

DEPARTMENT OF THE ARMY
HEADQUARTERS 1ST SQUADRON 4TH CAVALRY
APO San Francisco 96345

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AVDB-QHCO

26 December 1967

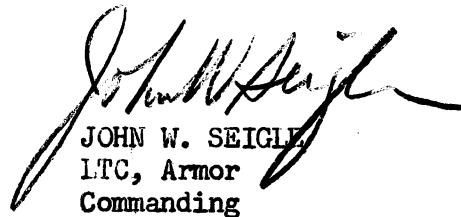
SUBJECT: Fundamentals of Armored Cavalry Tactics

TO: All Troopers
1st Squadron, 4th Cavalry
APO San Francisco 96345

1. Enclosed is the Fundamentals of Armored Cavalry Tactics as practiced by the 1st Squadron, 4th Cavalry in the Republic of Vietnam. These fundamentals are based on experiences during the last two years by many individuals who have served with the "Quarterhorse".

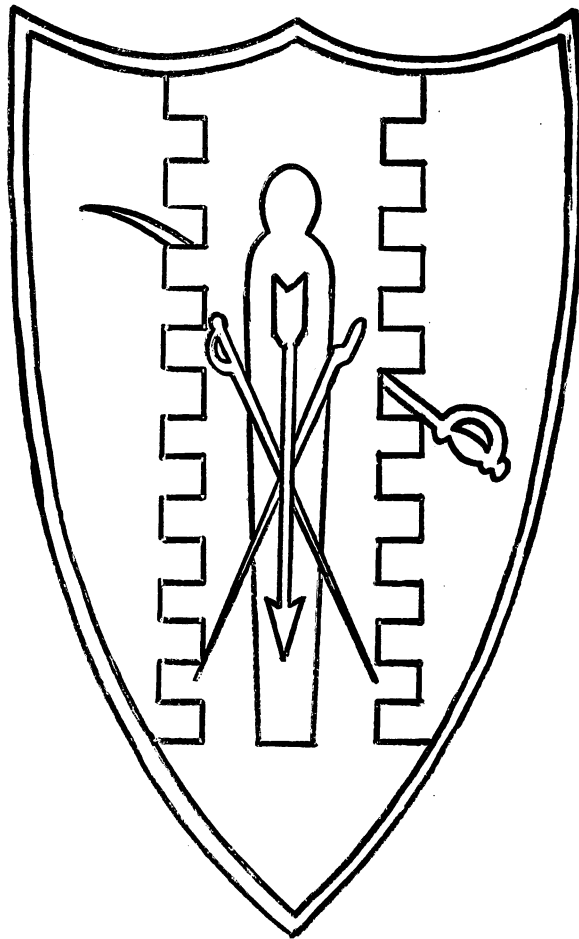
2. I urge each new trooper to read and to take to heart these lessons. More experienced troopers should refresh your memory and pass on your practical experience to the new troopers.

3. Recommendations for deletions, additions, or changes to these fundamentals are welcome. Formal suggestions are not required. Send a note, or call the Squadron S-3.


