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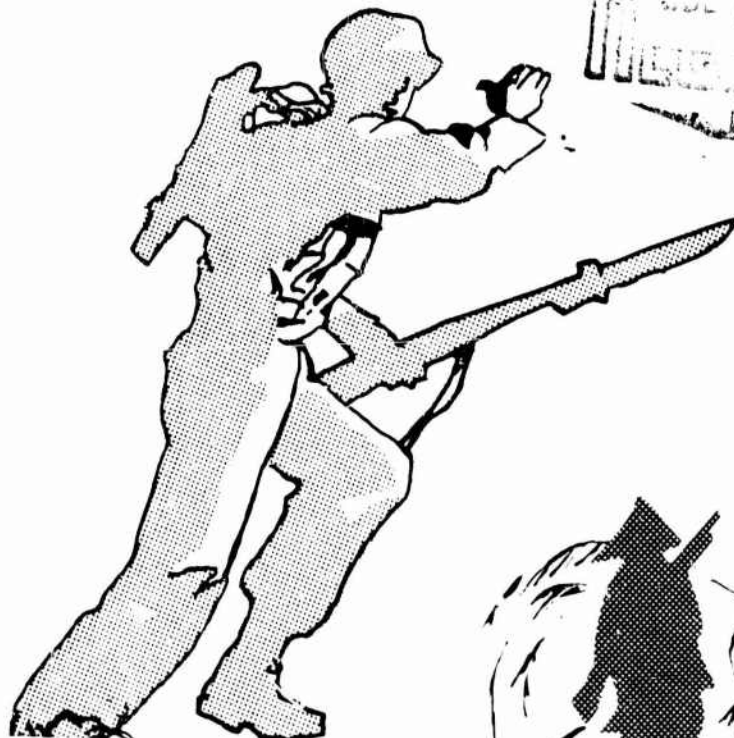
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OPERATIONS REPORT LESSONS LEARNED

REPORT 6-66

ADJUTANT



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**DEPARTMENT OF THE ARMY
OFFICE OF THE ADJUTANT GENERAL
WASHINGTON, D.C. 20310**

IN REPLY REFER TO

AGAM-P (M) (27 Jun 66) FOR OT RD

1 July 1966

SUBJECT: Operations Report - Lessons Learned 6-66, Lessons Learned
in Viet-Nam -- 1966

TO: SEE DISTRIBUTION

1. This is the seventh of a series of reports from combat operations being conducted by US Forces in Viet-Nam.

2. Information contained in this report is provided to insure appropriate benefits in the future from lessons learned during the current combat operations. The lessons cited in this report have not been evaluated by the Department of the Army and do not necessarily reflect official doctrine or approval.

3. This report cites the lessons learned by the 2d Brigade, 25th Infantry Division. Lessons learned were derived from battalion size and smaller scale operations of units in that command. It is important that this report be placed in the hands of those officers and enlisted men that train our individual replacements and units for RVN. These lessons learned can result in increased combat effectiveness of our units. Material contained in this report may be adopted for use in developing unclassified training material.

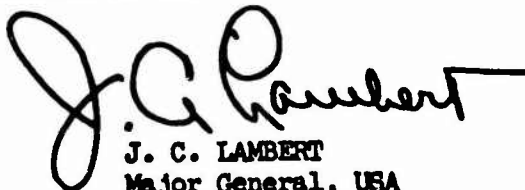
4. Additional Operations Reports - Lessons Learned will be provided as source material becomes available. Previously published reports of this series were:

- a. Summary of Lessons Learned, Viet-Nam, 2 Nov 65, UNCLASSIFIED.
- b. Operations Report - Lessons Learned, Report 1-66, Operation CRIMP, 22 Mar 66, marked FOR OFFICIAL USE ONLY.
- c. Operations Report - Lessons Learned, Report 2-66, The Battle of Annihilation and the BONG SON Campaign, 1 Apr 66, CLASSIFIED.
- d. Operations Report - Lessons Learned, Report 3-66, The PLEIKU Campaign, 10 May 66, UNCLASSIFIED (Limited distribution).
- e. Operations Report - Lessons Learned, Report 4-66, Evasion and Escape RVN, 24 May 66, CLASSIFIED.

f. Operations Report - Lessons Learned, Report 5-66, Combat Service Support -- RVN, 10 Jun 66, UNCLASSIFIED.

