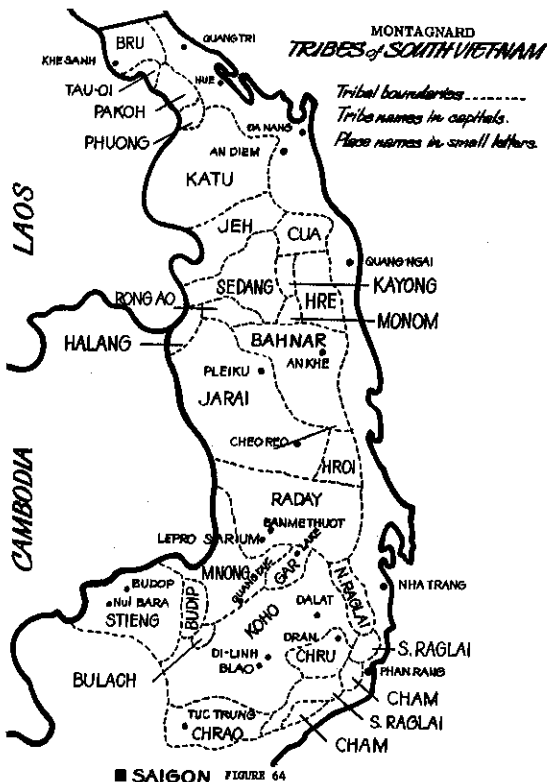
Figure 63. Relief Map of Vietnam

38. Characteristics of the Area

a. People: The hills and mountains are inhabited by Montagnards who are very primitive and, in many cases, aborigines (Figure 64). "Montagnard" is a French word meaning "Mountaineer". Generally speaking, these people are taller than the lowlanders and have a heavier muscle and bone structure, a darker complexion and more prominent mongoloid features. Clothing varies from tribe to tribe. Usually the women wear long skirts of dark material and may wear a short jacket or are bare breasted; the men wear loin cloths. They live in stilt houses. Their loyalty is given first to the family, and second to the tribe. Village life is completely communal. Word of mouth is their only means of communication as their literacy rate is extremely low.

b. Terrain: Steep slopes, sharp crests and narrow valleys characterize the mountainous areas. Numerous razorback ridges run in all directions and it virtually is impossible to follow them in any one direction for more than a few hundred yards. The forested areas of the foot hills up to 3000 feet have an unbroken continuity of tall trees that form a dense, closed canopy over the ground. The undergrowth is very thick comprising an almost impenetrable mass of smaller trees less than 10 feet high, intermingled with thorny shrubs and vines. Most streams are bordered by high, steep rocky banks and swift rapids and shallows are common. Forging is possible in many places except during the flash floods which occur during the rainy season.

c. Weather: In the highlands the southwest monsoon season lasts from May to October. During this period low clouds and ground fog limit observation and seriously restrict aerial activity. Cloud ceilings are less than 3000 feet about 80% of the time. Average monthly rainfall is approximately 13 inches. The average high temperature is 88 degrees with an average low of 55 degrees.



d. Movement.

(1) The steep terrain and dense jungles reduce foot mobility. Rate of march is usually from one half to two kilometers per hour with frequent rest stops. Experience shows that there is a tendency to overestimate the rate of advance of columns. The amount of rations and equipment carried by the individual soldier must be considered carefully to prolong his effectiveness.

(2) Wheeled and tracked vehicles will be restricted to the existing roads and trails. Bridges in this region are not capable of supporting heavy loads.

(3) The limited number of suitable landing zones requires careful and detailed reconnaissance in order to conduct heliborne operations. Open areas are sometimes covered with stakes and tree stumps, which may prohibit helicopter landings. The high altitude and small landing zones result in a reduction of helicopter lift capability.

e. Intelligence: Accurate, detailed and timely information about the VC/NVA is difficult to obtain because of the sparse population, lack of communication facilities, terrain and distances involved. Information from local inhabitants frequently is unreliable and misleading because the natives do not determine time or dates accurately and lack familiarity in dealing with numbers. Small, lightly equipped reconnaissance teams capable of staying in the area for long periods of time are particularly effective. Such teams can observe enemy activity and relay information to overflying aircraft on a pre-arranged schedule.