JOHN W. SEIGLE
LTC, Armor
Commanding

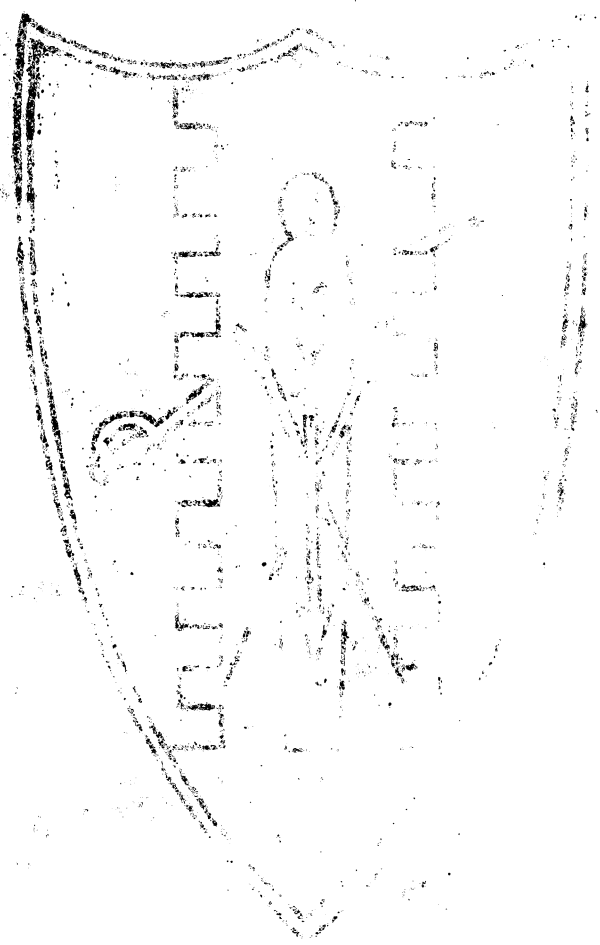
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FUNDAMENTALS
OF
ARMORED CAVALRY



AS PRACTICED BY
THE
1ST SQUADRON, 4TH CAVALRY

1st Cavalry Division
Signal Squadron



1st Cavalry Division
Signal Squadron

"The Fundamentals of Armored Cavalry"

1. The following constitutes the "Fundamentals of Armored Cavalry" which have evolved in the 1st Squadron, 4th Cavalry during the past two years. These fundamentals are general in nature and in no way are a substitute for common sense and imagination. They supplement, but do not replace the squadron field SOP. These fundamentals applied with common sense and imagination will minimize friendly and maximize enemy casualties.

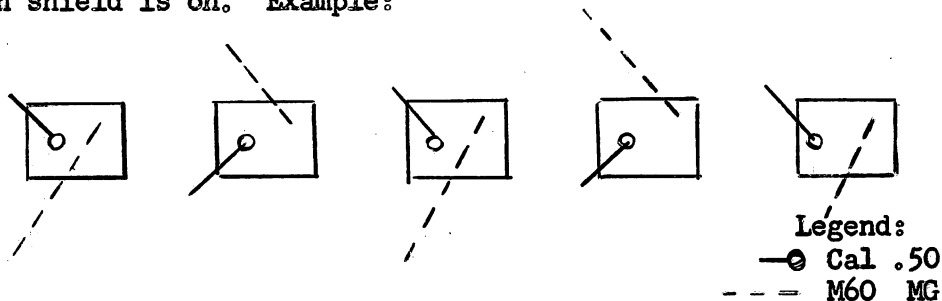
2. Every trooper operating in the field with this squadron is required to be thoroughly familiar with these principles and to have a copy of them readily available for reference.

3. Security: The trooper assigned to this unit must orient himself to be prepared to repel an enemy attack 24 hours a day for 365 days. There is no time for "daydreaming" or expressions of sympathy for physical discomfort and fatigue. Deviations from maximum security may cost you your life and the lives of your friends. Security is achieved in many ways. The discussion of "type" operations in succeeding paragraphs emphasizes techniques found useful in achieving security.

4. March Discipline: This unit, by nature of its equipment, conducts frequent road marches. The majority of the major battles fought by this squadron have occurred while conducting road marches. Road marches will be conducted with perfection!

a. Interval: Bunching up during a road march will increase friendly casualties and reduce our ability to maneuver. Excessive interval hampers our ability to mass our fire power rapidly and allows individual vehicles, rather than the entire column, to be engaged by the VC. Normal interval is 50 meters between combat vehicles; open interval is 100 meters between combat vehicles. Under no circumstances should a vehicle lose sight of the vehicles to his front and rear.