5. Addressees other than US Army are provided copies of Operations Report - Lessons Learned in accordance with the provisions of DJSM-545-55, dated 2 May 66.

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DEPARTMENT OF THE ARMY
HEADQUARTERS 2D BRIGADE TASK FORCE 25TH INFANTRY DIVISION

ENEMY TECHNIQUES

THE VC AS AN ENEMY

Engagements with the Viet Cong forces indicate that they are fairly well trained, organized and adequately equipped for their mission. Marksmanship has generally been excellent. Viet Cong probing and harassing actions against friendly CP's and perimeter security forces have been conducted between sunset and 2400 hours or from 0500 hours until BMNT. Contact with the Viet Cong at other hours has been a result of US initiated action or from isolated snipers as a rule.

The enemy's general tactic is the ambush, employing mortars, machine guns and rifle grenades. If cornered the Viet Cong will fight but more often they will disperse into small groups and melt into the jungle or countryside to fight another day.

LOCATION OF VC FORCES.

When conducting sweeps, ambushes or saturation patrol operations, particular attention must be paid to trails, draws, bases of hills and streams. During darkness the Viet Cong travel trails almost exclusively and are normally thoroughly familiar with all the trails. Viet Cong camps are generally close to major trail networks and water. Constant pressure can be applied to the guerrilla by hitting his camp sites and keeping him off guard.

VC FIRING POSITIONS.

Viet Cong firing positions are often characterized by outstanding camouflage; good cover to include small caves in foxholes as protection against overhead fire; small firing ports; ideal site selection such as strategically located trees for snipers or low grazing fires. Often the Viet Cong dig right into the middle of bamboo clusters or into the backs of giant ant hills. These likely areas should be the targets for reconnaissance by fire. Spider holes along rice field dikes are often used by the VC when it is to his advantage. Stream banks in contested areas are lined with trenches and fighting holes and provide a concealed escape route for harassing and delaying forces.

ORIENTATION OF VC DEFENSES.

The Viet Cong make good use of terrain and orient their trench works and defenses parallel to friendly defensive position and most probable avenue of approach into the area. For example, in Operation PADDY BRIDGE, a recently conducted search and destroy operation, friendly forces were required to attack VC fortifications frontally as foot movement in any other direction would have exposed our units in open terrain for an excessive distance. Such maneuvers must closely follow the air and artillery preparations. In planning operations units must take full advantage of US superior mobility in the form of armored personnel carriers or helicopters to attack Viet Cong defenses in least heavily defended direction. Extensive trench system and fighting holes line the majority of the stream banks, usually well concealed under trees and bushes.

VC FIRES.

This Brigade has found that when the Viet Cong open fire, it is generally from at least two directions and often from three. Fires are continued until engaged by fire or a friendly element is maneuvered toward the direction of fire. Immediate reaction against these harassing VC fires has resulted in suppressing the enemy fires and minimized friendly casualties. It is felt that the Viet Cong are quick to detect US weaknesses such as "bunching up" and the over-extension of a position, then react with grenades or mortars. During Medevac of casualties in an unsecure area the Viet Cong has attempted to maintain contact by all available forces. In addition mortars and rifle grenades have been fired into the evacuation area. Action must be taken by friendly forces to secure the LZ from enemy ground fire prior to the landing of Medevac helicopters.

VC SNIPERS.

The Viet Cong are very skillful in sniping from well camouflaged tree and ground positions. They normally get off a quick series of well aimed shots and then either cease fire or move to a new location. Experience has shown that the Viet Cong frequently employ snipers in three man teams, using mutually supporting positions in a triangular configuration with about 50 meters on a side.

VC TRAIL WATCHERS.

The enemy trail watchers fire single shots to signal the direction of movement of a friendly unit.

VC DECEPTION TECHNIQUES.

The VC take advantage of the kill emphasis, employing deception techniques such as deliberate exposure at far distances, prolonged sniper fire from a position, or open smoke fire to bait patrols into ambushes, crossfires and booby trapped areas, or to steer them away from established base camps or other guerrilla facilities.

ENEMY JAMMING OF RADIOS

The enemy normally exercises his jamming capability during critical phases of an operation such as air strikes, preparations or medical evacuations. Units must be alert to switch to the alternate frequency without order.

VC COUNTER-MORTAR TECHNIQUES.