39. Planning Considerations

a. Combat Support.

(1) Artillery: Limited road nets or complete absence of roads restrict movement of artillery. Suitable positions are difficult to find, and sometimes clear-

ing and leveling is necessary prior to positioning artillery pieces by helicopter.

(2) Air Support: Dense jungle, low clouds and ground fog restrict air support. The locations of friendly forward elements frequently are difficult to determine from the air, limiting the delivery of close supporting fires. Units should plan the use of pyrotechnics, panels and other devices to mark their forward positions.

(3) Helicopter Support: Landing zones are limited in size and number. Units should carry machetes and demolitions for clearing or improving LZs and chain saws should be kept ready for delivery by ropes lowered from a helicopter.

(4) Communications: Units should carry antenna RC 292 (minus the wooden mast sections) ready for rapid emplacement in a tree.

SECTION XII. OPERATIONS IN SWAMPY AND INUNDATED AREAS

40. General

Operations in swampy and inundated areas in Vietnam generally are associated with the Mekong Delta -- that region of Vietnam which lies south and west of the city of Saigon which is laced with rivers, streams and canals. However, some of these same conditions exist along the northern coastal plain in small delta areas. Rice paddies comprise most of the Delta. Two other types of areas within the Delta, the Plain of Reeds and the Mangrove Swamps, are treated separately below.

41. Characteristics of the Delta Area

a. Rice Paddy Areas.

(1) Area traits. The rice paddy land of the Delta is the most heavily populated rural area in RVN;

dwellings are found along nearly every waterway. Streams, canals and rivers interlace this area; trees and other vegetation along the waterways sometimes extend 300 meters on each side. The land between the waterways is covered by rice paddies and during the rainy season these paddies are covered with water to a depth of one foot or more. In the dry season these same rice paddies dry up.

(2) Movement capabilities.

(a) Routes. There is an extensive network of rivers and canals useable throughout the year, and generally capable of supporting craft as large as landing craft, mechanized (LCM). Large river craft are confined to the major canals and rivers. Overhead bridge clearance and depth of water at high and low tide must be considered in planning the use of river boats. Assault boats can operate freely on minor canals only during high tide. Native sampans operate at all times.

(b) Cross-country. Troops can maneuver in the paddies on foot the year-round. Foot movement during the dry season averages three to four kilometers per hour during the day and one and one-half kilometers per hour at night. During the wet season foot movement may be slowed by difficulties in crossing canals; a combination of deep water and steep muddy banks may result in insufficient traction. Consideration of the tide is necessary, even far inland, as high tide favors boat movement, while low tide favors wading across canals. Several large-scale operations have failed or have been aborted because the effects of the tide were not considered.

(c) Helicopters. Most rice paddies in both the wet and dry season are potential landing or loading zones.

(d) Airborne. Airborne forces can be employed year-round with few limitations on the size of the force dropped. During the wet season the water depth of the rice paddies should be considered when selecting drop

zones. If the situation requires it, drop zones can be selected successfully immediately prior to the drop.

(e) Dogs. Dogs may be used with good effect during the dry season particularly during searches and night operations.

(3) Viet Cong practices.

(a) VC greatly enhance their mobility through the use of sampans.

(b) Because of the danger of being boxed in between tree lines during daylight, the Viet Cong prefer to withdraw to successive fortified positions when friendly forces attack. When necessary they will fight from one of the many well constructed defensive positions they have built throughout the area.

(c) Barriers and mines are employed across canals and streams to protect Viet Cong positions.

(d) Mines and foot traps are used extensively throughout the area.

(e) The Viet Cong use guerrillas extensively as screening and diversionary forces. They customarily employ a rear guard to delay pursuing forces.

b. Plain of Reeds.

(1) Area traits. The sparse population is scattered throughout the small hamlets at canal or stream junctions and along the banks of these waterways. During the rainy season when the entire area is inundated, the people live in elevated houses or in sampans. Even during the dry season, the area is covered continuously with water varying from ankle to shoulder depth and blanketed by reeds and grass one half to four and a half meters high. There are trees scattered along the small number of canals and streams in the area. During the dry season many parts of

the area resemble the midwest prairies from the air. In the wet season it looks like a sea or large lake.