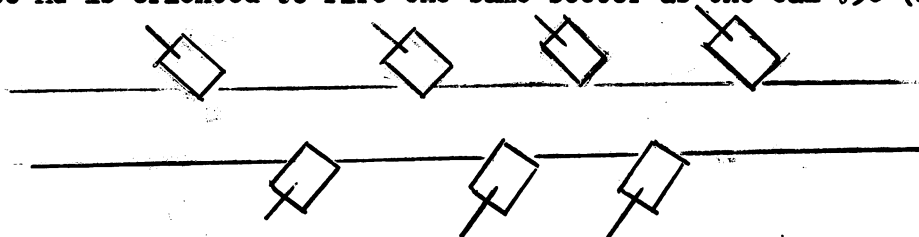
b. Weapons coverage: Weapons will be staggered by type to left and right of the road. If only one M60 MG is available on an ACAV it will cover the flank not covered by the cal .50 regardless of which side of the vehicle the M60 gun shield is on. Example:



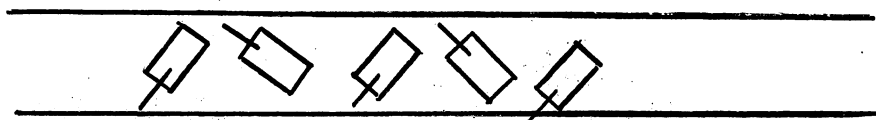
c. Observation: It is essential that every vehicle crew maintain continuous 360° observation. Drivers will observe to the vehicle's front and flanks: Track commanders will observe their left or right flank depending on the orientation of the cal .50 MG. The two scout observers observe to the left and right flanks respectively; ammunition handler observes

to the rear. If a vehicle does not have a 5 man crew, the track commander must assign sectors of observation, based on the terrain and situation, to achieve maximum possible security for his vehicle.

d. Herringbone: Every time a Quarterhorse column stops, regardless of the reason for the halt, the column will automatically herringbone. It is the responsibility of the track commander if he has only one M60 MG to insure that the M60 MG is oriented to fire the same sector as the cal .50 (see diagram).



NOTE: Extended herringbone to allow traffic to pass is illustrated. Closed herringbone, with vehicles remaining on road one behind the other, is normal prior to enemy contact. Example of the closed herringbone:

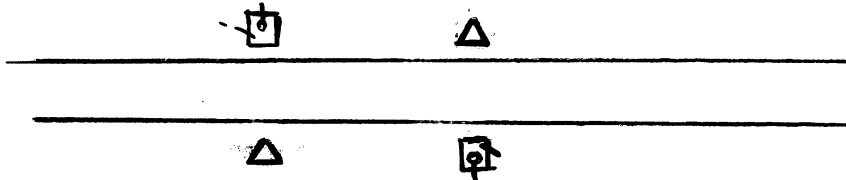


The interval between vehicles while in the herringbone formation is 25 meters. With this interval we can mass our fire power. Using the extended herringbone we can maneuver elements through our formation and still provide security.

5. Road Opening: A frequently performed mission is the opening of a road which has been under VC control for a period of time. In opening a road we concern ourselves with three forces: the mine sweep force, the security force, and the reaction force.

a. The Mine Sweep Force: This force consists of mine detectors, personnel to operate mine detectors, and probers. Never trust anyone else to sweep a road for you. If another force is providing sweep teams let them lead - but follow with your organic sweep team. Attempt to keep infantry out of your fields of fire. Whenever possible, extensive reconnaissance by fire should be conducted while sweeping the road. Recon by fire should be conducted to the left front and right front. Make the man with the RPG or command detonated mine think twice! Be wary of defiles. Check culverts and bridges thoroughly. Don't be afraid to get wet and probe, probe, probe. Many mines cannot be detected by the mine detector; they can only be found by probing or by running over them. The first way is much better. Never follow trails or old tracks unless forced to do so. If forced to follow trails or old tracks, sweep and probe them. Most mines are in the shoulders of the road. Avoid shoulders of roads. Avoid obvious turn off points along a road. Use common sense. If you see a place where you would put a mine or boobytrap - there may well be one there. Normally a minimum of three mine detectors should be available for sweeping a road. A mine sweep team consists of a mine detector, an operator for the mine detector, and a prober.