The Viet Cong often fire their mortars at friendly positions when these units are firing their indirect weapons. This makes counter-mortar radar detection difficult and causes confusion, sometimes leading to a cease fire by friendly elements in order to investigate the possibility of short rounds having been fired by friendly weapons. This practice should be carefully explained to all personnel so as to maintain confidence in our indirect weapons. It also underlines the importance of shell reporting.

VC MORTAR REGISTRATION.

The Viet Cong appear to be using high airbursts to register their mortars. They are capable of placing well-aimed indirect fire anywhere in sector without apparent pre-registration.

VC USE OF MINES AND BOOBY TRAPS.

All personnel should be thoroughly briefed on Viet Cong mines and booby traps, including means of detection and methods of destruction. Extreme caution should be exercised when moving near hedges and trees. Almost all Viet Cong houses are surrounded by hedgerows on all four sides. Knowing the US soldiers will try to avoid the open clearing and move through a concealed route, booby traps are normally placed at the corners of these hedgerows. Booby traps are often placed up in trees with the ground area beneath also booby trapped. They also booby trap foxholes and shell craters while withdrawing so a second tenant runs the risk of being a dead tenant.

VC MARKINGS ON BOOBY TRAPS.

Red markings on Viet Cong grenades, mines, etc. indicate that the ordnance is booby trapped. Normally they use an instant fuze which prevents one from getting far enough away before it explodes; therefore, such ordnance should be destroyed in place.

VC COMMAND DETONATED MINES

Command detonated mines are selectively employed against lucrative targets by the Viet Cong. In one instance several individuals passed a given site without incident but when the company command group reached that location, a command detonated mine was exploded at the exact moment that it would inflict maximum casualties.

VC MINE TACTICS.

The Viet Cong place antitank mines along roads and trails capable of handling wheeled traffic. They also place antipersonnel mines on defensible terrain nearby so that infantrymen taking to the high ground to protect a disabled vehicle are subjected to destructive devices.

VC TUNNELS AND FORTIFICATIONS.

The types of fortifications found were extensive trench systems, spider holes, reinforced bunkers, and numerous tunnel complexes. In fact, the Brigade destroyed over 400 tunnels during its first month of operations. VC underground tunnels have fallen into two general categories, classified for reference purposes as short and long tunnels. The short tunnels are 90 feet or less, containing two or more firing holes and air holes with 2 or 3 routes of entry. These tunnels are mainly used by snipers as firing positions and in most cases have one or more right angle cuts away from the original position, enabling the occupant to fire from a concealed position or escape if detection is probable. The long tunnels, 90 feet or longer, used as a covered route enabling a person or unit to come and go without being detected, may have secondary tunnels leading to caches, hospitals, classrooms, etc. The long tunnel normally has many concealed air holes leading to ground level. The tunnel when used as a covered route normally begins in Cong territory with hidden entrances or exits located throughout its length. Supplementary tunnels have been found to run at right angles to the initial direction at the entrance point. Tunnel entrances were often extremely difficult to locate unless artillery had ruptured the covers or a soldier stumbled over the protruding wire loop handles. The type of vegetation found in the area immediately around the tunnel entrances confirmed that many of the tunnel complexes were completed many years ago. Unless these tunnel complexes are located and destroyed as a unit moves forward the Viet Cong is capable of employing forces at any time in multiple locations to the flanks and rear of friendly elements with relative ease. Thorough search of these tunnels by the unit's trained tunnel teams prior to destruction is the only security for locating and destroying all entrances. Experience has proven that valuable documents and other miscellaneous papers are often stored in the tunnels. The tunnels were seldom booby trapped.

INFANTRY OPERATIONS

LEADERSHIP.

The importance of good leadership at the squad and platoon level cannot be overemphasized. Priority of work in the defense must be digging in and cutting fields of fire. Alert outposts are mandatory. Force and professionalism of non-commissioned officers become vital factors when troops are tired and weary. Leaders must remain calm and firm, especially during critical periods.

USE OF COVER AND DISPERSION.

VC will take advantage of US troops when stopped, by using accurate sniper fire, unless security forces are increased and are very alert. If units must stop, personnel must use cover and stay dispersed. Open areas such as rice paddies or open fields should be avoided when moving if possible. When units must cross these open areas it is mandatory that maximum dispersion be employed. Don't forget your base of fire.

OCCUPATION OF NIGHT POSITIONS.