(2) Movement capabilities.

(a) Routes. Only two major canals and a single road cross the area. Inhabitants normally travel by boat and sampan, often directly across flooded fields.

(b) Cross-country. The average rate of travel cross-country by foot in the dry season is one-half kilometer per hour. During the rainy season foot travel is not possible at all in many places. The sampan provides the fastest and best means of travel. Swimmer support boats (SSB), wide shallow draft boats, can be used but normally must be poled cross-country because the reeds tangle in the propeller. (See paragraph 43, Small Boat Operations). Armored personnel carriers are most valuable in this area, although frequent stops are necessary to cut the reeds and grass from the tracks and drive sprockets. River assault craft are limited to larger streams and canals. They are sometimes used to carry troops to the general area of operations but can seldom be utilized to support an assault operation.

(c) Helicopters. Helicopter landing zones in the Plain of Reeds are limited. In the dry season canals, and river banks may be used for landings, but in the rainy season troops must be loaded and unloaded from hovering helicopters. Care must be taken not to offload troops in water reaching over their heads. Small boats can be lashed to the skids of helicopters and used to disembark troops.

(d) Airborne. Airborne troops can be employed effectively throughout most of the area depending upon the depth of the water and the season of the year.

(3) Fire Support. Moving artillery into position to support operations requires boat or helicopter transportation and usually compromises security. Heavy mortars and artillery which can be delivered by helicopter still possess the disadvantage of limited range for the usually large

area in which operations are conducted in the Plain of Reeds. Naval guns can support operations within range of the Mekong river. Tactical air support and armed helicopter support are most useful. Assault boats or sampans may be used to carry heavier crew served weapons and ammunition.

(4) Viet Cong practices.

(a) Mobile Viet Cong units live in and fight from small sampans during the rainy season.

(b) Viet Cong use the area for training bases, manufacturing sites, and rest areas, most of which are located near the Cambodian border.

(c) Foot troops escape and evade by going under water and breathing through reeds or by hiding in high grass.

(d) Viet Cong use barriers and mines to protect canals, streams and rivers leading to their "secret bases".

c. Mangrove Swamps.

(1) Area traits. Population is very sparse and is concentrated along the shore line or at river and stream junctions. Most houses are built on stilts because of the wide variation of the tides. Few people actually live in the swamps. Trees, vines, exposed roots and dense undergrowth are marks of the Mangrove Swamps. Swamp depths, depending on the tide, vary from one meter of mud to one meter of mud covered by two meters of water. Tides cause river currents to reverse direction as the tide changes.

(2) Movement capabilities.

(a) Routes. There are no roads in the Mangrove Swamps. Boats traveling into the area during high tide can be stranded at low tide and may have difficulty reaching shore. Sampans can enter the area from the sea only during high tide. Although these conditions hamper tactical troop landings, several successful landings have

been made. LCMs and LCVPs can get close to shore only by following river channels.

(b) Cross-country. Foot movement is very slow. The average rate of foot movement is one kilometer per hour, and may be only a few hundred meters per hour. Armored personnel carriers can operate in only a few parts of the Mangrove Swamps, generally around the edges. Sampans and SSBs are limited to the few streams and are likely to be stranded at low tide.

(c) Helicopters and airborne. Helicopter and airborne forces can be employed in mass only on the fringe areas of Mangrove Swamps.

(d) Dogs. Dogs are partially effective on stream banks. They also can be used in the swamps during low tide, but they tire easily. During high tide the dogs must be carried or placed in boats.

(3) Fire support. The planning considerations for the use of artillery, mortar and air support are similar to those necessary for operations in the Plain of Reeds. Naval gunfire can be used as the Mangrove Swamps in RVN are adjacent to the seacoast. Consideration should be given to the use of assault boats or sampans to carry heavier crew served weapons and ammunition.

(4) Viet Cong practices.

(a) Viet Cong dominate the Mangrove Swamps and occupy most of the villages.

(b) These areas (like the Plain of Reeds) contain many secret bases for training, manufacturing and storage of war material, hospitals and rest areas.