When in this optimum configuration, dismounted patrolling can be conducted in the vicinity of the outposts/strong points. Frequently we must extend our outpost line, precluding the possibility of employing vehicles in back-to-back pairs. In this case the vehicles must be offset - but pairs still must be within sight of one another. When there is no vehicle providing security for the rear of your vehicle you must either dismount an OP to protect the rear of the vehicle or have an additional observer on the vehicle observing to the rear. Terrain will dictate which method will be used. Example:



When operating an extended outpost line vehicle positions should be shifted periodically. When possible, each vehicle should recon by fire prior to departing its old position and as it moves into its new position. Always sweep yourself into the new position.

7. NDP (night defensive position) or RON (remain over night) position.

a. Night defensive positions will be established with the following barriers/devices:

- (1) Concertina
- (2) Claymores (minimum of 12 per ACAV, 4 per tank)
- (3) Trip flares in the concertina wire
- (4) Trip flares 10-30 meters outside wire
- (5) Trip flares 100-200 meters outside the wire

b. Claymores will be carefully aimed to cover the assigned defensive sector and carefully sighted to provide grazing fire. Each claymore will be provided with a solid backing (sand bag or dirt mound). All claymores will be inside the wire. (Claymores may be emplaced with a trip flare rigged to ignite should the claymore be moved.)

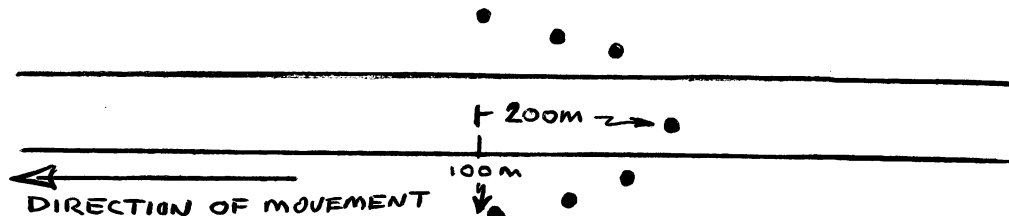
c. Concertina will be placed so as to put the vehicles out of hand grenade range from the wire (40-50m). Triple strand should be strung if possible and staked every 10 meters.

d. Listening Posts will be placed around the perimeter, on order, to provide early warning. Listening Posts are discussed in this document.

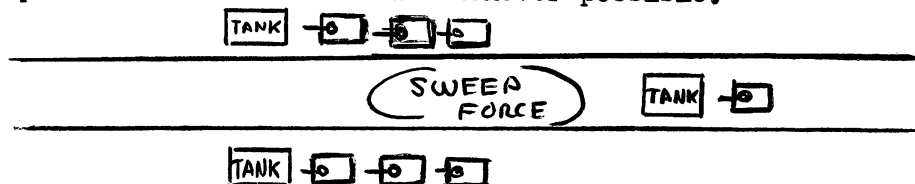
e. Patrols will be sent out after first light each morning to locate and destroy any claymores which may have been emplaced by the enemy around the night defensive position.

f. Defensive concentrations will be fired on at least two sides of the perimeter and preferable at four points around the perimeter. Defensive concentrations will not be planned or fired if the gun target line or its extension goes through a portion of the perimeter. On the schematic below,

b. The Security Force: The security force precedes the mine sweep force, operating well out on the flanks of the road in order to provide security for the mine sweep force. This force works as far out on the road flanks as possible, being alert for booby traps, claymore mines, and wires leading to command detonated mines in the road. When infantry is available it should be utilized as a part of the security force in the following manner:



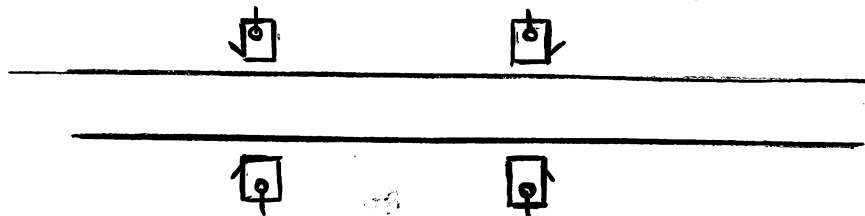
Armored vehicles can be intergrated into this formation. If infantry is not available we must provide the security force from our own resources. Remember that the VC do emplace mines off the road, too. When providing security for a mine sweep force use tanks to lead whenever possible.