Never occupy the same positions during the hours of darkness that are occupied during daylight hours. Night positions should be selected during daylight hours and occupied under cover of darkness; never occupy the exact same sites two nights consecutively. Good ambush patrols with Claymore mines in front of defensive positions are mandatory.

USE OF THE BUDDY SYSTEM.

Many friendly casualties have been caused by punji stakes, snipers firing from trees, spider holes, or by lead elements tripping booby traps. The use of two-man teams operating on the "buddy system" greatly reduced the occurrence of such incidents. One man should watch primarily for punji stakes, booby traps and snipers firing from holes nearby while his buddy searches the trees and the area further to the front for snipers. This same "buddy system" should apply on defense. Always have two men in each position, especially during hours of darkness.

REACTION TO SNIPERS.

Immediate reaction to sniper fire must be characterized by violence - a rapid return of a heavy volume of fire and fast movement. Fire control seems to work best with about one-third of the fire directed into trees and two-thirds on the ground. The M-79 is excellent for use against likely targets in trees. In dense tree growths, grenadiers must realize that rounds do not arm if they hit branches immediately after being fired.

EFFECT OF CASUALTIES.

The American soldier has a tendency of immediately going to the aid of a wounded soldier. VC snipers have capitalized on this and purposely wound a man to kill two or three others going to his aid. The immediate response should be that of laying down a heavy base of fire, both grazing and tree spray, in the direction of the sniper and pushing forward to establish a secure area for the wounded man. Personnel cannot stop fighting to aid the wounded. Aidmen must come forward to police the battle field.

USE OF ANTI-SNIPER TEAMS

In operations which involved clearing and destruction of Viet Cong facilities (tunnels, foxholes, "hooches"), roving "squirrel hunters" and screening forces on the outside of established perimeter kept the Viet Cong off balance and precluded possible sniper action against forces who were relatively stationary in the perimeter, conducting clearing operations.

USE OF APC'S.

Armored personnel carriers have been used as ambulances and resupply vehicles with much success. These track vehicles have provided protection for wounded while expeditiously returning them to medical treatment. The supply track was able to rapidly carry bulk items such as diesel and demolitions to the operational area.

MARKING OF TUNNELS AND BOOBY TRAPS

Personnel of attacking companies should mark tunnels, booby traps, etc. with toilet paper or some readily available item to assist the following company responsible for destruction in locating such.

USE OF TUNNEL TEAMS

Tunnel teams trained by the 1st Inf Div Cml Off have increased the effectiveness of unit operations. Once trained, organic personnel have systematically searched the base camp area for suspected Viet Cong tunnels and explored and destroyed those located. Numerous documents, weapons caches, and other items have been discovered by these teams. A minimum of three (3) men are required per team. One above ground and two men inside the tunnel equipped with pistol, flashlight, telephone and wire, plus compass and bayonet.

USE OF APC TO CLEAR PATHS THROUGH MINES OR BOOBY TRAP AREAS

Troops should take advantage of walking in APC or vehicle tracks or in others' footsteps in locations where mines are being used.

RECOVERY OF WEAPONS

Recovery of weapons belonging to the wounded or killed is a problem requiring careful attention. Some are so engrossed with getting the wounded man to safety that the man's weapon is left on the battlefield. When weapons are loaded on medical evacuation helicopters, it sometimes becomes very difficult to regain them.

USE OF FLARES

Units must not use flares too close to their positions, thus exposing their own positions more than the enemy's. Flares must be well to the front.

USE OF CLAYMORES

Claymores can be used effectively in the offense in thick jungle, in an H&I role or to protect the perimeter in the defense, and in breaking contact during the withdrawal or extraction phase of an operation. On ambushes there is a tendency to detonate Claymores prematurely before the enemy has entered the maximum killing zone. Commanders must insure that using troops understand the maximum effective range of the Claymore.

USE OF M132 MECHANIZED FLAME THROWER

Mechanized flame throwers, M132, have been used successfully in clearing operations and against suspected Viet Cong positions. Their principal disadvantage is the high fuel consumption rate and the time needed to return to a safe area where they can be refueled.

REPORTING

Continued stress must be made on accurate and timely reporting. An evaluation must be made by each headquarters prior to forwarding reports in order to determine if the who, what, where, and when are included in the reports.