(c) Escape and evasion is normally to the sea by sampan or by dispersion into the swamps.

(d) Mines, foot traps and mantraps are used extensively throughout the area. Almost every path

and route into the swamps is mined and heavily trapped.

42. Planning Considerations

a. Throughout most of the Delta the terrain is such that small forces are employed to develop the situation, with mobile reserves for commitment as required.

b. Most operations are aimed at encircling a suspected Viet Cong force in a given general area. Often the lack of definite intelligence leads to the selection of terrain objectives rather than VC locations as control measures. All forces must be quick to follow the VC, to keep pressure on him if possible, in order to develop rapidly the situation and fix him in a killing zone. Secondary forces are assigned blocking positions on both sides of wooded canal lines leading into the suspected VC area. These forces must be strong enough to withstand a VC breakout attempt, particularly at night. Maneuver elements usually advance along wooded canal lines, which offer very limited frontages (generally limited to platoon size on each bank of the canal). For this reason, it often is difficult to bring large forces to bear on VC positions on both sides of the canals. The use of screening smoke laid by aircraft or artillery may permit flanking movements through the open rice fields.

43. Small Boat Operations

a. General.

In the Delta region, small boats can provide a high degree of mobility for a military force. They are used to perform military tasks in much the same manner as light trucks.

b. Description of small boats.

(1) Dong Nai Boats, also called Swimmer Support Boats (SSB). These are wide, shallow-draft styrofoam boats weighing 500 pounds. Their styrofoam construction makes them buoyant enough to prevent sinking even if swamped (Figure 65).

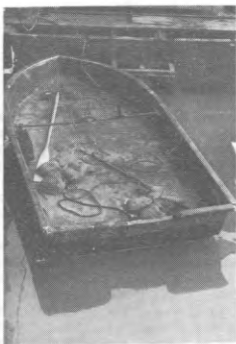


Figure 65 Swimmer Support Boat



Figure 66 Boston Whaler

(2) Boston Whaler. The Boston Whaler is an 18-foot boat with M-60 machine gun mounted in the bow. The boat is powered by a 40 H.P. outboard motor (Figure 66).

(3) Other boats used in Vietnam (Figures 67-72).

c. Planning Considerations. Boat operations are basically the same as other operations which use special means to increase the speed of movement. Backward planning should be used, and the general scheme of maneuver should not depend solely on the available water routes. Boats are intended to increase, not restrict the choice of routes. Small boats normally are not used as fighting vehicles. Troops usually debark and fight on foot; boat crews and security forces remain with the boats.



Figure 67 Landing Ship Infantry Large (LSIL)



Figure 68 LCM "Mike Boat"



Figure 69 Rag Boat STCAN/FOM



Figure 70 Commandant



Figure 71 Monitor



Figure 72 River Patrol Boat (PBR)

SECTION XIII. ARMOR/M-113 OPERATIONS

44. General

Initially it was believed that tanks and mechanized vehicles could not be used effectively in Vietnam. However, since the arrival of two Marine tank battalions in 1965 and the arrival of the first U.S. Army infantry mechanized battalion in late 1965, track vehicles have been employed successfully against the enemy. Consequently, the requirement for armored type vehicles has been increased to exploit the inherent characteristics of track vehicles (firepower, mobility and shock effect).

45. Innovations. Several noteworthy changes have been made in the concepts of employment of armored personnel carriers and tanks, as well as to the organization and equipment of Armor units.

a. M-113. The most striking innovation has been the use of the M-113 as a "fighting vehicle". In addition to being used to transport troops to a battle area, they are employed as light tanks using the fires of mounted weapons to destroy the enemy in close combat. Infantry ride on or in the carriers until contact with the enemy is made, then the infantry dismount. Carriers lead the assault, clearing paths through the underbrush as they go. Particularly dense foliage and mine infested terrain has made it more propitious, in many cases, for the infantry to remain mounted and assault the objective as the carriers detonate anti-personnel mines and booby traps. M-113 carriers employed as assault vehicles have been modified to add mounts for M-60 machine guns and a protective shield for the vehicle commander. A vehicle thus modified is referred to as an ACAV (Armored Cavalry Assault Vehicle). (See Figure 73). Sand bags are used extensively either on top of the vehicles or to line the floors. These reduce the effects of enemy weapons, especially anti-tank mines. The decision to add weight to the vehicle in the form of sand bags must be weighed against the possible decrease in cross-country mobility.