When utilizing this formation, the security force should operate as far from the road as terrain and good sense will allow, while still maintaining visual contact with the mine sweep force.

c. Reaction Force: The reaction force consists of all elements not committed to the sweep force and the security force. The reaction force follows behind the sweep force prepared to reinforce or support the sweep or security force. Due to the nature of this type operation, the reaction force moves very slowly. When at halts it assumes a herringbone formation. To minimize unnecessary starting and stopping the reaction force will allow the sweep and security force to move as far forward as terrain and visual contact will permit prior to displacing forward.

6. Route Security: After opening a road we frequently receive the mission to secure it. The principal technique used to secure a road is to outpost it. When we outpost we do just that: Outpost. We cannot defend a road in depth except by search and destroy techniques. The mission is to provide timely warning in case the VC attempt to establish an ambush. We cannot always prevent the VC from firing an RPG at a convoy or at us but we can make it extremely difficult for them to get a shot at us or at the convoy. The most desirable method of outposting a road is to place vehicles in pairs so that each pair is in sight of the left and right flank pair. Example:



concentrations one, two, three, and four are good. Five and six place the GT line extension through the perimeter. These should not be fired as casualties may result from a long or short round. If under attack and artillery is needed at points 5 or 6, it can be adjusted from the nearest defensive concentration.



Defcons
indicated by



g. The shape of the perimeter and the pattern formed by the concertina should be varied when possible to preclude establishing a pattern, to take advantage of the best fields of fire, and to provide interlocking fires.

h. Intermittent H&I fire employing the M-79 as a minimum will be conducted to discourage enemy activity close-in to the perimeter. These H&I fires will be controlled to avoid ambush patrols and listening posts. Control will also limit ammunition expenditure to acceptable levels.

i. When the moon does not offer sufficient light for use of the starlight scopes, illumination munitions may be fired periodically at a distance adequate to avoid illuminating the perimeter but close enough to provide sufficient light to actuate the starlight, (5000-6000 meters).

j. Defensive concentrations will be called in occasionally and walked along the sides of the perimeter. Defensive concentrations are adjusted initially from 1000 meters out of the perimeter. When they are refired this same procedure should be used unless the perimeter is under attack.

k. Be prepared for a mortar attack. Have a covered place for all personnel to go. Have a countermortar plan to include artillery concentrations on all likely mortar sites. Plan H&I fires, gunships, airstrikes and flareship employment.

l. Designate supplementary positions for each track on the opposite side of the perimeter to facilitate reinforcement with minimum confusion. Alternate positions will also be designated.

m. If in an artillery base, coordinate with the artillery unit to provide direct fire between your vehicles. Artillery can fire HE or beehive.

n. Frequently one Infantry Co and one Cavalry Troop will be co-located at an NDP. In this situation the following techniques are effective:

(1) The senior officer should command both units, unless a higher maneuver unit headquarters is present in the same location.

(2) One forward observer should be in charge of planning and firing all defensive concentrations and H&I fires.