NECESSITY OF ALERTNESS

Leaders must be especially watchful to insure alertness of troops returning to friendly lines after an operation. Troops tend to bunch up as they approach friendly lines, thereby affording the VC an excellent target for mortar or rifle grenade fire.

USE OF THE M-72 LAW

The LAW is an effective anti-sniper weapon if used on tree lines. It is also effective for clearing buildings prior to entering.

EQUIPMENT TO BE CARRIED

- a. Squad leaders should carry extra insect repellent for their squad, foot powder, water purification tablets, one or two razors.
- b. Medics should carry malaria pills, extra bandages, extra tags to tag personal gear and/or weapons of KIA, WIA.
- c. Squad bags to include trousers, shorts, and socks for each man should be prepared for each operation in event required to be air-lifted.
- d. Every NCO must carry at least one colored smoke grenade, radio operators should carry two. These must be resupplied daily.

e. Illumination grenades should be carried to mark helipads at night.

f. Engineers must carry a maximum load of demolitions and power saws.

g. Grappling hooks should be fabricated in each company for use in extracting caches and exploding booby traps.

COMMAND GROUPS

Command groups are readily identifiable by their collection of antennas. While there are a number of methods to camouflage these radios, the paramount requirement is to keep the number in the command group to a minimum and well dispersed. Command groups are primary targets for observed indirect fire and command detonated mines. FO teams should keep adequate distance from the commanders but should be close enough to provide immediate response. Newsmen, photographers, etc., accompanying the unit should not attach themselves to the command group and complicate the problem.

USE OF SMOKE TO MARK LOCATIONS

Whenever a unit is marking a location with smoke, they should require the homing element (FAC, Airborne Observer, Medical Evac, etc.) to identify the color of smoke. The Viet Cong will throw smoke to confuse the issue or lure an evacuation helicopter in ambush.

ACCOUNTING FOR PERSONNEL

A fire team does not move if a man is missing, a squad doesn't move if a fire team is missing, a platoon doesn't move if a squad is missing, a company doesn't move if a platoon is missing. Make leaders absolutely responsible for the accountability of all personnel at all times.

HABITING FOR THE NIGHT

When stopping at night, search out a minimum of 400 meters to the front to insure that the enemy is not observing the preparation of your defensive positions.

AMBUSH PATROLS

Patrols can and should use on-call marking rounds at predetermined points along their route to assist them. Ambush patrols should plot their ambush site as a concentration and fire upon it after returning to their lines.

AIRCRAFT FOR ANTI-AMBUSH PURPOSES

Maximum use of air observation by fixed and rotary wing aircraft

should be made in conjunction with troop movements. These aircraft should carry trained forward observers who are capable of the dual role of detecting and marking possible ambush sites and of adjusting artillery fire on any resulting targets. Aerial observation should be retained for the entire movement. There are examples of successful Viet Cong ambushes occurring after the friendly commander had felt that his mission was accomplished and he had no further need for his aerial eyes. Armed rotary wing aircraft should be on station until all vehicles have completed the move.

BATTLEFIELD POLICE

Nothing that can be of value ~~of~~ the enemy should be left behind. Even a burned-out radio battery still has enough juice to detonate an explosive charge if properly set in series. The Viet Cong will police up everything, including spent casings to use against us.

ARTILLERY OPERATIONS

BRIEFING OF CANNONEERS

The men must be kept aware of the situation at all times. They must be well briefed on the general, special and current situations. Response has been much better when this is done. Cannoneers have been informed as to the nature of the target and the results of every mission.

IMPORTANCE OF FORWARD OBSERVERS PROVIDING INFORMATION.

Forward observers must send all available information to the FDC. General terms such as "VC in open" must be forgotten. Specifics, such as number (size) of enemy force, nature of activity, distance, are a must for the FDC.

FIRE CONTROL TECHNIQUES

No fire lines and fire coordination lines must be on firing charts and must be current. The artillery commander should be the only approving authority for fire coordination lines between battalions and may establish them regardless of maneuver boundaries.

REPORTING OF RESULTS

Surveillance will often be negative. In order to determine full value of artillery fires, report not only confirmed results (which often will be few) but possible or probable results.