Figure 73 ACAV (M113 Modified)

b. Tanks. Techniques of tank employment used in Vietnam are not unusual, but during many operations the tanks may only support by fire due to trafficability limitations. Gunnery techniques are unchanged, but the majority of targets engaged are "soft" targets at very close ranges (100-500 meters). Ammunition basic loads have been adjusted to include more HE, cannister and WP rounds instead of armor defeating rounds. In some units, basic loads have contained up to two-thirds cannister. In many cases tanks have been modified to provide an external pedestal mount for the .50 caliber machine gun with some light protective shielding for the tank commander. (See Figure 74). This configuration is preferred to the cupola for use against ground targets.

c. Organization and Equipment.

(1) Armored cavalry units deployed to Vietnam have been reorganized to adept to local conditions. One basic change common to all cavalry units has been the replacement of authorized M-114 Command and Reconnaissance Vehicles by M-113 carriers. In many cases rifle squads and support squads have been converted to additional scout squads mounted in ACAVs. The armored cavalry regiment has substituted M-113s for the tanks within the armored cavalry troops.

(2) Tank and mechanized infantry battalions have made no significant changes in organization or equipment.

46. Capabilities. Armor capabilities significant to employment in Vietnam include:

- a. Heavy firepower.
- b. Off road mobility.
- c. Battlefield illumination.
- d. Lesser vulnerability to anti-personnel mines and booby traps.
- e. Lesser vulnerability to enemy ambush.



Figure 74 Tank(M48A3)

47. Limitations. Armor units operating in Vietnam are limited by:

- a. Vulnerability to enemy anti-tank mines.
- b. Numerous water obstacles, and limited capacity or narrow bridges.
- c. Reduced cross country mobility during the wet seasons.

48. Planning Considerations. Planning for armor operations in Vietnam should consider:

- a. Trafficability of the terrain.
- b. Enemy mine threat.
- c. Means of land navigation and control.
- d. Rules of engagement.
- e. Formations.
- f. Enemy ambush threat.
- g. Requirement for and availability of bridging.

49. Salient lessons learned from armor operations in Vietnam highlight the following tips:

- a. When crossing areas of marginal trafficability, maintain speed and avoid tracking and turning in the same area of the vehicles ahead of you unless in a known anti-tank mined area.
- b. Be prepared for extensive field expedient recovery and self-recovery. Obtain long cables, capstan kits etc. and train in their uses.
- c. Ammunition basic loads for tanks should be adjusted to include predominantly anti-personnel rounds.

d. Be alert for trafficability indicators. For example, a rice paddy in which water buffalo are moving is usually trafficable for M-113s.

SECTION XIV. DEFENSIVE CONSIDERATIONS

50. General

While continuous emphasis must be placed on offensive operations, establishment of sound defensive positions is essential. Planning and execution of the defense must be flexible and provide for rapid reaction to VC attacks.

51. Considerations

a. The best defense is offensive action; a series of outposts and ambush sites should be established in depth at dusk or shortly after dark. During daylight, saturation patrolling as well as outposts should be employed.

b. Defensive positions must provide all around protection with the capability for rapidly massing fires on any location around or within the perimeter. Always fire in defensive concentrations if possible. This is especially important in temporary perimeters.

c. For fixed and semi-fixed installations barbed wire barriers (concertina, single and double apron fence, tangle foot) should be constructed around the perimeter of the installation and around sensitive locations inside the perimeter. Although a good barrier plan is essential, the internal security cannot depend solely on the physical barriers placed around the installation.

d. Trenches should be dug in a zig-sag pattern between bunkers. Grenade sumps are required in trenches.