(3) Cross attachment of cavalry and infantry platoons should be made.

o. Tracks on the perimeter should plan to move back and forth if under attack. A movement of 20-25 meters forward and back makes a more difficult target for the enemy. (This tactic is not used when tracks are dug in.)

p. Position vehicles around the perimeter in a staggered formation to facilitate massing of direct fire. Orient toward the primary anticipated direction of fire.

q. Vehicles may be dug in for added protection during the dry season. Remember to leave sufficient room between the protective berm and the vehicle to permit you to perform maintenance services. The same extra space also provides protected sleeping positions.

r. ACAV ramps will be lowered only to clean or resupply the vehicle. Ramps will normally be up with the doors open except when under attack or imminent threat of attack. In this latter instance doors will be closed.

s. Troopers may sleep inside ACAVs providing the ramp is up and the rear door is open. (We do not want any fume poisoning cases in the 4th Cavalry.) Troopers will not sleep on top of any vehicle. Each trooper sleeping next to a vehicle will have adequate sandbag protection to safeguard him against grazing fire - either RPG or mortar fragments. There is no rule about how many sandbags high this protection will be except that it will be sufficiently high to protect you fully when you are prone.

t. Fighting positions with full overhead cover as outlined in "The Fundamentals of Infantry Tactics" will be constructed for all personnel who do not have a fighting vehicle. Positions will be sited to provide interior defensive fires. Personnel on fighting vehicles will not prepare fighting positions. Their place of duty when under attack is on their combat vehicle.

u. When under mortar attack, the cal .50 MG will be manned on all vehicles on the perimeter. Vehicles not manning cal .50 MGs will have their driver's hatches "cracked" to reduce concussion in the event of a direct hit.

8. Weapons: Safety, Care, and Cleaning:

Good cavalrymen are noted by the condition of their weapons and the healthy respect given them by the battle-tested trooper to avoid accidental discharges. Weapons, both crew served and individual, are thoroughly cleaned at least once daily and inspected daily by the chain of command. A dirty

weapon is indicative of a sloppy attitude. Such a sloppy attitude will be improved by disciplinary action, commencing with the responsible member of the chain of command and terminating with the dirty weapons owner. No weapon will be loaded unless enemy contact is joined without a specific order from a troop commander, platoon leader or higher. Inserting a magazine into a pistol, M-16, or grease gun constitutes loading the weapon. Inserting shotgun shells into the shotgun (tube) constitutes loading the weapon. The chain of command will constantly inspect to insure that no weapons are being loaded without proper authority. Violation of this rule will result in disciplinary action.

9. Ambush Patrols:

a. Mission: Primary mission is to kill VC. A secondary mission is to give early warning to the squadron of large unit movement and/or mortar attacks.

b. Size: 8 to 10 men -- to include one medic.

c. Alert Posture: 100%

d. Location: Must be located so that mounted reinforcements are available within 15 minutes for a squad, 30 minutes for a platoon, 60 minutes for a troop.

e. Equipment (minimum)

- (1) 1 M60 machine gun (1000 rds. ammunition)
- (2) 1 M79 (36 rds. ammunition)
- (3) All others armed with M-16 with at least 14 magazines
- (4) 4 hand grenades per man
- (5) 2 claymores for each rifleman (minimum)
- (6) 2 AN-PRC-25 with spare battery and set of earphones, long antenna
- (7) 4 parachute starclusters of two different colors
- (8) 1 hand held illuminating flare per rifleman
- (9) 1 shotgun (optional)
- (10) 1 starlight scope
- (11) 2 compasses
- (12) Map coverage of the ambush area (2 ea, 1 with the patrol leader and one with the assistant patrol leader, only the ambush position should be on the map)
- (13) Trip flares

e. Considerations are:

(1) General

- (a) Rehearse: Every man must know his job and his position.
- (b) Test fire weapons before leaving perimeter.
- (c) Practice anti-ambush drills, noise and light discipline.
Tie down or tape equipment that may rattle.
- (d) Use simple signals for control.
- (e) Use star clusters as needed for signals.
- (f) Only ID tags and Geneva convention ID cards outside perimeter. No cigarettes, lighters, or matches.

(2) Organization:

- (a) Designate:
 - 1. Search elements.
 - 2. Support element.
 - 3. Security element.
 - 4. Patrol headquarters (Patrol Leader and RTO)
- (b) Search element will search killing zone on order.
- (c) Support element will support patrol by fire by placing maximum fire in killing zone and overwatching with fire search and security elements.
- (d) Security element must prevent patrol from being surprised and give early warning of VC approach.