FIRE ADJUSTMENT

For close-in firing the first round in adjustment or an initial round in FFE missions, must be white phosphorus (WP). This will insure

that the fire is safe and will greatly reduce possible casualties if the maneuver element is disoriented. Be sure to apply corrections to the HE round when switching from WP. Forward observers must be prepared to adjust by sound as well as sight. During daylight hours combined adjustments, with the air OP bringing fire close to the ground observer for final adjustment, has been invaluable. "Creeping" has not been a dirty word here. For close-in fires it has been a must, due to map inaccuracies and difficulties in locating oneself. Drops of less than 50 meters are sometimes necessary.

FIRING ILLUMINATION

Illumination is frequently fired without firing tables. At close range, experimentation with charge 1 at least 800 mils, will give good illumination close in.

SKIP POST AIR STRIKE ANALYSIS

Pre-planning should include arrangements to cancel the FAC's normal post-strike analysis after an airstrike: when artillery of mortar preparation is to immediately follow.

INDEPENDENT BATTERY MISSIONS

When a battery operates on an independent mission there must be close coordination with the infantry battalion LNO; both must know the situation thoroughly.

COORDINATION

Plan all operations thoroughly. Coordination, fire plans, etc. cannot be hurried. Do not allow yourself to be rushed by an "I want it in two hours" order. Firm SOP's in communications, coordination and delivery of fire have been invaluable.

CONTROL OF FIRE SUPPORT

The coordination of fixed wing and rotary wing aircraft in an area with artillery and mortar fire on a 360 degree basis has proven to be a major problem. Too often, all mortar and artillery fire is stopped for long periods during air strikes or casualty pickups by "DUST OFF." Whenever possible, specified flight corridors should be established so as to minimize the time that indirect fire weapons must cease fire. Co-location of the USAF A1 LNO, the Artillery LNO, and the Army Aviation air-ground control net at the same table in the Brigade TOC has facilitated this coordination.

CHECK OF RANGE AND DEFLECTION

All indirect fire weapons, including 81mm mortars, must have an independent check on both range and deflection.

FIRE CLEARANCE

Normally battalion LNO's are contacted by wire for clearance to fire the missions called in by his forward observers. It has proved advantageous at times to expedite firing by having the LNO to continuously monitor his fire direction net and to advise the fire direction center (FDC) as to "clear to fire" or "not clear to fire", immediately after the FDC has read back the fire mission to the FO.

COUNTER-MORTAR RADAR

Counter-mortar radar is very effective but limited equipment permits coverage of only a small sector of the brigade perimeter at any one time. Shellreps/mortreps are essential and reporting upon receipt of the first incoming round is of extreme importance. Thorough training in reporting is mandatory prior to arrival in-country. Shell identification manuals have been impossible to find in Vietnam.

EXTRA FIRE CONTROL EQUIPMENT

Extra fire control equipment such as aiming posts, bulbs and aiming post lights should be carried. Toggle switches for remote control of aiming post lights are very helpful.

PLASTIC FIRING CHARTS

Plastic target grids and firing charts shrink and expand under the temperature and humidity conditions found in Vietnam, thus affecting their accuracy. Grid sheets should be kept covered when not in use.

FIRING CHARTS

6400 mil chart. Secure 25,000 charts since smaller charts taped together produce some inaccuracy. Bring cloth to cover the chart when not in use. Terry cloth or towels are ideal to cover the chart because when they are pulled back for a fire mission, the chart operators rest their sweaty arms on the towels thus protecting the chart. Do not try to move the deflection indexes with each new adjusted deflection. Normally registration is with all 7 charges and is done too frequently to move all deflection indexes. The deflection correction is applied from the stick by the computer on FFE missions.

MAP SCALES

The use of maps, scale 1:50,000 for posting the situation, friendly front lines, patrols etc. is unacceptable as it is not sufficiently accurate to post these with grease pencil and adequately control artillery fire. The most successful system is for each LNO to have a 1:25,000 overlay which is then posted in colored pencil on a plastic firing chart that can be used as an overlay to the actual firing chart.

AMMUNITION STATUS

Maintaining an accurate ammunition status chart for designating lots to use and for reporting to higher headquarters, is a difficult problem. Batteries must be trained to routinely report ammunition by type, lot number, amount and fused.

CLEANING TUBES

As a normal practice tubes should not be oiled. A good solution for cleaning has been washing the bone with hot soapy water and drying it thoroughly during lulls in firing. Rust is no problem if the drying is done well. Extra immersion heaters are beneficial for this purpose.