e. Bunkers, by the nature of their fixed positions, are most vulnerable to infiltration attack, or attack by

direct fire weapons. Bunkers must be located at least 50 meters behind the inner barrier wire to reduce the damage from VC emplaced Claymore mines and to prevent hand grenades from reaching them from positions outside the wire. All bunkers should have reinforced overhead cover capable of withstanding the effects of mortar fire. They should be camouflaged, if possible, to increase the problem of identifying them at night. Bunkers should, whenever possible, be mutually supporting.

f. Claymore mines, emplaced inside the barrier wire for command detonation, are most effective against personnel. Improvised flame devices, such as the electricaly detonated "fougasse", also are effective.

g. The M79 grenade launcher is effective in covering dead space in final protective fires close to the edge of the defensive perimeter. A clear field of fire must be obtained to avoid premature detonation caused by rounds striking branches or limbs.

h. A well coordinated illumination plan rightly controlled by the commander must be developed in order to prevent indiscriminate use of illumination. Improper illumination may reveal friendly forces and defensive positions to the VC.

i. Locate guard or reserve forces throughout the internal area to combat small unit infiltrations. A plan to utilize reserve forces to prevent or repel VC penetrations of the perimeter must be developed. This important fundamental lesson was learned the hard way by the valiant defenders at Camp Bu Dop in July 1965. The VC attacked with two battalions and succeeded in penetrating the northwest corner of the camp. From this position inside the compound the VC fired into the backs of the defenders and inflicted heavy casualties. This situation could have been prevented if a reserve force had been constituted and committed to repel the VC penetration.

j. Establish multiple means of communication with bunkers and internal security posts.

k. There must be a minimum of movement inside the perimeter after dark. If firing of weapons or explosions of grenades occur inside the perimeter (not from protective bunkers or firing pits) all personnel not in protective positions should "freeze" in a firing position. Anyone running or moving about should be considered enemy. Signals must be used to identify friendly counterattack forces. After firing ceases conduct a sweep inside the perimeter.

l. Disperse key personnel, weapons and equipment in order to avoid excessive losses.

m. The chain of command within all units must be defined to preclude confusion resulting from key personnel becoming casualties.

n. Emergency plans to restore communications, to provide medical aid and to insure uninterrupted defense of the area must be developed and rehearsed.

o. Search civilian workers upon their departure from the installation to prevent removal of arms, ammunition or other property. Areas where personnel were working must be swept to remove marker signs emplaced to locate bunkers, automatic weapons sites, or other sensitive fixtures for unfriendly forces outside the installation.

p. Establishment of hasty defensive perimeters during the conduct of other operations requires consideration of the following:

(1) Ambush patrols and early warning devices to cover avenues of approach into the perimeter. Emplace the ambushes while moving into the area.

(2) Stop before dark to set up camp for the night.

(3) Halt on the most defensible terrain available. During rest stops, insure that designated guards are alert and outposts are placed.

(4) Consider the technique of stopping 2-3 hours before last light, approximately 300-500 meters from your intended night base camp. Establish good local security, and then use this halt for chow, minor first aid, weapons maintenance or to accept a helicopter resupply. Send a patrol to recon your intended base. When this patrol locates suitable, defensible terrain for a base and reconns for defensive ambush and OP/LP sites, the patrol sends back guides to the main body, and also maintains surveillance of the base area. After dark, the main body is guided to the actual base, occupies assigned sectors of the perimeter by units, and digs in quietly. Ambushes and OP/LPs are established in accordance with previous daylight reconnaissance, to include an ambush on the route used by the unit to reach the actual base. For normal indirect fire support planning for the actual base area, plan concentrations for the first (temporary) base, and likely approaches into that area.

q. The VC will make every effort to remove all casualties, weapons and documents from the battlefield in order to prevent accurate assessment of their losses. Use long range automatic weapons fire combined with continuous illumination of the area to keep the VC from "policing" the battlefield as they withdraw. Casualties left behind by the VC are often booby trapped. Exercise extreme caution when searching or moving VC casualties.

r. Remove all trip flares and booby traps at first light.

s. Do not disclose automatic weapon positions by firing when the VC harass with sniper fire.

t. Increase security forces on nights of extremely limited visibility (no moon) and during periods of heavy rain. The VC often attacks at such times.

u. When occupying hasty perimeters in the same area for a given period of time, do not occupy the same position for more than two nights. Even a two hundred meter move is

sufficient to counter VC daylight reconnaissance. One system is to occupy a position on the first night, operate from it the following day, and displace to a new position at dusk of the second night. Complete reconnaissance of the second position is essential.