(3) Movement to Ambush Site:

- (a) Move into "lay dog" position prior to dark. Move into ambush patrol position as it starts to get dark. VC normally move soon after dark or just prior to first light.
- (b) When moving to ambush position:
 - 1. Stay dispersed.
 - 2. Put out flank security.
 - 3. Put automatic weapons near the lead.
 - 4. When stopped, each man faces alternate flank.

5. Consider use of mounted scout squad patrol in adjacent area as an "anti-ambush" patrol.

6. Designate rallying points.

(4) Execution:

- (a) Maintain all-around security.
- (b) Set up claymores for all around defense with emphasis on the killing zone.
- (c) Consider use of rope/wire for internal signals in ambush position.
- (d) Don't fire too early - wait until VC are in killing zone - then fire on order and shoot low - a ricochet is better than a miss. Primary killing weapon is the claymore.
- (e) Be prepared to call for illumination and reinforcements/RRF as needed. Use hand held flares as needed.
 1. If only a few VC enter the killing zone, blow one or two claymores and lay low. They may be security element for a larger unit. Let bodies lie until daylight or until VC main body or "body snatchers" come, then ambush them.
 2. If a larger group enters the killing zone, detonate claymores on order of patrol leader and lay down a heavy base of fire with small arms and machine guns. Call for illumination and RRF to assist in the immediate police of the battlefield and to exploit the advantage gained over the enemy.
 3. Cover VC withdrawal routes with booby traps and blocking fires.
 4. Always overwatch by fire any friendly elements moving into the killing zone.
 5. At least one man on the patrol must be trained to call for and adjust artillery fire.

10. Listening Posts:

- a. The primary mission of a listening post is to give early warning, not to fight. On occasion, an LP may develop the situation with hand grenades and M-79 or claymores (on order only).
- b. Size: 3 men - minimum of 2 men awake at all times.
- c. Location: Far enough outside of the perimeter so that noise within the NDP won't distract it.

d. Equipment:

- (1) 2 men armed with M-16's
- (2) 1 man armed with M-79
- (3) Minimum of 14 magazines/M-16
- (4) Minimum of 7 claymores
- (5) 4 hand grenades/man
- (6) 1 AN/PRC-25 with spare battery
- (7) 1 starlight scope

e. Considerations on employment:

- (1) Claymores used for defense of LP and to cover withdrawal of LP in contact.
- (2) Hand grenades and M-79 used for developing enemy situation and for defense.
- (3) If an AN/PRC-25 is not available, commo should be established by means of a telephone, TA-a, and wire, WD-1.
- (4) Commo checks will be made with LP every 15 minutes, normally by having LP break squelch.
- (5) If an LP is having problems staying awake, a strand of wire or rope may be tied to a portion of the body of the man in charge. The wire or rope leads back into the NDP. If communication cannot be established, the rope or wire can be pulled or jerked until communication is reestablished.

11. ACAV Loading Plan:

a. This loading plan is prescribed for all ACAV's in the 1-4 Cavalry. ACAV's will be loaded, stored and maintained in this configuration at all times. Uniformity of stowage permits movement by troopers from one track to another in combat situations with minimum loss of individual orientation.

b. This loading plan meets requirements for combat utility while considering crew needs.

- (1) Seats may be utilized as beds.
- (2) The ammo is arranged to assist the loader. Also, the 7.62mm has a ready rack of the boxes for the gunner.
- (3) .50 Cal ammo cans have tops knocked off, enabling the loader to put a box in the .50 Cal holder, as the TC swings around to the left.

(4) Boxes under the radio, e.g.: incendiary, W.P., trip flares, should be painted other than OD - and plainly marked.

(5) Ammo on seats will be tied in with long commo wire so that when the rear box is opened and kicked, the rest come loose with no problem.

(6) This arrangement permits easy access to the engine compartment to facilitate check of lubrication levels.