COMMUNICATIONS

IMPORTANCE OF RADIO OPERATORS

The importance of radio operators monitoring their nets at all times can not be emphasized enough. Instructions must be passed from the sender to the commander concerned and not the operator. On extended operations a radio operator's alertness can be sustained by commanders having an extra RTO in the command group who can carry the radio when the operator tires.

SELECTION OF COMMUNICATIONS PERSONNEL.

Dependable communications with the next higher echelon and all supporting weapons is an absolute necessity. Sharp, intelligent, resourceful men must be selected as radio operators.

USE OF WIRE IN ATTACK

In one operation which involved seizing and securing a limited objective with two companies forward and the third company following in a destruction role, wire was used with all companies both in the attack and extraction phases with tremendous success. This reduced radio traffic to a minimum and denied the enemy, who had demonstrated a monitoring and jamming capability, information or interference with the orders for the operation. The enemy completely jammed the Battalion Command Net prior to the on-call preparation being lifted, in an effort to delay the obvious order to execute the attack. Wire was used to issue these instructions and to order a switch to the alternate frequency.

JAMMING

The enemy exercises his jamming capability only during critical phases (i.e. air strikes, during artillery preparations, medical evacuations, etc.) Units must be alert to switch to the alternate frequency without waiting for orders.

TRANSMISSIONS ON RADIO

When reporting incoming fire over the radio, commanders should disguise the accuracy of this fire as the Viet Cong at times appear to be monitoring unit frequencies and adjusting their fire based on friendly commanders reports.

COMMUNICATIONS SECURITY

Correct radio procedures, use of code words, check points and encoded map coordinates (except for enemy information) will prevent the Viet Cong from knowledge of the operation.

AN/PRC-25

Helicopter radios do not communicate well with AN/PRC-25's. When possible airborne observers should use the PRC-25 or the ground receiving station should utilize a vehicle-mounted radio (Old Series). The PRC-25 is a tremendous improvement over the old series of radios. Its use has increased the man-portable communications capability of ground forces immeasurably. The use of the squelch on the PRC-25 results in poor communications with the old series of radios. Squelch should only be used at night or when on an ambush patrol.

CHANGING AN/PRC-25 BATTERIES

There is a tendency to forget about changing the batteries in the AN/PRC-25. The extreme heat and lack of refrigeration for dry cell batteries reduces their usefulness from a 30 day supply to ten or fifteen. Use old batteries first. AN/PRC-25 batteries often last longer than the 24 hour expectancy but new batteries should be put in radios just prior to an operation.

REMOTING RADIOS

It is not desirable to remote radios into the operations center as the batteries in the remotes do not last and even new batteries seem too weak to do the job. Some units extend the speaker & handset into the operations center, however, the lack of immediate control of the volume and squelch is undesirable. The best method is to mount the radios in the operation center to spare vehicle batteries charged by a 28-volt generator. The radios may be kept on "receive only" when not transmitting to cut down on the power drain. Bring extra cable and vehicle batteries to allow flexibility in setting up communications.

TRANSMISSIONS

Radio nets get strangled by inarticulate RTO's. Keep air open during helicopter assault. RTO's should listen to radio traffic and get a feel for what is going on before transmitting an administrative or non-essential type message.

PANELS AND SMOKE

Use on "Dust Offs" and marking lines for air support missions can result in a heavy demand for smoke grenades. Companies should carry one smoke grenade per man on operations, at least two panel sets, plus all the pyrotechnics listed in current SOI.

WIRE IN MECHANIZED BATTALION

Because of the requirement for a static defense of the base camp area, the amount of wire (WD-1/TT) organic to the mechanized battalion is not considered adequate in Vietnam. Mechanized and Infantry Battalions should be authorized the same amount of wire.

OH-23 AS A COMMAND AND CONTROL (C&C) SHIP

The OH-23 is not considered a good command and control ship. It has only one radio channel available and use of a PRC-25 as a supplement is not favorable since one cannot listen to the PRC-25 handset while wearing a flight helmet. Furthermore, it is difficult to understand anyone transmitting over the radio in the OH-23.

TELEPHONE POLES

Don't count on readily obtaining good bamboo lance poles for overhead wire. Many units are using long engineer stakes welded together to get the wire off the ground.

TELEPHONES

Telephones are at a premium due to needs for perimeter, base camp and operations. Get all EE8's you can, if you can find them, will be a great help.