52. Sentry Dogs. Sentry dog units are employed to safeguard installations against unauthorized entry. Each dog is trained to use its keen sense of hearing and smell to alert its handler to the presence of humans and animals. On order from the handler, the sentry dogs will attack an intruder. Guard duty tours for sentry dogs should be about four hours long, covering a post of approximately 200 meters in length. Rotation between guard posts should be on a regular basis to prevent the dog from becoming overconfident and less alert in familiar surroundings.

SUMMARY

Early, detailed and continuous acquisition of intelligence information in all operations will facilitate the application of maximum combat power at precise times and places, utilizing fully the time and space advantages our greater mobility affords us. The success of military operations in the counterinsurgency environment of Vietnam depends upon the application of old and new tactics and techniques -- in bold and imaginative ways. These must be improved constantly to bring the enemy to combat repeatedly and inflict heavy losses upon him.

CHAPTER 5

COMBAT SUPPORT

INTRODUCTION

The mission of all US military aviation in RVN is to provide support for the counterinsurgency effort of the Republic of Vietnam. Tactical air support, armed helicopters, artillery and naval gunfire have proven extremely effective against the Viet Cong and North Vietnamese troops conducting guerrilla warfare in the Republic. As a consequence the enemy has learned to take full advantage of inadequacies in fire support planning and to exploit the limitations placed on fire support by bad weather and poor visibility. A number of effective techniques for the employment of combat support means are discussed below.

SECTION I. AIR SUPPORT

1. General

Air power in all its forms plays a vital role in the Vietnam war, and has been assigned a variety of tasks. Some of these tasks are adaptations of roles and missions which have been employed previously. For one, the frequent and deadly attacks by Strategic Air Command's B-52 bombers have made VC installations in former safe havens vulnerable and lucrative targets.

2. Tactical Air

a. Missions of Tactical Air. The primary role of tactical air in Vietnam is to provide close air support for ground forces and to strike enemy concentrations, encampments, fortifications, storage areas and routes of communication and supply. Other missions include aerial reconnaissance, assault airlift, interdiction, and counter air when required.

b. To accomplish the mission of tactical air numerous types of aircraft have been introduced into Vietnam (Figures 75-95).

c. Mobility and quick response are key elements of the tactical air concept. The ability to move quickly and forcefully is needed to keep the enemy from successfully mounting large scale attacks or finding safe havens for his activities. This is accomplished by a network of well-dispersed forces and bases coordinated by a tactical air control system designed to provide support for ground forces at a moments notice.

d. In Vietnam, tactical air power is relied on to accomplish a number of missions. Some of these are:

(1) Providing close support to ground troops against preplanned targets or targets of opportunity. The environment of SVN often restricts ground movement and requires that maximum tactical air power be responsive to destroy an elusive enemy.

(2) Finding and engaging the enemy beyond the range of ground penetration. This type of tactic is employed to reduce the enemy's capability to infiltrate or move supplies through areas otherwise inaccessible.

(3) Moving ground troops into battle wherever the enemy can be found. This mission is accomplished by tactical airlift to remote airfields where troops can be introduced into battle.

(4) Conducting air strikes against landing areas for future operations. Landing areas are limited in many parts of SVN and are often well-defended; thus the mission of saturating a proposed landing area for troops is an important one which is carried out by all types of tactical aircraft to supplement ground fire support or to replace it when the situation and range precludes use of ground fire support.

(5) Providing close air support to base camps, landing areas and defensive positions that the enemy attempts to overrun by human wave type attacks. This type of close support has become commonplace in SVN and has assisted greatly in the defense of such areas.



Figure 75 C-1 Observation Aircraft



Figure 76 B-57 "Canberra"



Figure 77 A1E "Skyraider"



Figure 78 F-8 "Crusader"



Figure 79 A-1H "Skyraider"



Figure 80 F-100 "Supersabre"



Figure 81 F-104 "Starfighter"