GRC-46's

This unit's GRC-46's have not been modified to accept the KW-7 so we have only off-line crypto capability. Do all you can to have this modification completed prior to deployment. Desert filters for GRC-46's are needed in this area during the dry season.

GRC 3-8

If you still have the GRC 3-8 series radios, try to bring a URM 32 (signal generator) and URM 48 (frequency meter) for battalion level alignment of radios. This will reduce support level maintenance downtime immensely.

PACKING OF RADIOS

Obtain dessicant to pack with radios for overseas shipment. (This also applies for fire control equipment and boxed weapons).

FREQUENCIES

Due to the high density of troop units and the nature of the war, denying extensive use of wire, a large number of radio (FM) nets are employed. Units not converted to the new family of radios are experiencing difficulty in operations due to a sharing of radio frequencies with as many as four or five other units. The new family of radios with their extended frequency range are a valuable asset and reduce this problem to a satisfactory level.

WEAPONS

TAPING M-14 MAGAZINES TOGETHER

The practice of taping a second magazine to the magazine of the M-14 rifle (then turning the two over quickly and inserting the second for rapid loading) often results in the second magazine being stuck in the ground. This gets the magazine dirty and causes malfunctions so such practice should be discontinued.

MAINTENANCE OF WEAPONS

The high evening humidity in this area rusts weapons. Clear and reload all weapons each night and each morning to prevent rounds sticking in chambers. Leaders must conduct weapon inspections daily.

MACHINE GUN AMMUNITION

Keep a short belt of machine gun ammunition out and ready to fire - carry all other machine gun ammunition in cans to protect from corrosion and dirt.

CLAYMORE

Attempt to secure Claymore mines to objects and remove only after approaching them on flanks and visually inspecting.

HAND GRENADES

Grenades must be securely fastened to the harness to prevent loss. They also should be taped to prevent separation of grenade body and fuze.

NIGHT FIRING

Personnel should aim low at night to insure hitting any enemy that may be crawling in.

USE OF CLAYMORE MINES

Following points are stressed in use of Claymore mines:

- a. Avoid premature detonations prior to enemy entering the killing zone.
- b. Secure Claymore mines to fixed objects such as trees or stakes.
- c. Secure electrical wires to legs of the mine to prevent animals from tripping the wire and separating the fuse from the mine.
- d. Individuals physically receiving a Claymore should carry the hand generator in a pocket to avoid accidents. Recovery party should approach mine from the flanks making a careful visual inspection prior to movement of the Claymore.
- e. Employ Claymores so that they can be well-guarded and under constant observation by friendly troops.

MEDICAL

CASUALTIES TO MEDICAL AIDMEN

Operation planning should include to immediately replace company aidmen who become casualties as this happens more frequently in guerrilla warfare than in conventional warfare.

AERIAL MEDICAL EVACUATION

Aerial medical evacuation is responsible for saving more lives than any other evacuation means, however, there are multiple considerations in its use. The calling in of "Dust Off's" restrict tactical operations, by curtailing and sometimes completely stopping supporting indirect fires. The scheme of maneuver may have to be altered to secure LZ's for medical evacuation. These should normally be cleared areas to the rear of operational areas.

Dust off helicopters cannot take improvised stretchers if they are too long, so be prepared to shift wounded to the stretchers that are on the evacuation helicopter.

MEDICAL EVACUATION IN APC'S

The use of armored personnel carriers in a medical evacuation role in areas subject to sniper fire and booby traps proved highly satisfactory. The optimum number of APC's that should be made available to a battalion for medical evacuation is three. Medical evacuation is best handled utilizing attached APC's moving casualties from the front lines to field litter ambulance under battalion control to a forward Medical Evacuation Center where they are evacuated to the battalion aid station. Guides should be available at the forward Medical Evacuation Center to lead the APC to the company collection point. Personnel manning this point should mark the point with smoke on order.

EVACUATION OF DEAD

Preparations in the form of evacuation bags and a vehicle should be on hand in the vic of the Forward Medical Evacuation Center to evacuate KIA's as quickly as possible without utilizing field litter ambulances which may be needed for the wounded.

ASSISTING CASUALTIES

Over attention to assisting casualties can sometimes detract from a unit's aggressiveness, resulting in additional casualties from sniper fire which could be prevented by a heavy volume of friendly fire and aggressive maneuver to adequately clear the area where the initial casualties were taken.